

**Twenty-Fifth Meeting of the  
IMF Committee on Balance of Payments Statistics  
Washington, D.C.  
January 14–16, 2013**

**(Rescheduled from October 29–31, 2012)**

**Developments in International Data Sharing**

**Prepared by  
Eurostat and OECD**



**Working Group to Improve  
Validation and Data Exchange Procedures  
Between International Organisations  
in the Area of National Accounts:  
State of play**

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# **ECB, ESTAT and OECD Working Group to improve Validation and Data Exchange Procedures in the area of National Accounts**

## **1. Introduction**

At the end of 2011, Eurostat and the OECD set up a technical working group (WG) with a one year mandate to analyse and improve the exchange of data in the area of national accounts, where both institutions currently perform some parallel work on the validation and dissemination of data. The ECB joined the project as compiler of quarterly financial accounts and balance sheets. With the aim to ensure that national accounts in public databases are not only of high quality, but also consistent with each other reflecting an efficient division of work between institutions, the main task of the WG is to propose practical improvements for current validation and data exchange procedures to achieve an overall more streamlined process for the collection, validation and dissemination of national accounts data. (See mandate and roadmap in the annex.)

As this process will also have implications for national compilers – e.g. in terms of the goal of an ultimately reduced response burden but also a possibly intensified scrutiny of national accounts data in the nearer term – this paper aims to provide some more information on the expected outcomes of this (still on-going) project. Following information on the background of the initiative and current practices, it will outline principles and benefits from a clearer division of work between international institutions and highlight the importance to agree on minimum checks for the validation of national accounts data, which should in fact be implemented at the earliest possible stage and thus be discussed – and further refined – in close cooperation with national data providers.

## **2. International initiatives on streamlining the collection and exchange of data**

Possible enhancements in the cooperation between international organisations regarding the collection, processing and exchange of data has been a recurrent topic at international meetings such as the Inter Agency Group on Economic and Financial Statistics (IAG) that is responsible for the monitoring of further progress in the G-20 Data Gaps Initiative. A growing willingness for intensified international cooperation to address existing and new data requests is not only a response to national and international resource constraints, but also enabled by technical progress and increasing emphasis on statistical business process integration, both between international institutions and national authorities.

For instance, the ECB, Eurostat and the OECD have also assumed responsibility to develop and implement Data Structure Definitions (DSDs) for global use in the area of national accounts and ensure that it is closely coordinated with similar developments in the area of balance of payments. Indeed, the use of SDMX (Statistical Data and Metadata eXchange) data model is not only a strategy to improve the exchange of data between international organisations, but also expected to play a key role as a driver of vertical and horizontal integration for the statistical production process as a whole.

In fact, as a streamlined exchange of data between institutions requires both appropriate nomenclature and technical standards, and clear rules and responsibilities to ensure the quality of data, the work of the ECB, Eurostat and OECD WG on validation and data exchange procedures complements activities of the SDMX technical working group that currently works on a consistent

nomenclature for national accounts data transmitted according to the 2008 SNA and its European equivalent, the 2010 ESA.

### **3. Overview on current arrangements**

Currently, the ESA95 Transmission Programme specifies in detail which data have to be transmitted to Eurostat within certain delays (as well as agreed derogations) and constitutes the legal basis for the bulk of national accounts data transmitted from European countries. In order to limit the burden on national authorities, it has already been an established practice that the OECD receives an automatic forwarding of national accounts data received by Eurostat instead of requesting specific data transmissions from its members.

In this respect, the general principles for the exchange of statistical data between Eurostat and the OECD, which have been specified in a Memorandum of Understanding in the year 2000, stress the principles of cost effectiveness and the minimisation of the burden on respondents and postulate that "all statistical data will be verified and documented either by Eurostat or OECD, prior to its release, so as to comply with the characteristics and equality requirements of official statistics".

So far, the OECD and Eurostat have generally proceeded with a parallel validation and dissemination processes of data from the ESA95 Transmission Programme, but for some datasets, the OECD already publishes validated data from Eurostat, which has freed resources for other purposes.

The latter practice has also been established with the ECB, which receives validated national accounts data from Eurostat, and compiles financial accounts and balance sheets based on the Monetary Union Financial Accounts (MUFA) Guideline requirements as well as Insurance Corporations Pension Funds (ICPF) statistics that National Central Banks (NCBs) transmit to the ECB, which subsequently validates the national data and exchanges them with the other international organizations.

Further efficiency gains could thus indeed be achieved, if the cooperation between Eurostat and the OECD is further enhanced, with the objective that the OECD publishes national accounts data from the ESA95 transmission programme that have been validated by Eurostat. The resulting efficiency could then be deployed to increase the number of countries for which national accounts data are collected (e.g. BRIICS) and/or to enter into complementary activities.

### **4. Principles for improved data exchange procedures**

In line with the above mentioned general initiatives to streamline the exchange of data between international organisations, the division of work between the ECB, Eurostat and the OECD, could profit from the specification of clearer responsibilities and procedures in the area of national accounts.

For instance, as the Memorandum of Understanding between Eurostat and the OECD explicitly allows further bilateral agreements in specific fields, an addendum could specify the following general principles for the collection, validation and dissemination of national accounts:

- a) As a general principle, it could, for example, be agreed which organisation has the prime responsibility for specific data, so that it can focus on the collection, validation and dissemination of data under its constituency.
- b) Following the validation of these data using agreed and well documented minimum checking rules and procedures, within agreed delays, validated data would then be transmitted to other institutions using standard tools and procedures.
- c) If more timely transmission of data are needed, e.g. for analytical purposes in relation to regular publications or policy requirements, (selected) non-validated national accounts data could be transmitted for internal use (respecting agreed confidentiality requirements).
- d) In general, receiving organisations should ensure that data are not published before they are officially released by the responsible organisation, especially for data that have not been published by national authorities and/or data that are particularly politically sensitive.
- e) A need for coordinated data releases is, for example, in particular important for government finance statistics, which currently undergo an in-depth scrutiny in Eurostat and may thus be revised even if they have already been published by national authorities.
- f) Subsequent questions regarding the correctness of national data (e.g. in relation to validation checks) should generally also be handled by the same international organization, which would investigate the issue or forward the question to its national counterpart.
- g) The above principle should however not prevent specific questions being clarified directly between the OECD and the national authorities, or the OECD having regular contacts with its delegates. In these cases, the responsible organisation should be informed of issues that lead to data changes, as it will also be the one who processes any data corrections.

While the current practice of parallel checking has probably also some advantages, e.g. in terms of error detection or the gaining of a deeper understanding of the relevant national data, both producers and users of national accounts data should overall profit from the improved division of work and validation practices between international organizations. National authorities would mainly communicate with one counterpart that specialises on its data transmissions and gains deeper understanding of specificities, which it could record as metadata and share with users in other institutions and the general public, while the risk of (temporary) misalignment of published data is significantly reduced.

## 5. Specification of related quality requirements

As quality insurance is an important precondition for a more streamlined exchange of data between international institutions, a significant part of the WG mandate is the review and analysis of current data validation routines.

If "data validation" is defined as a process to ensure the correspondence of the final (published) data with a number of quality characteristics, referring notably to intrinsic characteristics of the data in terms of accuracy, coherence, comparability, and "data editing" is defined as the broader activity aimed at detecting and correcting errors (or logical inconsistencies), the processing of data usually encompasses three phases:

- (i) the definition of a consistent system of requirements (checking rules),

- (ii) their verification on given data (data validation or data checking), and
- (iii) the elimination or substitution of data in contradiction with the defined requirements.

As international organisations generally do not introduce corrections directly, but consult national authorities which confirm or retransmit the data, the focus of the WG has been on the comparison of current validation practices within international organizations, in view of identifying an agreed set of minimum checking rules for national accounts data.

Following a broad agreement on which validation checks are considered as “essential”, “important” and “useful” at its last meeting on 11 September 2012, the WG is now working out detailed recommendations on checks (and acceptable variance) for specific datasets, broadly distinguishing between basic format, structure and content checks, consistency checks and plausibility checks. As these should, in principle, be implemented at the earliest stage, the next step is the discussion of identified recommended minimum validation checks with national authorities.

In the case of EU Member States, the issue of improved data validation and exchange procedures will therefore be on the agenda of the National Accounts Working Group (NAWG) on 20/21 November 2012. OECD delegates will also be informed and consulted on the outcome of this project.

## **6. Extending the experience to other statistical domains**

The IAG, at its video-conference of 24-25 September 2012, decided to expand the WG described in this document to other IOs, like IMF, United Nations and BIS. In such an enlarged forum it should be possible to envisage the extension of the data sharing arrangements between IOs, as foreseen for National Accounts, also to BoP-data.

While the pull mode might be the final solution to all problems related to minor (and major) differences between the national data disseminated by the various IOs, the "pull mode" is not for the near future. In the short term, arrangements between IOs like the one described for National Accounts might help to solve the relevant issues.

## **Annex: Mandate and Roadmap**

### **Improved data exchange in the area of National Accounts:**

#### **Mandate and Roadmap**

#### **Mandate (from: 16/03/2012)**

On the background of international efforts to streamline the exchange of data between international organisations and more specifically the on-going implementation of SDMX in National Accounts, Eurostat and the OECD decided to set up a technical working group (WG) with the aim to analyse and improve the data exchange in the area of national accounts.

Given that the Eurostat and the OECD currently perform some parallel work on validating national accounts data received from their Member States, the WG encompasses mainly Eurostat and OECD staff that deal directly with the processing and validation of specific national accounts datasets. In addition, in relation to quarterly financial accounts and balance sheets, a representative from the ECB will be invited to participate in the working group. The participants will be put forward by their respective organisations.

The task of the WG is notably to propose practical improvements for the data validation and exchange procedures in order to ensure high data quality and a better division of work between the OECD and Eurostat in this area.

In this view the WG should notably:

- take stock of current practices, problems and expectations in view of agreeing the scope of the project and respective responsibilities;
- exchange and analyse current validation routines (e.g. checking algorithms, reports) in different areas as well as dataset problems and properties in order to identify possible gaps and improvements and agree on essential validation rules;
- if needed, look at ways to meet timeliness requirements, either by accelerating validation procedures, or by looking into ways to exchange non-validated data, data under embargo, non-publishable data (for content reasons) and/or confidential data; and
- implement, test and document the agreed improved validation and data exchange procedures and processes.

The aim of the WG should be to complete these tasks within the year 2012.

### Roadmap (Updated Status in September 2012)

Milestone		Process / Event		Date	Description
1	Preparation Q1-2011	1.1	Preparatory meeting	18 Jan. 2012	<ul style="list-style-type: none"> <li>Preparatory to take stock of current practices, problems and expectations. (done)</li> </ul>
		1.2	Minutes	January - February	<ul style="list-style-type: none"> <li>Circulation of the minutes in view of agreeing the scope of the project and respective responsibilities. (done)</li> </ul>
		1.3	Information exchange	January - March	<ul style="list-style-type: none"> <li>Exchange of information on current validation routines (e.g. checking algorithms, reports) (done)</li> </ul>
		1.4	Work plan/roadmap	March	<ul style="list-style-type: none"> <li>Agreement on roadmap and detailed work plan (done).</li> </ul>
2	Analysis Q2-2012	2.1	Validation procedures	April-June	<ul style="list-style-type: none"> <li>Analysis of current validation procedures in different areas to identify improvements (done)</li> </ul>
		2.2	Eurostat datasets	April-June	<ul style="list-style-type: none"> <li>Review of dataset problems and properties to identify gaps and possible improvements (on-going)</li> </ul>
		2.3	OECD datasets	April-June	<ul style="list-style-type: none"> <li>Identification/testing of complementary OECD datasets by Eurostat (missing)</li> </ul>
		2.4	Essential validation rules	June	<ul style="list-style-type: none"> <li>Circulation of a compilation of current validation rules (done).</li> </ul>
3	Implementa- tion Q3-2012	3.1	Validation procedures	July-September	<ul style="list-style-type: none"> <li>Implementation of improved validation procedures (started for MA)</li> </ul>
		3.2	Exchange procedures	July-September	<ul style="list-style-type: none"> <li>Implementation of improved data exchange procedures (on-going)</li> </ul>
		3.3	Meeting and Documentation	September	<ul style="list-style-type: none"> <li>Meeting on recommended minimum validation rules and improvements for the validation and data exchange procedures (done)</li> </ul>
4	Testing and finalisation Q4-2012	4.1	Data validation	October-December	<ul style="list-style-type: none"> <li>Specification of minimum validation checks for specific datasets (on-going)</li> </ul>
		4.2	Data exchange	October-December	<ul style="list-style-type: none"> <li>Test and evaluation of data exchange procedures (transfer processes, confidentiality flags, etc.)</li> </ul>
		4.3	Documentation	December	<ul style="list-style-type: none"> <li>Finalise documentation of WG recommendations and agreements (MoU)</li> </ul>