Session 2: Coherence of data published by various international organizations on the same subject

CO-ORDINATION OF DATA DISSEMINATED BY INTERNATIONAL ORGANISATIONS

- UNSD, OECD, EUROSTAT, IMF, UNIDO -

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A. Introduction

In a context of stagnant, if not declining, resources and rapidly increasing amounts of disseminated data, it is imperative to look at possible synergies between international data collection and dissemination agencies. These synergies have specific characteristics according to the data subject, but all have in common the need to:

- reduce the response burden of national data providers;
- minimise (or even better, eliminate) any duplication in data collection and processing;
- improve data quality through agreed methodological standards and processing routines;
- enhance data comparability across countries;
- avoid confusion and misinterpretation by users caused by differences in data published by IOs.

The OECD has been involved in the implementation of data sharing arrangements in the following areas:

1. Yearly Trade Statistics by Commodity (called International Trade by Commodity Statistics (ITCS) between the OECD and COMTRADE at UNSD);

2. Yearly Structural Business Statistics (called Structural Statistics for Industry and Services (SSIS) between the OECD and the Structural Business Statistics (SBS) at Eurostat);

3. Monthly index of industrial production statistics with the IMF;


These co-ordination initiatives are described below. In addition, the OECD is currently undertaking a major project in conjunction with Eurostat to evaluate the feasibility of using Eurostat’s Euro-IND database to provide data for all EU countries for the OECD Main Economic Indicators (MEI) database. This project is also outlined below.
B. Key characteristics, challenges and opportunities, and risks of the various co-operation projects

1. Yearly Trade Statistics by Commodity (ITCS) between at OECD and COMTRADE at UNSD

i. Characteristics

Both UNSD and OECD have traditionally collected detailed merchandise statistics separately, the OECD for its (now) 30 Member countries plus China, Hong Kong China and Chinese Taipei and UNSD for UN Member States. This was a clear duplication of collection and reporting.

Realising the scope for synergies and to reduce response burden in countries, the OECD and UNSD decided around five years ago \(^1\) to join forces in the area of data collection and processing concerning (largely identical) merchandise trade.

This was a multi-stage process, requiring:

- a formally signed Memorandum of Understanding (in early 2001) by the Chief Statistician and Director of Statistics at OECD and the Director of the UNSD;

- joint letters from UNSD and OECD to Member countries of OECD to inform them to cease sending data to the UN while continuing to do so to the OECD. The OECD undertook to dispatch the data at the very earliest possible date to the UN according to an agreed format and level of detail;

- careful and progressive testing of this approach by:
  - applying it first to only 13 OECD countries (in 2000), then in 2001 to another 9 countries, and in 2003 to all 30 OECD countries;
  - moving from data “dispatching” from OECD to UNSD to comparing processing routines in detail;
  - moving to unique “output” trade values disseminated by both organisations.

- the adoption of a common IT platform (SQL) in 2003 which both Organisations now apply for uniform data processing and dissemination.

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\(^1\) Instrumental for this major change in the modus operandi were the Inter-Agency Task Force for Merchandise Statistics, convened by the WTO and meeting annually and the 1\(^{st}\) OECD Trade Expert Meeting, bringing together IOs and data providers from National Offices, held in 1999 at OECD Headquarters.
This co-operation, comprising the three traditional stages of data treatment (collection, processing, dissemination) and a common IT platform is a major breakthrough for data sharing between the OECD and the UN.

**ii. Challenges and opportunities**

A general concern for both Organisations is timeliness and in this area much has been achieved but much still remains to be done. In an effort to improve the timeliness of data collection and to improve the interpretability of the data received, the OECD and UNSD have again sent a joint letter to all OECD Member countries. This letter, which was sent at the end of February 2004, requested provisional and final trade data for 2003 and outlined in detail the requirements for the dataset. In addition, all OECD Member countries were requested to send HS 2-digit data, disaggregated by partner for the purpose of accommodating suppressed or missing information at the detailed level.

There was also formal agreement between the UNSD and the OECD to take cooperation in the field of international merchandise trade statistics one step further and to include data processing as a joint project. Recently, UNSD and OECD signed a new memorandum of understanding in this area. The database teams of UNSD and OECD work very closely together and have agreed upon one common data processing practice. The IT teams are now implementing this agreement with each writing separate parts of the system.

The following decisions were taken regarding the data processing system:

- The basic national data will be standardized at the most detailed commodity level available. These data can be shared with other international organizations.

- Records will be standardized with respect to country codes, commodity codes and quantity unit codes. Values in national currency will be converted to US dollars.

- The statistical territory as described by the country itself will be used for the definition of the statistical territory of that country as a reporter and as a partner.

- Records with non-standard HS codes will be added to corresponding 2-digit level standard HS codes. These records (with non-standard HS codes) will also be maintained separately as memorandum items.

The above-mentioned standardisation and improvements in timeliness are a permanent challenge, but also a unique opportunity to improve data quality and achieve uniform output while optimising resource use (specialisation, comparative advantage) in the two international organisations and a significant reduction in response burden for countries. The very close scrutiny and permanent interaction assures a continuous quality control (and full transparency about how data are calculated) with the additional advantage to address these issues not only between international organisations (through an Inter-Agency Task Force) but in particular also at the Expert meetings at the OECD with national representatives from NSOs, central banks or customs offices.
So far, this exchange has provided excellent results and clearly the goodwill of the countries concerned for which we are grateful.

Other advantages of this cooperation concern:

- a standard treatment of quantities, according to WCO and UNSD world standard, and
- an integrated and consistent approach for the amount and structure of metadata.

**iii. Risks**

The main potential risks attached to this cooperation agreement could arise from the significantly different dissemination strategies and patterns used by the partner organisations. The OECD publishes 5 yearly publications and several CD-ROM packages using different classifications. In addition, Internet access and the OECD system for disseminating information, including statistics (OLISNet) also provide easy access to OECD trade data. The same applies to monthly trade data. OECD and OECD customers should benefit from worldwide reporter country coverage. If, for the time being, annual trade data sales of OECD drop because of this data sharing agreement and new dissemination pathways, solutions would need to be found to compensate for any potential loss of revenues.

**2. Yearly Structural Business Statistics (SBS): MoU with Eurostat and sourcing from Eurostat for common variables and sectors**

**i. Characteristics**

The catalysts to improve co-operation with Eurostat in the area of yearly structural business statistics were similar to those described above for trade. There was a very large overlap of variables and sector coverage though with much larger differences in data values than for trade data. Hence, there was an urgent need to clarify the situation, compare data in detail, develop a realistic action plan and concrete steps in co-operation with all those OECD Member countries which are members of the EU. Because of the regulatory EU framework in place, involvement of OECD working parties (notably the Statistical Working Party of the Industry Committee (SWIC)) and a range of Eurostat meeting bodies, a complex process and procedure had to be followed.

Co-operation in structural business statistics between the OECD and Eurostat is based on the general principles set out in a general Memorandum of Understanding between the two organisations, namely the:

- mutual interest of both organisations in achieving the best quality of statistical data at the European level;

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2 Notably the Steering Group of Structural Business Statistics, the Business Statistics Director Group, the Statistical Policy Group.
• availability of statistics to users with only a minimum delay;

• optimum use of available resources and minimisation of the burden on respondents

It is important to underline that, of course, only variables and sector details that are common to both organisations, that is, where duplication and differences may occur, plus an undue response burden on countries, are the subject of this arrangement.

In the arrangements negotiated by the two partner organisations it is recognised that:

Eurostat:

• Is the European Community authority responsible for the implementation of Regulation No 322/97 on Community statistics. Eurostat is responsible for data collection according to the Council Regulation 58/97 on Structural Business Statistics and Council Regulation No 1165/98 of 19 May 1998 concerning short-term statistics and dependent further Community law.

• These legal acts empower Eurostat to receive data from European Member States according to definitions, methods, timetables and formats set out in these and related acts.

• The process of collecting statistical data also extends to members of the European Economic Area and to EU candidate countries.

• Is developing new business statistics to better respond to user needs. The development programme is set out in the 5-year Statistical Programmes of the European Union and in Annual Statistical Programmes, and covers improvements in structural and short term business statistics, statistics on information society and connected areas.

It is also recognised that

the OECD:

• Has the obligation to respond to the mandate expressed by its Member countries, which translate into a work programme determined by the OECD Secretary General in response to the OECD Council, OECD Ministerial mandates, and priorities set by Committees and Working Groups.

• Plays an important role in harmonising statistics from its member countries outside the EU with EU countries.

• Collects and harmonises OECD statistics needed for the accomplishment of the work programme, co-ordinated by the Statistics Directorate, which ensures the setting of high quality standards.
• Is in the process of adapting its business statistics to new analytical needs, which may impact on the list of variables to be collected.

• May have statistical needs which could be different from those established in the European Union, requiring direct data collection by OECD for all its member countries.

• Needs to continue maintaining direct and regular contact with all Member countries on all statistical matters

As set out in the Memorandum of Understanding, data exchanged between Eurostat and the OECD may be used and processed for the purposes of each organisation, with the only commitment being to indicate in all products that part of the data has been taken from the other organisation’s sources.

ii. Challenges and opportunities

Through a specific and detailed protocol, there is an exchange of data and experiences in business statistics between the partner organisations in specified areas of mutual interest. For such identified areas, specific working arrangements are annexed to this protocol.

As a result of the principles of co-operation mentioned above, the basis for the working arrangements is a specialisation of each organisation in data collection from different groups of countries. Eurostat will supply the OECD with data for official use collected from European countries, while the OECD will supply Eurostat for official use with data for other OECD Member Countries. It is also agreed, that both organisations will establish and maintain a privileged exchange of information regarding methodological and quality aspects of the data covered.

Both organisations will also closely co-operate in the development of new statistics, by sharing experiences and work to ensure consistency and non-duplicative use of resources. If special working arrangements are deemed useful for specific development areas, annexes to this protocol can be added, after agreements by both parties.

In particular, the OECD’s mandate and role to provide a methodological bridge between EU and Non-EU Member countries will bring significant benefits to all parties concerned (e.g. target definitions, OECD work in SMEs, virtual discussion groups on Business Register issues, the statistical units used, etc).

With regard to Structural Business Statistics, a logical extension already needing further consultation and a similar agreement is the breakdown of data by size classes. Both organisations aim at including in 2004 an additional annex on exchange of data by size classes.

Data sets covered

For Eurostat: Collection of structural business statistics
For OECD: Data collection for the Structural Statistics for Industry and Services (SSIS) database

Business Sector coverage

ISIC Rev. 3 Categories A to O, except Category L, at the most detailed level available (up to 4-digits).

First reference year

Data collection of the year 2003, beginning with reference year 1999. Revisions, which each organisation may receive in the future, relating to reference years prior to 2001, will also be exchanged.

Annual Business Statistics variables to be sent by the OECD to Eurostat

For all available OECD non-EU countries, the OECD will make confidentialised structural business data available to Eurostat for official use according to Eurostat’s needs and rules. The format of these data would be that of the variables collected through the OECD SSIS questionnaire. If desired by Eurostat, it may include those variables which are collected by OECD, but not by Eurostat.

iii. Risks

The data comparison resources invested by both partners were significant during the past two and a half years. Such a high level is not sustainable in the longer term, but an automatic data transmission procedure is currently being tested. Both parties expect significant efficiency gains in the immediate future (the IT component is absolutely crucial to bring down the required resource levels at present in this context).

The procedure on how to confidentialise this particularly sensitive and regulated (at EU) set of statistics is important and an agreement is needed in the yellow, not the red the green zone of level confidentialisation. This will need to be further investigated if this results in a significant loss of data for the OECD required to meet the Organisation’s analytical needs (which are formulated by high-level Delegates of all OECD countries). “Over-confidentialisation” may become a major stumbling block.

OECD sectoral coverage (and data availability) is greater than that of Eurostat. The opposite is true for variables. A compromise needs to be found between too little and too much. It should also be underlined here that UNIDO receives SBS data from the OECD. A special working group set up this February by the OECD (SBSNet) will also address the coverage requirement issues, taking duly into account both organisation’s possibilities and constraints as well as those of third parties, such as UNIDO. Both Eurostat and UNIDO participate in SBSNet.

Outcomes and future steps have been and will continue to be regularly presented to and discussed by the relevant bodies at OECD, UN, and Eurostat to provide the appropriate degree of direction and adaptation to new needs.
3. Monthly index of industrial production statistics between the OECD and IMF

The OECD currently supplies the IMF Statistics Department with a monthly file containing key index of industrial production statistics for 28 OECD countries in lieu of the Fund’s direct collection of these data. The file is transferred as an Excel spreadsheet the day after the monthly Main Economic Indicators (MEI) publication has been released to which these data contribute. A metadata file explaining changes (if any) to the series required by the IMF since the previous MEI publication is also provided with the monthly data set. These data are then published in the IMF’s monthly International Financial Statistics publication, with the OECD mentioned as a source in the introduction.

This data sharing arrangement has been in place since January 2004, following an investigation by the IMF as to whether the MEI could satisfy their requirement for index of industrial production statistics for OECD Member countries. Given the success of this project, the provision of data for other subject areas may be considered in the future, at which time more sophisticated methods of data transmission would also be evaluated.

4. Monthly business tendency and consumer opinion survey data between the OECD and the European Commission

The European Commission (EC DGFIN) currently provides the OECD with harmonised monthly business tendency and consumer opinion survey data for all EU countries that are members of the OECD. These data are then published in the monthly MEI with the source signalled by footnotes in the data tables and specific text in the publications’ explanatory notes. Data are extracted automatically by the OECD directly from the European Commissions’ database.

This data sharing arrangement has been phased in during 2004, such that from the June edition of the MEI only EC DGFIN sourced data will be published for this topic. Consequently, collection of these data from national agencies will cease. This project has had several advantages, such as ensuring the consistency of data published by the OECD and EC DGFIN and reducing the reporting burden for national agencies. However, it has also facilitated the development of a strong relationship between these two organisations, who now work closely together with their respective Member countries (including the Big 6 OECD Non-Member countries) to promote best practices in the conduct of business tendency and consumer opinion surveys. Areas of such cooperation between the OECD and EC DGFIN include: the development of processes to increase the sharing of information on existing international standards and best practice for business tendency and consumer opinion surveys, not only between the partner organisations but to the larger statistical community; development of standards for metadata; harmonisation of data and processes such as seasonal adjustment; improvement in response rates and reduction in respondent load; etc.

5. Assessing the feasibility of using Eurostat data for the OECD’s monthly MEI publication

i. Characteristics
The OECD and the Short-Term Statistics Section (Unit D3) in conjunction with the Euroindicator Section (Unit C6) of Eurostat recently launched a joint project to compare the content of the OECD’s Main Economic Indicators (MEI) and Eurostat’s European and national short term indicators (Euro-IND) databases. This project is part of a broader strategy to assess the feasibility of Eurostat becoming the sole provider of data to the MEI database for all European Union countries.

The broad scope and coverage of the MEI database is very similar to the Euro-IND database in regards to the statistical domains represented. Work is currently in progress to compare the following attributes of these databases for the short-term statistics in industry, commerce and services domain:

- coverage of series by subject and country;
- length of time series and relative timeliness (in regards to the most recent data point available);
- degree and quality of metadata available;
- evaluation of data quality.

**ii. Challenges and opportunities**

*Initial comparison studies*

Initial results have shown that the scope of the two databases for short-term statistics in industry, commerce and services domain is very similar although some minor differences can exist in definitions of specific series maintained by the two sources, in particular Eurostat collects working day adjusted data in production and retail trade whereas OECD collects original data. Also, the MEI maintains much longer time series due to its policy of linking different versions of country series for a particular subject over time, even though there may have been methodology changes between the versions.

Direct comparisons of time series expected to be the same based on their description are being performed with generally encouraging results. Where differences are identified, the OECD and Eurostat’s Unit D3 work together to identify reasons for the discrepancies. Often this has been due to slight differences in definitions for series maintained by the two organisations, or a deficiency in the data transmission procedures by either organisation. Where the discrepancies cannot be resolved, countries are in the process of being contacted to explain why they are providing different data for the same subject to OECD and Eurostat. This process of review has already been valuable in identifying weaknesses in current processes used within both organisations and thus will lead to general improvements in data quality.

*Future work*

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3 It is the policy of Eurostat not to link series but to encourage countries to provide as long a time series as possible for each subject. Consequently, Eurostat series are expected to be the same length as those published by the national institutes.
The project has reached a stage where the OECD may soon have enough evidence to conclude that using Eurostat as a single data source to satisfy the requirement of the MEI for EU countries will not compromise existing data quality, at least for the short-term statistics in industry, commerce and services domain. In fact, the project has shown that improvements are likely to be made in the area of timeliness and comparability of output across countries. This reflects Eurostat’s comparative advantage in collecting these data via the EU regulation on short-term statistics.

However this analysis will need to be extended to the other statistical domains of Euro-IND. The close cooperation between the OECD and Eurostat units D3 and C6 thus far has enabled this analysis to proceed smoothly, and similar cooperation with other sections of Eurostat responsible for the remaining statistical domains of Euro-IND (i.e. Balance of Payments, Consumer Prices, Labour Market, Monetary & Financial Indicators) will be needed to make comparisons in these subject areas. Implementation of this objective would also be a large scale technical project to establish an ongoing data and metadata transfer process between the organisations for which specific additional resources would need to be allocated. Progress on this project is regularly reported to the Friends of the Chair (FROCH) group, a subsidiary body of the Statistical Programme Committee (SPC) who strongly supports the undertaking of this project.

If successful, once implemented this initiative should result in efficiency improvements for the OECD, data quality improvements for both OECD and Eurostat (including standardisation of output) and a reduction in burden for national agencies. It addition, Eurostat will benefit from a reciprocal arrangement through receiving data on non EU countries, in particular the United States and Japan, from the MEI. This should allow the OECD to focus on improving data quality and comparability for non EU OECD Member countries, which represents its main value added in the field of international statistics. A key aspect of this work is to draw comparisons between EU and non EU countries to support improvements in improving the statistical systems of all OECD Member countries through the work of such forums as the Short-Term Economic Statistics Expert Group (STESEG).

### iii. Risks

The MEI database has a long history, having existed since the 1960’s and has a significant internal and external user base. It order to satisfy its users, MEI must continue to maintain long time series to support empirical analysis and must contain important series required by users. These issues represent challenges when considering a change of source for European Union countries, as some series currently maintained by the MEI for EU countries are not subject to the EU regulation and therefore are not maintained by Eurostat. In addition, for some subjects there are countries that provide the OECD with national series and Eurostat with adjusted series to satisfy the requirements of the regulation.

The OECD will need to work through these issues with its major internal and external users as this project progresses. An undesirable outcome would be the need to maintain some series provided by national sources to supplement data provided by Eurostat, which would then erode many of the potential efficiencies and reduction in burden for national agencies sought by this project.