



Joint Thirty-Eighth Meeting of the
IMF Committee on Balance of Payments Statistics
and Eighteenth Meeting of the Advisory Expert
Group on National Accounts

Inter-secretariat
Working Group on
National Accounts

Remote Meeting
March 7–10, 2022

BOPCOMVM1—22/13
SNA/M1.22/13
For discussion

CM.3 A Taxonomy for Communicating Economic Statistics Releases, Products, and Product Updates

Prepared by the Communications Task Team (CMTT)

INTERNATIONAL MONETARY FUND

CM.3 A Taxonomy for Communicating Economic Statistics Releases, Products and Product Updates¹

The release of economic statistics is complex for different reasons. When producers of economic statistics release information to users, not only do they need to communicate the statistics, but they also need to communicate information about the product and context of the release to users. Without this information, users will not be adequately equipped to properly use and interpret the statistics. Over the years, national statistical organizations (NSOs), national central banks (NCBs) and other national bodies have developed country specific methods and practices to communicate statistical releases, products, and product updates to users as well as to sign-post methodological changes and revisions. The practices have greatly assisted with the interpretation and use of national accounts, balance of payments, 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 by the current economic accounting statistical standards (EASSs).² This guidance note includes a set of proposed recommendations that national authorities could integrate into their current communication practices. The adoption of international guidelines in this area should assist in cross-country comparability of information and provide clarity for users.

INTRODUCTION

1. When a national authority³ releases economic statistics to users, they need to communicate much more than the statistics. National statistical organizations (NSOs) need to communicate information related to the quality, timeliness, frequency, and reference period of the product. Current practices show a complex landscape with a range of different terms and phrases used to describe the release of economic statistics and various types of product updates. 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, data revisions, benchmark revisions, rebased estimates, chain-linked volumes, improvements to methods, and corrections among others.

¹ Prepared by Claire Evans (United Kingdom, Lead Author), Robert Kent-Smith (United Kingdom), Kwangwon Lee (Korea), David Wasshausen (United States), Orestis Tsigkas (Eurostat), Francien Berry, James Tebrake and Richard Kimuli (IMF). The work was undertaken under the supervision of Mr. Sanjiv Mahajan (United Kingdom: Chair, CMTT), including drafting.

² This note was presented at the IMF's Balance of Payments Committee (BOPCOM) meeting on October 28, 2021. In addition to other comments (not yet taken on board), some members highlighted that the previous terminology "international economic statistical standards" did not adequately reflect the range of national and international macroeconomic statistics. The current proposed terminology is "Economic Accounting Statistical Standards."

³ In this note the generic term national statistical organization (NSO) will be used hereafter for the purposes of this note to refer to any national authority or organization that is responsible for producing economic statistics including Central Banks and Finance Ministries.

2. The range of terminologies employed by national authorities make cross-country comparisons and interpretation of economic statistics a challenge for users. The pandemic has further increased the number of terminologies used to demarcate vintages of statistical products and their corresponding metadata descriptions. This is due to the proliferation of new data sources aimed at giving early insights into economic developments usually provided by less timely official indicators. It therefore seems even more important and beneficial to consider standardizing the terminologies used across countries. A consistent presentation would facilitate comparisons between countries and over time. This ‘harmonized approach’ should be balanced with the needs and expectations of domestic users. In this context, this Guidance Note (GN) provides a set of recommendations, which national authorities could gradually integrate into their current communication practices when viable. The adoption of international guidelines in this area should assist in the cross-country comparability of information and clarity for users.

3. The Communication Task Team recommends that the proposals of this GN be included in a chapter of the System of National Accounts (SNA), Balance of Payments Manual (BPM), and Government Finance Statistics Manual (GFSM) titled “Economic statistics - Communication Practices and Recommendations.”

EXISTING MATERIAL

4. The international community has developed significant guidance on communicating revisions, products, product updates and releases. While this has been helpful, there are some inconsistencies in the existing guidance and recommendations. The update of the current SNA and BPM is an opportune time to review this work, identify best practices and incorporate changes into the existing body of work via a set of recommendations that will improve the way NSOs communicate data releases, products, and product updates to their users. The list of materials consulted is provided in Annex I.

RECOMMENDED APPROACH

5. This GN provides a series of recommendations for NSOs to communicate (i) economic statistics releases / vintages of data, (ii) products, and (iii) product updates to users. These recommendations are intended to assist users with interpreting the products and releases while enhancing national transparency and international comparability. The degree to which NSOs will be able to implement these recommendations depends upon several factors including tradition, organizational branding, resources, systems, statistical governance and laws. Nevertheless, it is felt that adopting a set of international recommendations and incorporating them into the SNA, BPM and GFSM will assist NSOs in communicating their releases, products, and product updates to users.

I. Communicating Releases / Vintages of Data

6. Producers of economic statistics must constantly balance 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 must also balance the expectations that users have for a long consistent time-series with their desire for agile economic accounting standards that ensure an exhaustive measure of economic activity. To manage these two important features of the economic statistics, economic accountants and their users have developed an implicit agreement. This

agreement states that the economic accountant will provide timely, high frequency data reflecting current economic conditions if users are willing to accept updates to those same estimates at some point in the future.

7. The fact that a statistic released today can be updated and released again at some point or several times in the future results in the creation of vintages of economic statistics. To illustrate, consider a national authority that releases an estimate of GDP for the first quarter of 2021 on May 30th, 2021. Between 2021 and 2028, four new estimates are made for the first quarter of 2021 as illustrated below⁴

- June 30th, 2021: 2021 Q1 may be revised as the quarterly estimates are produced.
- March 31st, 2022: 2021 Q1 may be revised due to seasonal adjustment for 2021.
- September 30th, 2023: 2021 Q1 may be revised due to benchmarking through SUTs.
- May 30th, 2024: 2021 Q1 may be revised due to the results of an economic census.
- September 30th, 2028: 2021 Q1 may be revised due to the implementation of the new SNA.

8. National authorities may release multiple vintages of a specific economic statistic depending on their release cycles and revisions policies. Adherence to a standardized set of definitions to describe and present data releases / vintages of economic statistics will improve the use and interpretation of economic data. When a user is presented with an economic statistic, they require more detail than the statistic to interpret its meaning. First, the statistic represents a concept, and that concept requires a name and definition. Beyond the name and definition, the user also needs to understand the reference period or accounting period to which the statistic relates. Other critical information includes the date on which the statistic was released, the origin and quality of the data sources used, and the conditions under which it was produced. It seems beneficial to have a standard approach across countries to communicate this information to users. A consistent presentation would facilitate comparisons between countries as well over time.

9. The CMTT recommends that NSOs adopt a common approach when communicating data releases / 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 data releases / 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.

Box I: Terms and Definitions Related to Economic Vintages

- **A statistic** is a discrete unit of observation that is derived from measurement and can be represented numerically.
- **A time-series** is a series of regular time-ordered statistics of a quantitative characteristic of an individual or collective phenomenon taken at successive, in most cases equidistant,

⁴ This is illustrative and may not apply to all countries. This example can be extended to other economic statistics including estimates of balance of payments and government finance statistics data that are subject to revisions.

periods / points of time.

- **A vintage of statistics** is a statistic or a set of statistics (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** represents the time-period represented by the statistic.
- **The update period** represents the time-period over which revisions to a statistic have been applied.
- **A release period** represents the calendar date that data are released to the public well in advance.
- **A revision** is defined as the numerical difference between two vintages of the same data point. For example, if the first vintage of estimated GDP in volume terms in 2019 was 0.5 per cent and the second vintage of estimated real GDP in 2019 was 0.4 per cent then the update or revision is 0.1 percentage points.
- **A regular / routine revision** refers the incorporation of more complete (but not yet final) source data, improved models, and / or methods into the compilation process. Regular revisions occur for both sub-annual and annual estimates. They can occur throughout the year, at regular (often yearly) intervals, or as new information becomes available. Regular revisions may also include 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 statistic. It is the statistic that was compiled using the highest quality source data and the most advanced methods. Benchmark estimates generally do not get revised and therefore are often also referred to as the “final” estimate. However, a change in concept of a component or the aggregate or the move to a new standard guideline can generate further changes.
- **A benchmark revision** reflects the incorporation of a benchmark estimate(s) into a given set of economic statistics / accounts. The benchmark estimate reflects the incorporation of the final vintage of all source data into the economic statistics. The benchmark revision implies that account program does not expect to receive any additional information that it can use to improve the overall quality of the economic statistic. The benchmark estimates can only be constructed once a final vintage of each of these data sources is available. All revisions undertaken before the incorporation of the benchmark update are considered regular revisions.
- **A comprehensive revision** is a special case of benchmark revisions where the economic statistic not only incorporates the final vintages of source data but also integrates new or updated concepts, accounting treatments, classifications or substantially improved methods. These generally occur when there are major changes to the accounting standards that are used to compile the accounts. These types of revisions often result in a break in the time series and a need for programs to backcast these changes over time.

10. Together the terms, regular revisions, benchmark revisions, comprehensive revisions 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), classifications, or presentations.

11. To illustrate the standard format recommended for communicating the notion of “substance”, timeliness, frequency, reference period 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 regular revision). These vintages would be categorized as:

**Table 1: Naming Convention - Quarterly GDP
(successive vintages for the same reference period)**

Substance (Type of Revisions)	Timeliness	Frequency	Reference Period	Update Period
Regular	30-day	Quarterly	First quarter, 2021	
Regular	60-day	Quarterly	First quarter, 2021	2021.Q1
Regular	90-day	Quarterly	First quarter, 2021	2021.Q1

These vintages should be communicated as:

- Regular – 30-day - Quarterly National Accounts release, first quarter 2021
- Regular – 60-day - Quarterly National Accounts release, first quarter 2021 (2021.1Q revised)
- Regular – 90-day - Quarterly National Accounts release, first quarter 2021 (2021.1Q revised)

For users’ reference, the vintages could be recorded as follows:

Table 2: Recording Vintages of Data in Real-time Tables: Quarterly GDP

Series	Frequency	Release Date	Revision Type	Q1 2021	Q4 2020	Q3 2020	Q2 2020	Q1 2020
GDP	Quarterly	June 30 th , 2021	Regular	99	95	90	85	80
GDP	Quarterly	May 30 th , 2021	Regular	102	95	90	85	80
GDP	Quarterly	April 30 th , 2021	Regular	100	95	90	85	80

12. This recommendation is further elaborated in Annex II with additional examples covering vintages that result from comprehensive revisions, benchmark updates, and updates after annual estimates. The recommendation also applies to other types of economic statistics that are subject to revisions.

II. Communicating product updates or revisions

13. EASSs provide the frameworks to produce economic statistics. These statistical standards have some basic features. They define the concepts to be measured including the coverage. They outline the methods that can be used to “quantify” those concepts. They outline the accounting rules that need to be followed when recording various flows and stocks. They also identify the classification systems, accounts, and table structures that should be used to present the data. If an EASS changes or if the way the country implements that statistical standard changes, it could trigger an update of the time-series. In addition to updates resulting from changes to the statistical standard, economic statistics can also be updated due to the incorporation of improved source data used to produce the economic statistics. Given that these five factors above can trigger an update to an economic statistic, it seems appropriate that the presentational framework for reporting updates / revisions be developed around these factors.

14. It is recommended that producers categorize and decompose updates (revisions) into various categories reflecting the source of the revision(s). These include for example *conceptual changes, methodological changes, accounting changes, coverage adjustments, source data changes, quality changes (e.g. improved seasonal adjustment, data validation changes, balancing adjustments, etc.) and presentational changes* when reporting updated / revised estimates to users (See Annex III)

15. Conceptual changes result from a change in a concept associated with a statistical standard. One example of a concept is *production*. This concept, as defined in the *2008 SNA* determines the size of output and GDP.⁵ First the definition notes that production “...*is a physical process*” meaning that natural processes ‘are not’ included in this SNA concept. Second, the definition notes that the “...*production boundary includes goods and services provided for free to households by governments and NPISHs but not goods and services provided for free by households to households.*” Note that GDP would be larger if the concept of production included goods resulting from natural process. If the concept / definition of production changes, it will trigger an update to the estimate of GDP.⁶

16. Methodological changes result from modifications to the statistical methods used to compile the economic statistics. One way to interpret a statistical method is the way in which an accounting rule is implemented. For example, one compiler may decide to use a series of price indices to derive an estimate of the market value for a stock of assets, while another compiler may decide to obtain observed values recorded on the balance sheets of enterprises. Both follow the same rule but use different methods to apply the rule. Any change to these techniques or the development of new techniques would result in an update to previously published estimates. As a second example, assume that as part of its imputed rental calculations, country A finds that the quality of owner-occupied dwellings was twice the quality of rented dwellings. Based on a self-assessment, it is determined that the quality of owner-occupied dwellings is three times the quality of rented dwellings. If the comparison method would be replaced by the self-assessment method, imputed rental would need to be adjusted and the estimates

⁵ “a physical process, carried out under the responsibility, control and management of an institutional unit, in which labour and assets are used to transform inputs of goods and services into outputs of other goods and services. All goods and services produced as outputs must be such that they can be sold on markets or at least be capable of being provided by one unit to another, with or without charge. The SNA includes within the production boundary all production actually destined for the market, whether for sale or barter. It also includes all goods or services provided free to individual households or collectively to the community by government units or NPISHs.”

⁶ Other examples of key concepts in the EASSs include production, consumption, income, economic territory, revenue, expenditure, among others.

of output would be revised. If we assumed that this increased country A's output by \$2 billion, this would be classified as a methodological change.

17. Accounting changes result from changes to the accounting rules or in the application of the accounting rules when compiling economic accounts. The accounting rules embedded in an economic accounting framework determine how activities get recorded. For example, a key accounting rule in the 2008 SNA is the rule that transactions are recorded on “*an accrual basis throughout*” (2008 SNA § 3.163). If a country moves from cash to accrual basis of recording, it will trigger updates to prior period estimates.

18. Coverage adjustments refer to updates that ensure all aspects of exhaustiveness are covered within the economic accounts. For example, changes may occur when a NSO realizes that it has been geographically under-reporting elements of the economy or source data only covers above certain thresholds and adjustments are needed for the remaining elements.

19. Source data changes result from incorporating new (generally higher quality and more comprehensive) source data into the economic accounts. Source data updates are probably the most common type of revision reported by producers since they often need to rely on incomplete information when preparing timely estimates. As new data become available and producers integrate this new data into the estimates, changes will materialize. Often these changes help to refine the estimates or add additional detail. In general, these updates do not tend to alter the trend or change the overall ‘story’ that is presented to the users. A compilation change could be triggered when an error is discovered in the business process or source data that requires an adjustment to either the process or source data to correct the error. These types of changes are less common and are generally isolated to less prominent components of the account. The errors are generally associated with some form of change being implemented and can even be the result of a change in staff.

20. A quality change results from the process of data validation such as occurring through ensuring consistency of source data, improved seasonal adjustment or the impact of revised balancing adjustments. These changes may or may not be each separable.

21. Presentational changes reflect variations in how the accounts and related information are presented. In practice, a NSO *could* publish a single estimate of production. However, this would not be very useful for their users and would only lead to a series of additional questions about which industries are driving production or which regions contributed the greatest share. Presentational updates do not necessarily result in updates to the underlying data but rather in how the details are presented to users to enhance the message(s) being conveyed. If for examples, a statistical agency decides to reclassify a particular economic activity such as services provided by Fintechs from one industry to another after receiving new details about the activity or new statistical guidance. This may lead to changes in how the estimates for the two industries involved are presented to users, although it does not impact overall GDP. These changes can be wide-ranging from publishing revision triangles to charts showing impact of revisions and contributions to growth rates to new tables providing more detail.

22. To illustrate this framework, consider the following table where country A reports a \$10 billion update to its benchmark estimate of GDP in current prices (separate tables may be produced to inform the impact in volume terms, for example, the impact in terms of the revision in the form of contributions to the revised growth rate). Decomposing the \$10 billion update according to the framework

presented above provides important information to users regarding the rationale for the update and the overall quality of the new estimates.

Table 3 – Example of How to Decompose a GDP Update

Category	Revision	Notes
Conceptual Change	\$4	Incorporated estimates of Financial Intermediation Services Indirectly Measured into the accounts for the first time
Methodological change	\$1	Improved method used to calculate imputed rental income
Accounting change	\$1	Recording consumption of fixed capital at replacement cost
Coverage change	\$1	Extended coverage to include a wider geographical boundary.
Source data change	\$2	Incorporated new estimates from the latest household budget survey.
Quality change	\$1	Improved seasonal adjustment.
Presentational change	zero	Presentational changes were made but they did not result in any revisions.
Total Change/Revision	\$10	

From the example in Table 3, the user can determine that nearly half of the revision is due to a change in concept and 20 per cent is due to the incorporation of new and more complete data. This type of detail greatly improves the interpretation of the new estimate and the underlying revisions.

23. In addition to presenting updates / revisions by the source of the changes, NSOs are also encouraged to supplement this presentation with additional presentations which may show revisions by industry or expenditure category or by institutional sector. For example, if a country publishes a new release of GDP which shows an upward revision of 10 per cent, users will want to understand if the increase was concentrated in a few specific industries, if it was spread across most industries or only one institutional sector.

III. Communicating Product Types

24. The pace of economic change has increased in recent decades. As such, users are requesting that compilers of economic statistics produce an increasingly broad range of products with greater details and on a timelier basis. However, data users are increasingly unwilling to wait 2-3 years for the impact of some developments normally associated with the production of official statistics. In response, NSOs have started to adopt the strategy of producing and releasing estimates that have not been subjected to the same rigor as official statistics and have adopted several different labels for these estimates. For example, in response to the impact of COVID-19, we saw the development and publication of faster, standalone indicators which are not national accounts products per se. Some have chosen to use the term satellite accounts (in line with the SNA definition), others refer to these estimates as experimental and yet others refer to them as provisional or draft. Different terms are used from one country to another, and even the same country may use different terms for different products.

25. Although different descriptors are used to “label” products, there is usually a common element being communicated - quality. At a very high level, the current set of labels used by national authorities are intended to communicate three pieces of information. First, whether the estimates comply with nationally or internationally adopted methodological standards. Second, whether the source data used to compile the estimates have been rigorously produced. Third, whether the compiling agency is in

the exploration or development phase and is 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.

26. It is recommended that a two-tier taxonomy for classifying product quality be adopted.

The first tier in the taxonomy proposes the use of the term official statistics. Official statistics are those estimates that incorporate recommended nationally or internationally adopted concepts, methods, accounting rules and classifications and meet all the standards required. These statistics are produced using the highest quality source data available and have been subjected to rigorous quality assurance practices and have benefited from significant user feedback.

27. There is a first tier of official statistics which will include provisional estimates.

Like official statistics, these data incorporate nationally or internationally adopted concepts, methods, accounting rules and classifications. However, these data are provisional because they often represent an early estimate before more comprehensive data become available. A key distinguishing feature of provisional estimates is that there is an expectation these estimates will soon “graduate” to final official statistics status. Before finalizing the product and moving it to a final “official statistics” status, a scrutiny process ensuring the quality requirements are in place as well as user input and feedback is required. The user input focuses on the fit-for-use of the product and whether the various dimensions of the product are appropriate or need to be changed. This could include feedback regarding appropriate frequency, timeliness, detailed, output format. etc.

28. The second tier is experimental estimates. These are estimates released by a national statistical agency in which the agency may have gone outside of nationally or internationally recommended concepts, methods, accounting rules or classifications in the production of the estimates. Often, they may be of a research or indicative nature. The source data used to compile the estimates may be untested and its quality may not be quantifiable as would be the case with official statistics. The data are communicated with a “proof of concept” notion and the main motivation for releasing the data is to seek feedback so the estimates can be improved upon. There is no expectation at this point that the data will ever move from experimental to official status, however with a range of improvements 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 “product quality” taxonomy is summarized in the following table:

Table 4: Two-Tier Product Quality 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.
	Provisional Estimates: These estimates incorporate nationally or internationally adopted concepts, methods, accounting rules and classifications but they represent an early estimate before more comprehensive data becomes available.
Level 2	Experimental Estimates: These are estimates released by a national statistical agency in which the agency may have gone outside of nationally or internationally recommended concepts, methods, accounting rules or classifications in the production of the estimates. Often, they may be of a research or indicative nature.

29. 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. The System of National Accounts is a set of inter-related *accounts* that trace economic activity from production to the distribution of income, to expenditure, saving, capital formation, financing, to wealth (positions). In addition to a “prescribed” list of accounts, the System of National Accounts also recommends that countries produce tables, satellite accounts, bridge tables, supplementary tables, sub-accounts – all of which seem to have a status different from that of an account.

30. It would assist users if countries followed similar practices when referencing the products or statistical outputs associated with a particular statistical standard. By establishing common definitions, frameworks and taxonomies for these different types of accounts, we can enhance data users’ understanding of these statistics, including how they fit together and how they compare across countries. Broadly speaking, these 13 accounts can be classified as belonging to one of three *types* of accounts: *production, income and expenditure accounts (the current accounts), accumulation accounts, and balance sheets.*

31. Accounts as defined by the System of National Accounts, have an opening and closing item and consist of debits and credits. Accounts are also related to each other such that the closing balance of one account can be the opening balance of the subsequent account. It seems reasonable that any product within the economic accounting frameworks with an opening item, a closing balance and debits and credits should be considered an account.

32. In addition to defining an account, there is also a need to delineate between those accounts that are part of the sequence of accounts and those outside the sequence of accounts. As noted, the SNA, GFS, BPM are EASSs that provide accounting systems covering their respective domains in which the accounts are related in some manner. This relationship is usually represented by either the closing item in one account equating to the opening item in the subsequent account or by the closing item in one account being equivalent to the closing item in another account. It is recommended that those accounts that reflect this interconnectedness be considered the “main” set of accounts.

33. In addition to those accounts that are included in the overall “sequence” of accounts, the EASSs offer the flexibility to develop satellite accounts. Satellite accounts provide NSOs with the opportunity to experiment with both the classification and presentation as well as the concepts and methods. Unfortunately, the term “Satellite” is not well understood. In some cases, they are viewed as not connected to the sequence of accounts.

34. It is recommended that instead of using the term “satellite” the EASSs adopt the term ‘supplementary account’ or ‘thematic account’ as appropriate. At a high level, this means a statistical standard such as the system of national accounts consists of the sequence of accounts and supplementary or thematic accounts with the distinguishing feature being that these are either independent from the recommended sequence of accounts or included features not in the main accounts. It is important to note that both the sequence of accounts and supplementary or thematic accounts hold the same definition in that they have an opening item, a closing item a balancing item and a debit, credit structure.

35. In addition to defining accounts – the EASSs also include recommendations related to the development and dissemination of tables – such as the supply and use tables or supplementary

tables such as those covering pension entitlements. The term “table” is distinguished from account in that tables do not have balancing items and are not part of a table sequence of inter-connected accounts. Given that the EASSs do not prescribe the development and publication of tables in the same way the production and dissemination of accounts are prescribed, it is recommended to include the term “supplementary” when referring to tables in the SNA.

36. The “product” taxonomy is summarized in the following table.

Table 5: Two -Tiered Product Taxonomy

Level 1	Level 2
Economic Accounts	
	Sequence of Economic Accounts
	Supplementary Accounts
	Extended Accounts (e.g. labour)
	Thematic Accounts (e.g. tourism)
Economic Tables	
	Economic Tables (e.g. SUTs / IOTs)
	Supplementary Tables (e.g. pensions, regional, environmental)
	Extended Tables (e.g. extended SUTs, unpaid work)
	Thematic Tables (e.g. health, tourism, sport, creative sector, etc.)

RECOMMENDED APPROACH - PRACTICAL ASPECTS

37. Many NSOs have invested heavily in the development and communication of releases, products, and product updates to users. In these cases, it will be difficult for NSOs to fully implement the above noted recommendations. Existing branding on documentation, training, and sources and methods materials may make implementation of these recommendations improbable in the near term. To operationalize these recommendations, therefore, the CMTT suggests that these changes are implemented in a gradual manner culminating with full transition to the next update of the SNA.

CHANGES REQUIRED TO THE SNA AND OTHER STATISTICAL DOMAINS

38. The CMTT proposes that the above recommendations are also included as part of a chapter in the BPM, SNA and GFSM titled “Economic Statistics - Communication Practices and Recommendations.” In addition to including the information from this GN, this proposed chapter should also include information from the CMTT GN on *Terminology and Branding and Alignment to Statistical Standards*.

Annex I: Reference Materials

The following is a list of the references and existing material that were consulted in the development of this guidance note.

- Bureau of Economic Analysis. n.d. *Key source data and assumptions*.
https://www.bea.gov/sites/default/files/2021-03/GDPKeySource_4q20_3rd.xlsx.
- Bureau of Economic Analysis. 2020. *Concepts and Methods of the U.S. National Income and Product Accounts*. United States: B.E.A, U.S. Department of Commerce.
<https://www.bea.gov/resources/methodologies/nipa-handbook/pdf/chapters-01-04.pdf>.
- . 2020. "The 2020 Annual Update of the National Income and Product Accounts." *Bea.gov*. August.
<https://apps.bea.gov/scb/2020/08-august/pdf/0820-nipa-update.pdf>.
- European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank. 2009. *System of National Accounts, 2008*.
- Eurostat. 2013. *ESS guidelines on revision policy for PEEIs - 2013 edition*. Manuals and Guidelines, European Union. doi:10.2785/42763.
- . 2014. *Essential SNA: Building the Basics*. 2014 Edition. Eurostat. doi:10.2785/51610.
- . 2013. *Handbook on Quarterly National Accounts*. Luxembourg: European Union. doi:10.2785/46080.
- Eurostat. 2019. *Quality Report on National and Regional Accounts — 2018 data*. Statistical Reports, Luxembourg: European Union. <https://ec.europa.eu/eurostat/web/products-statistical-reports/-/ks-ft-19-009>.
- . 2021. *Release Calendars for Euro Indicators*. May 18. <https://ec.europa.eu/eurostat/news/release-calendar>.
- German Federal Office of Statistics. 2020. *Gross domestic product: detailed results on the economic performance in the 3rd quarter of 2020*. November 24.
https://www.destatis.de/EN/Press/2020/11/PE20_465_811.html.
- . 2019. *National accounts, domestic product Major Revision of National Accounts 2019*.
<https://www.destatis.de/EN/Themes/Economy/National-Accounts-Domestic-Product/InfoRevision2019.html>.
- Germany Federal Office of Statistics. 2021. *National Accounts, Domestic Product*. April 30.
https://www.destatis.de/EN/Themes/Economy/National-Accounts-Domestic-Product/_node.html#sprg246446.
- International Monetary Fund. 2017. *Quarterly National Accounts Manual*. Washington D.C.: IMF.
- International Monetary Fund, Statistics Department. 2012. *Data Quality Assessment Framework (DQAF) for National Accounts Statistics*. IMF. https://dsbb.imf.org/content/pdfs/dqrs_nag.pdf.
- Lequiller, Francois, and Derek Blades. 2014. *Understanding National Accounts*. OECD.
<https://doi.org/10.1787/9789264214637-en>.

- Office for National Statistics. 2018. *Household satellite account, UK: 2015 and 2016*. October 2.
<https://www.ons.gov.uk/economy/nationalaccounts/satelliteaccounts/articles/householdsatelliteaccounts/2015and2016estimates>.
- Office for National Statistics. 2020. *U.K. National Accounts, The Blue Book: 2020*. ONS.
<https://www.ons.gov.uk/economy/grossdomesticproductgdp/compendium/unitedkingdomnationalaccounts/bluebook/2020>.
- Statistics Canada. 2020. *Satellite Accounts and Special Studies*. June 30.
<https://www150.statcan.gc.ca/n1/pub/13-607-x/2016001/44-eng.htm>.
- Tebrake, James, and Margarida Martins. 2019. "A framework for recording and communicating revisions." *13th Meeting of the Advisory Expert Group on National Accounts SNA/M1.19/4.2*.
https://unstats.un.org/unsd/nationalaccount/aeg/2019/M13_4_2_Framework_for_recording_and_communicating_revisions.pdf.
2020. "Tourism Satellite Account: Year Ended March 2020." *www.scoop.co.nz*. December.
<https://www.scoop.co.nz/stories/BU2012/S00438/tourism-satellite-account-year-ended-march-2020.htm>.
- UNECE. 2019. *Generic Statistical Business Process Model (GSBPM) v5.1*. January.
<https://statswiki.unece.org/display/GSBPM/GSBPM+v5.1>.
- United Nations Statistics Division. n.d. "Developing a global programme for the implementation of the 2008 SNA and supporting statistics."
https://unstats.un.org/unsd/nationalaccount/aeg/2019/M13_4_2_Framework_for_recording_and_communicating_revisions.pdf.
- United Nations Statistics Division. 2011. *Guidelines for Monitoring the 2008 SNA Implementation - Extract of the Report of the Intersecretariat Working Group on National Accounts to to the forty second session (2011) of the United Nations Statistical Commission*. UNSD.
<https://unstats.un.org/unsd/nationalaccount/docs/guidelines.pdf>.

Annex II: Vintages of Economic Statistics

This annex further elaborates the CMTT’s recommendation for communicating vintages of data to users. The example discussed in Section III of this guidance note can be extended to illustrate how this approach would apply to subsequent quarters.

Assume that on July 31st, 2021 the NSO publishes data for the second quarter of 2021 and updated the estimates for the first quarter of 2021. After the July 31st revision, the NSO publishes two additional vintages of second quarter estimates on August 30th, 2021 and September 30th, 2021. These vintages would be categorized as follows:

Table 6: Naming Convention: Quarterly GDP
(successive releases of vintages for the same reference period, multiple update periods)

Type	Timeliness	Frequency	Reference Period	Update Period(s)
Regular	30-day	Quarterly	Second quarter, 2021	2021.Q1
Regular	60-day	Quarterly	Second quarter, 2021	2021.Q2-2021.Q1
Regular	90-day	Quarterly	Second quarter,2021	2021.Q2-2021.Q1

These vintages would be communicated as:

- Regular – 30-day - Quarterly National Accounts release, second quarter 2021 (2021.1Q revised)
- Regular – 60-day - Quarterly National Accounts release, second quarter 2021 (2021.2Q revised)
- Regular - 90-day - Quarterly National Accounts release, second quarter 2021 (2021.2Q revised)

These vintages could then be recorded as:

Table 7: Recording Regular Revisions (Multiple Release Cycles)

Series	Frequency	Release Date	Revision Type	Q2 2021	Q1 2021	Q4 2020	Q3 2020	Q2 2020	Q1 2020
GDP	Quarterly	September 30 th , 2021	Regular	105	100	95	90	85	80
GDP	Quarterly	August 30 th , 2021	Regular	102	100	95	90	85	80
GDP	Quarterly	July 31 st , 2021	Regular	104	100	95	90	85	80
GDP	Quarterly	June 30 th , 2021	Regular		99	95	90	85	80
GDP	Quarterly	May 30 th , 2021	Regular		102	95	90	85	80
GDP	Quarterly	April 30 th , 2021	Regular		100	95	90	85	80

Communicating Vintages of Annual National Accounts

If a country does not produce quarterly national accounts and only releases annual national accounts nine months following the reference period, then the vintage could be categorized as follows:

Table 8: Naming Convention: Annual GDP (New Vintage)

Type	Timeliness	Frequency	Reference Period	Update Period
Regular	9 month	Annual	2020	

This vintage can be communicated as:

- Regular – 9 month – Annual National Accounts, 2020

If the NSO publishes another vintage of their 2020 annual GDP estimates before releasing estimates for 2021, this vintage could be categorized as:

Table 9: Naming Convention: Annual GDP (New Vintage)

Type	Timeliness	Frequency	Reference Period	Update Period
Regular	15 month	Annual	2020	2020

This vintage could be communicated as:

- Regular – 15 month – Annual National Accounts, 2020 (2020 updated)

These vintages could be recorded as:

Table 10: Recording Regular Revisions (Annual National Accounts)

Series	Frequency	Release Date	Type	2020	2019	2018
GDP	Annual	March 31 st , 2021	Regular	105,000	100,000	95,000
GDP	Annual	September 30 th , 2020	Regular	102,000	100,000	95,000

Communicating Vintages – Benchmark Revisions

Many NSOs establish periodic (even annual) benchmark estimates which reflect the final vintages of source data. These benchmark estimates can be adopted into the economic accounts either ‘off-cycle’ or during a regular release cycle. Usually, the NSO updates a significant portion of their time-series when incorporating benchmark estimates. All of this information should be communicated to users when releasing the data. To illustrate how this can be communicated, consider the example where a NSO incorporates updated estimates of annual GDP for 2018 off-cycle, three years following the reference period. Assume that the NSO only publishes annual estimates of GDP and that the benchmark update of 2018 GDP is published on December 21st, 2021. This vintage would be categorized as⁷:

Table 11: Naming Convention: Annual GDP (Release of Benchmark Revisions)

Type	Timeliness	Frequency	Reference Period	Update Period
Benchmark		Annual	2018	2020-2018

⁷ Notice that the idea of release timeliness is dropped from this characterization since it is done off cycle.

This vintage could be communicated as:

- Benchmark – Annual GDP release 2018 (2018-2020 updated)

This vintage could be recorded as:

Table 12: Recording Benchmark Updates – off Cycle (Annual National Accounts)

Series	Frequency	Release Date	Revision Type	2020	2019	2018
GDP	Annual	March 31 st , 2021	Regular	115,000	109,000	102,000
GDP	Annual	December 31 st , 2021	Benchmark		110,000	102,000
GDP	Annual	March 31 st , 2020	Regular		105,000	99,000
GDP	Annual	March 31 st , 2019	Regular			100,000

If we assume that the country decides to publish the 2018 benchmark revisions and the 2019 revisions when they publish the 2020 estimates, the vintages would be categorized as:

Table 13: Naming Convention: Annual GDP (Successive Releases of Different Vintage)

Revision Type	Timeliness	Frequency	Reference Period	Update Period
Benchmark		Annual	2018	2020-2018
Regular	15 month	Annual	2020	

The vintages would be communicated as:

- Benchmark – Annual National Accounts, 2018 (2018-2019 updated)
- Regular – Annual National Accounts, 2020

The vintages would be recorded as:

Table 14: Recording Benchmark Updates – on Cycle (Annual National Accounts)

Series	Frequency	Release Date	Revision Type	2020	2019	2018
GDP	Annual	March 31 st , 2021	Regular	115,000	109,000	102,000
GDP	Annual	March 31 st , 2021	Benchmark		109,000	102,000
GDP	Annual	March 31 st , 2020	Regular		105,000	99,000
GDP	Annual	March 31 st , 2019	Regular			100,000

Communicating Vintages – Comprehensive Revisions

In addition to benchmark revision, NSOs periodically introduce conceptual and methodological changes into their economic statistics program. It is important that the NSO both distinguish between the various types of changes that were made during the update – methodological, conceptual, accounting rule - and communicate these revisions consistently to users.

To illustrate how a NSO would communicate a comprehensive revision to users, consider the example where the compiling organization incorporates the conceptual and methodological changes resulting from the release of 2025 SNA in the calendar year 2026 and release these data during a regular release cycle.

The benchmark estimates are established for 2023 and data are revised back to 2020. These vintages would be categorized as:

Table 15: Naming Convention: Comprehensive Revision

Revision Type	Timeliness	Frequency	Reference Period	Update Period
Comprehensive		Annual	2023	2024-2020
Regular		Annual	2025	

These vintages would be communicated as:

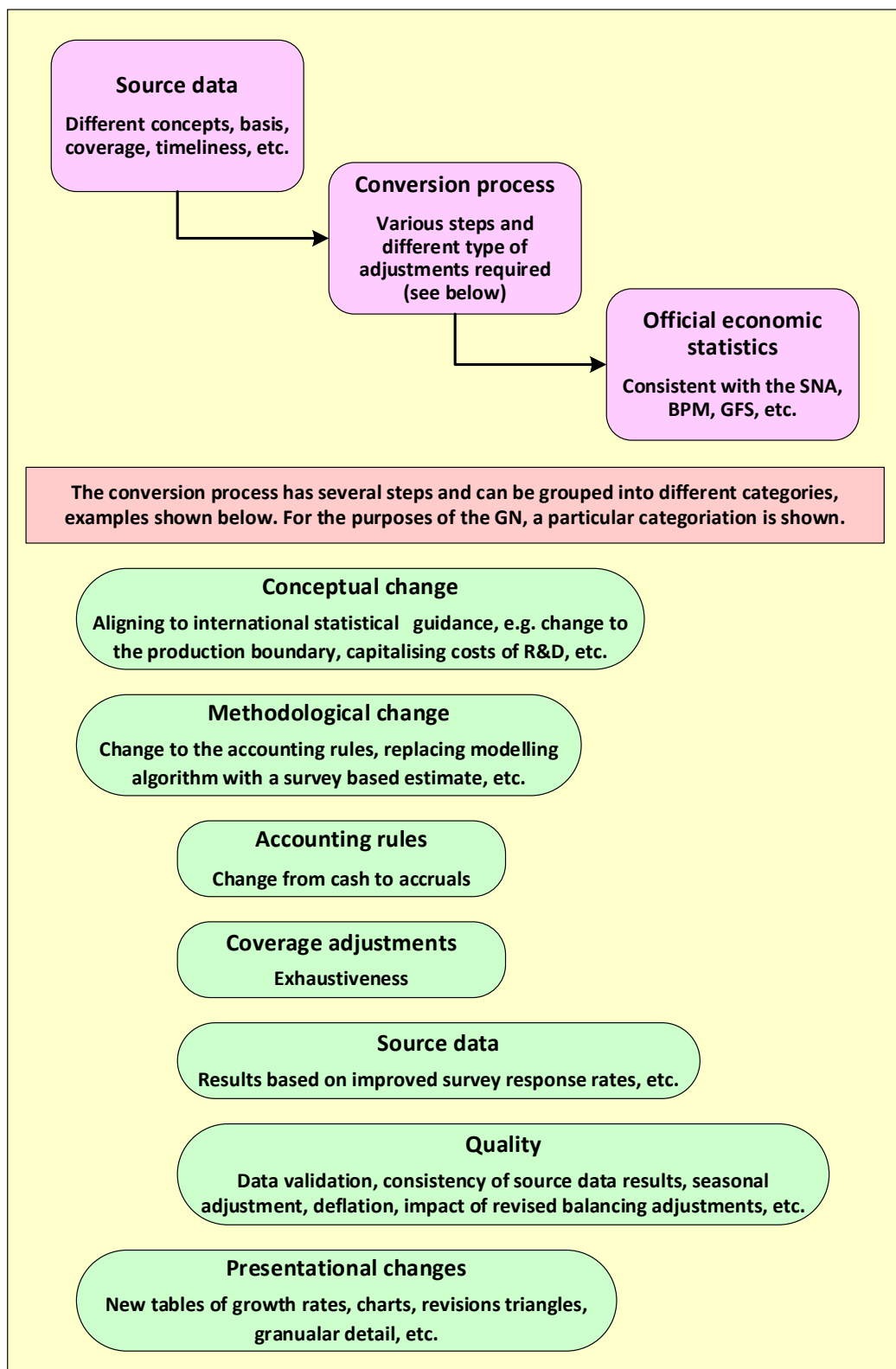
- Comprehensive – Annual National Accounts release, 2023 (2024-2020 updated)
- Regular – Annual National Accounts release, 2025

These vintages would be recorded as:

Table 16: Recording Comprehensive Revisions – on Cycle (Annual National Accounts)

Series	Frequency	Release Date	Type	2025	2024	2023	2022	2021	2020
GDP	Annual	March 31 st , 2026	Regular	130	128	124	124	120	119
GDP	Annual	March 31 st , 2026	Comprehensive		128	124	124	120	119
GDP	Annual	March 31 st 2005	Regular		125	121	121	116	115
GDP	Annual	March 31 st , 2024	Regular			122	121	116	115
GDP	Annual	March 31 st , 2023	Regular				119	116	115
GDP	Annual	March 31 st , 2022	Regular					117	114
GDP	Annual	March 31 st , 2021	Benchmark						115

Annex III Summary of Compilation Steps and Types of Changes Creating Revisions



Annex IV: Outcomes of the July 2021 AEG Meetings

AT THE JULY 2021 MEETING, THE AEG MEMBERS WERE ASKED TO REFLECT ON THE FOLLOWING QUESTIONS:

1. Do you agree with the proposal to standardize the communication of economic statistics vintages to include the: substance of the release, timeliness, frequency, reference period, and the update period?
2. Do you agree with the recommendation for countries to standardize the breakdown of revisions to highlight (i) methodological/conceptual changes, /accounting rules changes, (ii) changes to source data, (iii) changes to statistical coverage (iv) presentation changes?
 - a. Is this breakdown feasible for your economy without significant change to the statistical infrastructure?
3. Do you agree with the standardized labelling of the 'quality' of statistical products as official, provisional, and experimental estimates?
 - a. Do you agree with the description of experimental estimates?
 - b. Do you agree with the description of provisional estimates?
4. Do you agree with the recommendation to adopt the term 'supplementary account' (instead of satellite accounts) across all domains when referring to those tables outside the main sequence of accounts?
5. Do you have other comments on this guidance note?

SUMMARY OF DISCUSSIONS

- The members took note of the benefits of the proposed Taxonomy for Communicating Economic Statistics, Products and Product Updates and generally supported the proposed guidance. However, they requested that further work be undertaken to clarify the term experimental estimates. The CMTT updated the definition of the term to “estimates released by a NSO in which the NSO may have gone outside of nationally or internationally recommended concepts, methods, accounting rules or classifications in the production of the estimates.”
- The CMTT also refined the definitions of provisional estimates used in the GN as well as proposed further refinement of the product quality taxonomy and product taxonomy.
- Finally, the CMTT refined GN to ensure consistency with the other two GNs prepared by the CMTT.

Annex V: Outcomes of October and November 2021 BOPCOM and AEG Meetings

THE MEMBERS OF THE COMMITTEES WERE ASKED TO REFLECT ON THE FOLLOWING QUESTIONS:

1. Do you approve this note for global consultation?
2. Do you agree with the recommendation for countries to standardize the breakdown of revisions to highlight (i) methodological/conceptual changes, /accounting rules changes, (ii) changes to source data, (iii) changes to statistical coverage and (iv) presentation changes??
 - a. Is this breakdown feasible for your economy without significant change to the statistical infrastructure?
3. Do you agree with the two-tiered standardized labelling of the 'quality' of statistical products as official and provisional separate from experimental estimates?
 - a. Do you agree with the description of experimental estimates as: "estimates released by a NSO in which the NSO may have gone outside of nationally or internationally recommended concepts, methods, accounting rules or classifications in the production of the estimates"?
 - b. Do you agree with the description of provisional estimates as: "estimates that incorporate nationally or internationally adopted concepts, methods, accounting rules and classifications but for which the scope of the output has not been finalized, for example, they reflect early vintages of source data"?
4. Do you agree with the recommendation to adopt the terms, 'economic accounts' 'supplementary accounts', and 'thematic' accounts?
5. Do you agree with the recommendation to adopt the terms, 'economic tables', 'supplementary tables', 'extended tables' and 'thematic tables' across all domains when referring to those tables outside the main sequence of accounts?
6. Do you have other comments on this guidance note?

SUMMARY OF DISCUSSIONS

The members agreed to moving the GN for global consultation. While they broadly supported most recommendations, but requested further clarifications on the :

- use of the term "experimental estimates".
- terms "provisional", "final" or "official"
- distinction between terms 'thematic' and 'supplementary' (and "extended").

Further the members also provided the following comments:

- The distinction between conceptual changes and accounting changes (used in the document) might be difficult in practice as the two elements are inter-related.
- It may be useful to clarify the distinction between different types of changes in source data (i.e., whether they are related to updates in source data or incorporation of new sources).

The term “changes in estimation methods” may be more appropriate than “methodological changes”, which might be misunderstood.

- Different classes of estimates do not always indicate differences in estimate “quality”: some experimental estimates are of comparable quality to official estimates. Moreover, the quality of official estimates may vary significantly across the various accounts.