

GUIDANCE ON THE PUBLICATION AND TRANSMISSION OF NATIONAL ACCOUNTS DATA AND METADATA IN THE CONTEXT OF THE COVID-19 CRISIS

EUROSTAT, DIRECTORATE C

UNIT C2 — NATIONAL ACCOUNTS PRODUCTION

VERSION	DATE	CHANGES
1.0	27 APRIL 2020	
1.1	10 SEPTEMBER 2020	Minor editorial changes
		Chapter 'Aim and scope': Inclusion of the reference period 2020Q2

Background

National accounts are among the most sought statistics to show the economic impact of the COVID-19 crisis. Since 8 April 2020, Directors of Macroeconomic Statistics (DMES) have followed up the challenges that the crisis has created for macroeconomic statistics and taken actions to mitigate their impacts.

Member States' working arrangements still may take the form of remote working or a mixture of remote and office working. Countries are working towards maintaining the statistical production, in line with existing deadlines, however significant risks to the quality and timeliness of information remain. The ongoing work in primary statistics in response to COVID-19 restrictions is important, as these data form key inputs to the national accounts. Some countries still face delayed or incomplete administrative data sources too.

Statisticians are using alternative information to fill in for gaps in traditional data sources when needed. They are also examining imputation methods and models, with the expectation that the past relationships between indicators and macroeconomic statistics are not going necessarily to continue under the COVID-19 crisis. Compilers may have to make assumptions about industries, which have fully or partially 'closed'. The situation differs across countries – in some of the countries - March data are heavily affected (and therefore 2020Q1 data) whereas others see statistical difficulties from April onwards (i.e. 2020Q2 data).

DMES underlined the importance of sharing best practice as well as good and timely communication, preferably with common messages for users. Members specifically invited Eurostat to develop and keep up-to-date common guidance notes and help resolve emerging issues observed in data transmissions. For this reason, Eurostat has created a dedicated page with guidance, supporting statistical compilers.

In May 2020, the lifting of lockdown measures started across the EU. While statistical activities are slowly returning to normal, particularities of the COVID-19 lockdown period continue to persist.

This document updates the guidance note issued on 27 April 2020 and focuses on data publications affected by the COVID-19 crisis starting from the end of July 2020.

Aim and scope

This note gives guidance on the publication of national accounts data and metadata covered by the ESA 2010 transmission programme¹, except for government finance statistics², in the context of the COVID-19 crisis.

It applies to national accounts data due for transmission to Eurostat from April to September 2020 and, consequently, for national and Eurostat publications until the end of October 2020. In line with the ESA 2010 transmission programme, the focus is on the reporting of 2020Q1 and 2020Q2 in quarterly national and sector accounts as the impact of the crisis articulated in these quarters. While national publication dates vary across countries, they are broadly aligned with the following releases preannounced in Eurostat's release calendar:

Eurostat release date	Dataset	Reference period	Type of publication	Transmission deadline			
National accounts main aggregates							
30 April	Preliminary GDP flash estimates	2020Q1	News release, database update	29 April			
15 May	GDP and employment flash estimates	2020Q1	News release, database update	14 May			
9 June	GDP, employment and national accounts main aggregates release	2020Q1	News release, database update	31 May			
20 July	GDP, employment and national accounts main aggregates release	2020Q1	Database update	No later than the day they are published nationally			
31 July	Preliminary GDP flash estimates	2020Q2	News release, database update	30 July			
14 August	GDP and employment flash estimates	2020Q2	News release, database update	13 August			
8 September	GDP, employment and national accounts main aggregates release	2020Q2	News release, database update	31 August			
19 October	GDP, employment and national accounts main aggregates release	2020Q2	Database update	No later than the day they are published nationally			
Non-financial sector accounts							
3 and 28 July	Quarterly sector accounts: households and business	2020Q1	News releases, database update	24 and 30 June for euro area and non- euro area members respectively			

¹ Annex B of Regulation (EU) No 549/2013, OJ L 174, 26.6.2013, p. 1–727

² Eurostat will publish similar guidelines on government finance statistics at its website.

2 and 29 October	Quarterly sector accounts: households and business	2020Q2	News releases, database update	23 and 30 September for euro area and non- euro area members respectively
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Comment: Quarterly data on government finance statistics for 200Q1 were released on 22 July 2020 while data for 2020Q2 are provisionally planned for publication on 23 October 2020.

The note also covers cases specified in footnote 1, Table "Overview of the tables" of ESA 2010 transmission programme regarding Member States' obligation to submit any newly reported or revised variables under the ESA 2010 transmission programme no later than the day they are published nationally.

Methodological aspects of data compilation are addressed in separate guidance notes of COVID-19 relevance.

General approach

It is essential that Eurostat and Member States continue to ensure a full transparency regarding impacts of the COVID-19 crisis on national accounts. As a rule, compilers should apply the European Statistics Code of Practice and the Quality assurance framework of the European Statistical System (ESS) concerning their news and data releases. Recommendations of the two documents on transparency and communication are even more relevant under the current situation.

The ESS agreed on how to ensure the strategic communication during the COVID-19 crisis. National accounts compilers should ensure that this guidance is implemented in the domain, specifically regarding keeping users informed, providing innovative sources and products, finding common solutions and coordinating within the ESS, and widening the range of communication channels.

The COVID-19 crisis drew the user attention to national accounts data reflecting measures undertaken by governments and directed to financial and non-financial corporations and households. The published methodological guidance notes refer to national accounts variables that have been affected. The compilation of some of them appeared more challenging than usual. Challenges differ across Member States due to specificities in the government measures during the lockdown and the pace of lifting the restrictions.

Member States complemented their national publications (news releases, database updates, electronic publications, etc.) with information specifying the impact of crisis on data sources, methods used and the quality of data. Users will continue to be interested in what changes have been implemented in the normal compilation practice and how they affect data quality. Therefore, Member States are invited to make a similar effort in the next publications.

To ensure transparency, it is necessary to continue to prepare and publish crisis-relevant information (metadata) and disseminate the data with appropriate flags and footnotes.

Furthermore, communication actions remain indispensable in three phases:

- Before the release of data affected by the crisis;
- During the affected data release, and
- Post-crisis when the possible data issues are resolved.

COMMUNICATION PRIOR TO DATA RELEASE

Common statistical practice already foresees pre-communication on major events in national accounts such as on planned major revisions. Under the COVID-19 crisis, Member States may consider to pre-announce:

- If the release calendar will be maintained or how it will change:
- Challenges related to data sources and methods;
- Mitigation actions to address the challenges;
- The expected impact on data quality (e.g. completeness, accuracy, exhaustiveness, etc.) in qualitative terms as far as this is feasible.

Eurostat published a note to users on its website under ESA 2010 implementation and data quality and linked the individual pages of national accounts domains to it. Member States may consider referencing this note in their national communication.

COMMUNICATION WITH DATA RELEASE

Member States are asked to continue to include COVID-19 relevant information in the metadata as follows:

- Implemented adjustments to the compilation methods and data sources, specifically for the month(s) and quarter(s) affected by the crisis;
- Details on missing data and imputations carried out;
- Clarifications on major events: revisions, data inconsistencies, outliers, use of flags explaining the events, including breaks in time series and zero and negative values;
- Explanations regarding seasonal adjustment: direct/indirect approach, calendar adjustment, log transformation, mean effect, ARIMA model, outliers (type and period) and other relevant information:
- Information on COVID-19 related data quality issues that have been resolved.

Availability of these crucial metadata is important for understanding the published data. The experience accumulated with data transmissions for 2020Q1 was very positive even if compilers were confronted with extraordinary challenges and workload. Member States are invited to continue to transmit COVID-19 relevant metadata covering all major issues comprehensively.

Aggregates could be flagged with 'p' for provisional, 'e' for estimates or even 'u' flag for low reliability as appropriate from the national compilation perspective. The use of 'n' flag - not for publication - for aggregates affected by the COVID-19 crisis is inappropriate and would not be of service to data users.

Suppression of data from dissemination is only obligatory for reasons of statistical confidentiality defined in Regulation (EC) No 223/2009, i.e. to prevent identification of individual units. In case of quality concerns due to the crisis, suppressing the dissemination should not be the first choice because users would be deprived of essential information. Statisticians may not be able to ensure the usual data quality for each aggregate. Yet, availability of lower reliability aggregates would serve users better than a lack of information.

For the above reasons, the **general recommendations** are to:

- Report the mandatory data specified in the ESA 2010 free for dissemination, flagged in an appropriate manner and accompanied by metadata;
- Revise the data with low reliability flags as soon as new source information arrives;
- Publish these updates nationally and transmit them to Eurostat as soon as possible, even if the timing falls between normal publication dates. The low reliability flags should be removed at this stage.

While lockdown restrictions are being lifted gradually, they may be reintroduced as necessary. Problems in data sources availability should be resolved gradually as far as the lockdown conditions ease. It is important for users that there is no delay in publishing data updates and improving quality. National accountants should not aim to minimize the frequency of revisions

by grouping quality improvements in affected data because some users perceive frequent data changes negatively in principle. On the contrary, data revisions are important under the COVID-19 crisis as the main instrument to improve the data quality.

When COVID-19 related quality issues have been resolved, related metadata should be updated accordingly.

Eurostat keeps up-to-date a questions and answers document on the statistical impact of the crisis on national accounts on its website. Member States may consider referencing this document in their national communication. In addition, Eurostat disseminates country specific metadata associated with the affected national estimates (see the data pages on national accounts and institutional sector accounts).

POST-CRISIS COMMUNICATION

After the crisis, it will be appropriate to assess the actual impact of it on data quality and draw some lessons learnt. While the expectation is that crisis-related quality issues will be fully resolved within a reasonable delay, the chance that some of them may persist is not excluded.

At EU level, the impact assessment will be done in the context of the ESA 2010 quality reporting and assessment. This work will start on 15 February 2021 with the launch of the quality exercise for data transmitted by Member States to Eurostat in 2020. While the public assessment report of Eurostat for data transmissions in 2020 will cover the whole calendar year and, thus, be available with a delay of about a year, the preliminary analysis and communication could start when working arrangements go back to normal and data for 2020Q1 and 2020Q2 have been updated after their first release.

Publication of analytical Statistics Explained articles has started to show the crisis impacts in depth. The first available article shows the impact on main GDP aggregates including employment.

Specific guidance on ESA 2010 data and metadata reporting

GDP AND EMPLOYMENT FLASH ESTIMATES

The publication of GDP and employment flash estimates for 2020Q1 nationally and at EU level was successful, in line with the published guidance and in time. It triggered a strong user response due to significance of indicators for the economies. Metadata for this quarter are available here.

The publication of GDP and employment flash estimates for 2020Q2 nationally and at EU level will be maintained as foreseen in the release calendars. Eurostat provided guidance on the methodological aspects of compilation. Member States are asked to send to Eurostat concise metadata on the implemented adjustments to the compilation methods and data sources, specifically for the month(s) of 2020Q2 affected by the crisis. In its news releases, Eurostat will add information regarding methods and revisions of relevance for the European aggregates. Similarly, Member States may consider publishing relevant metadata in their national publications. National and Eurostat data flags, footnotes and metadata should correspond to each other.

NATIONAL ACCOUNTS MAIN AGGREGATES

The publication of national accounts main aggregates for 2020Q1 nationally and at EU level was successful, in line with the published guidance and in time. Metadata for this quarter are available here.

The publication of national accounts main aggregates for 2020Q2 and 2019 nationally and at

EU level will be maintained as foreseen in the release calendars. Eurostat provided guidance on the methodological aspects of compilation. Member States are asked to send to Eurostat concise metadata on the implemented adjustments to the compilation methods and data sources as well as missing values and imputations, in addition to metadata collected regularly. Eurostat intends to follow the approach applied during benchmark revisions and publish country specific information as it did for the 2020Q1 data. At the Eurostat web page on National accounts (including GDP), the note to users on the page on data will be updated as necessary, also with a link to a file with country specific information for 2020Q2. Similarly, Member States may consider publishing relevant metadata in their national publications. National and Eurostat data flags, footnotes and metadata should correspond to each other.

NON-FINANCIAL SECTOR ACCOUNTS

The publication of non-financial sector accounts for 2020Q1 nationally and at EU level finished successfully at the end of July 2020. Metadata for this quarter are available here.

The publication of non-financial sector accounts for 2020Q2 and 2019 nationally and at EU level will be maintained as foreseen in the release calendars. Member States are asked to send to Eurostat concise metadata on the implemented adjustments to the compilation methods and data sources as well as missing values and imputations, in addition to metadata collected regularly. In particular, Eurostat invites Member States to explain the methodological approach they have selected for recording the state aid to enterprises and individuals due to the pandemic and show its impact on sectors and parts of the accounts.

Eurostat extended the content of country specific metadata with crisis relevant information. At Eurostat's webpage on Institutional sector accounts, a note to users is available on the data page as well as a link to country specific metadata for 2020Q1. Metadata for 2020Q2 will be published together with the data. Member States may also consider publishing relevant metadata in their national publications. Data flags, footnotes and metadata of ESA 2010 datasets in national and Eurostat publications should correspond to each other.

OTHER DATASETS

According to the ESA 2010 transmission programme, transmission of annual datasets not mentioned in the table above is due by the end of September and December 2020. These are for instance the annual financial accounts, the regional accounts and the supply, use and inputoutput tables. They concern the reference year 2019 or an earlier period. In addition, in line with their national release calendars, Member States update other data tables. The recommendations above broadly apply to such national publications and transmissions to Eurostat.

Czechia published its benchmark revision of national accounts on 30 June 2020. Other Member States intend to undertake benchmark revisions of national accounts in September-October 2020. In addition to following the recommendations on benchmark revisions described in the Practical guidelines for revising ESA 2010 data, it seems appropriate to communicate clearly, if the crisis has any impact on the revised data.

Coordination with data providers

The COVID-19 crisis demonstrates clearly the dependence of national accounts on availability and quality of source data: administrative sources as well as other statistics such as surveys and balance of payments. Close national coordination will be very beneficial. Consistency between national accounts and balance of payments remains an important objective. This should articulate in consistent metadata and use of flags and footnotes for identical aggregates.