Statistical Commission
Thirty-seventh session
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Item 4 (b) of the provisional agenda*
Items for information: international merchandise trade statistics

Report of the United Nations Statistics Division and
the Organization for Economic Cooperation and
Development on the Joint United Nations/OECD
System for collection and processing of international
merchandise trade statistics

Note by the Secretary-General

In accordance with a request of the Statistical Commission at its thirty-third
session,** the Secretary-General has the honour to transmit to the Commission, for
information, the report of the United Nations Statistics Division and the
Organization for Economic Cooperation and Development (OECD) on the Joint
United Nations/OECD System for collection and processing of international
merchandise trade statistics. The Commission is requested to take note of the work
done as discussed therein and may wish to comment on the plans of the Statistics
Division and OECD for further cooperation in this area of statistics.

para. 80 (c).
Report of the United Nations Statistics Division and 
the Organization for Economic Cooperation and 
Development on the Joint United Nations/OECD 
System for collection and processing of international 
merchandise trade statistics

Introduction

1. In response to the request of the Statistical Commission at its thirty-third session that international organizations strengthen the coordination of their statistical activities\(^1\) and building on their memorandum of understanding of 15 January 2001, the United Nations Statistics Division and the Organization for Economic Cooperation and Development (OECD) have made a special effort to improve cooperation in the area of international merchandise trade statistics. The overriding objective of this effort was to reduce the respondent’s burden, to synchronize and harmonize data-processing routines and to disseminate identical data. By its very nature and also owing to the novelty of its character, this has been a multi-year process in which the cooperation of the Statistics Division and OECD has been gradually deepened and extended.

2. During 2002-2005, the Statistics Division and OECD jointly developed: (a) an agreement on arrangements for data collection and data sharing; (b) common data-processing standards; and (c) computer applications for use in data processing and dissemination. This set of agreements, standards and applications is referred to by both organizations as the Joint United Nations/OECD System for collection and processing of international merchandise trade statistics (Joint System). During the process of developing the Joint System, OECD member countries were informed thereon and consulted. The development of the Joint System was highly appreciated by OECD trade experts during their meetings in 2004 and 2005 and was seen by them as an excellent example of inter-agency cooperation.

I. Description of the Joint System and status of its implementation

A. Agreement on data collection and data sharing

3. The organizations agreed on a list of requirements for the data and metadata to be collected from OECD member countries. It was also agreed that the Statistics Division would terminate its collection of data directly from OECD member countries and would use instead the data sets collected by OECD. OECD will monitor the timeliness of data and metadata reporting. The requirements for the collected data are in accordance with the recommendations of the Commission adopted at its twenty-ninth session\(^2\) and published by the Statistics Division in *International Merchandise Trade Statistics: Concepts and Definitions*.\(^3\) The Statistics Division will apply the same requirements in its collection of data from non-OECD countries.
4. In the process of implementing this agreement, the organizations sent a joint letter to all OECD member countries in January 2004, in which they informed them about the final data-reporting requirements and arrangements.

5. Currently, both organizations are working on the implementation of the standardized data-processing procedures to ensure that the data processed by both organizations are identical. Upon completion of this activity, trade data of OECD member countries will be processed by OECD only and will be included in OECD and Statistics Division databases simultaneously.

B. Summary of common data-processing standards

6. The Statistics Division and OECD reviewed their data-processing procedures and agreed on common data-processing standards. The details of those standards can be found in the room paper entitled “Joint UN/OECD System for collection and processing of international merchandise trade statistics (Joint System)”. A summary of the agreed standards are provided below.

Country codes

7. The United Nations country/area codes will be applied at the data records level. Using those codes as building blocks, each organization will create country groups needed for further data processing and publishing, according to its own definitions and needs.

Trade conversion factors

8. The trade-weighted exchange rates (trade conversion factors), calculated separately for exports and imports, will continue to be applied by both organizations. The procedure has been developed to check automatically the significance of the revisions of exchange rates on a quarterly basis. The recalculation of the value data will be carried out simultaneously in both databases, if deemed necessary. A track record of historical conversion factors will be kept for reference.

Classifications and correlation tables

9. Both databases will continue to treat the Harmonized Commodity Description and Coding System (HS) as a primary commodity classification for data-collection and data-processing purposes. The Standard International Trade Classification (SITC) will be used to aggregate the HS data into commodity groups more suitable for some analytical purposes and for maintenance of the historical series. The correlation tables between various existing revisions of these classifications, as developed by the Statistics Division, will be applied by both organizations. Depending on need, the Statistics Division and OECD may utilize other classifications for dissemination of trade data. For example, OECD has a history of expressing trade data in terms of the International Standard Industrial Classification of All Economic Activities (ISIC) and the Statistics Division introduces trade data in terms of the Classification by Broad Economic Categories (BEC).
Non-standard codes

10. The organizations agreed that there was a need for non-standard HS codes to process special transactions or special commodities reported by countries that could not be allocated to standard HS or SITC codes. The lists of such codes (or memorandum items) were reviewed and agreed. A correspondence table between OECD and Statistics Division non-standard codes is being created and will be used when necessary.

Quantity units and quantity estimations

11. The databases of both organizations will contain two quantity fields: net weight and quantity in terms of the standard units of quantity recommended by the World Customs Organization. Since reporting of quantity information by countries has many gaps, both organizations use estimates. In order to improve quality and comparability of such estimates it was agreed to standardize the estimation procedure using the new approach developed by the Statistics Division. Quantity conversion factors will be reviewed and agreed upon with the understanding that the factors provided by the Food and Agriculture Organization of the United Nations (FAO) for agricultural products will be taken to the maximum extent possible. It was also decided that quantities would be shown only at the 4- and 6-digit levels of HS and at the 3-, 4- and 5-digit levels of SITC.

Confidentiality

12. Owing to the confidential character of some transactions, countries provide less detailed partner breakdown in the national data sets at the HS 6-digit level rather than at the HS 2-digit level. This creates discrepancies between totals shown at the 2-digit level and the accumulated totals of data reported at the lower levels of the classification. OECD and the Statistics Division have agreed to include in their databases a general methodological note explaining those apparent discrepancies to users of trade statistics and are finalizing rules on uniform processing of the confidential data.

Metadata

13. The organizations treat metadata as an indispensable part of their respective databases and agreed to improve the efficiency of trade metadata preparation, storage, access, management and dissemination. OECD is loading trade metadata into its recently developed MetaStore application. This includes trade definitions, recommendations, sources, country notes, information about classifications, etc. As a common repository, MetaStore manages metadata for data sets of various subject areas and different structures. The Statistics Division is studying the possibility of implementing applications similar to MetaStore as a management tool for its metadata. The Statistics Division and OECD will ensure that users have no difficulty in accessing the metadata maintained by both organizations.

Synchronization of databases

14. In order that identical data may be disseminated to users of trade statistics, both Statistics Division and OECD databases will be permanently synchronized. The synchronization process will be launched every night to update OECD and Statistics Division mirror databases. The data will be transferred in Extensible Markup
Language (XML) format using Statistical Data and Metadata Exchange (SDMX) cross-sectional schema.

C. Computer applications for use in data processing

15. As a part of the Joint System, all computer applications with associated source code that have been or will be developed for the processing and dissemination of trade data are to be shared between the two organizations. The starting point for this development was the creation of the Statistic Division application for maintenance and dissemination of detailed commodity trade statistics, namely, the United Nations Commodity Trade Statistics Database (UN Comtrade). OECD is in the process of installing this application and adapting it to its needs, with a view to making it accessible to the public by mid-2006.

16. The backbone of the whole operation is the trade data-processing application named COPRA (Commodity Processing application). The effort undertaken in developing COPRA has been a one-of-a-kind example of inter-agency collaboration. On the one hand, statisticians of the Statistics Division and OECD worked out in detail the methodology for standards of data processing (including country nomenclature, treatment of confidentiality, estimation of missing quantities and data validation); on the other hand, information technology (IT) staff of both organizations wrote code and developed application interfaces to create the computer programs.

17. On 1 January 2006, COPRA will become the production system for the processing of trade data at the Statistics Division and OECD. The perceived benefits of the new system are: (a) inter-agency standards on all details of data processing; (b) harmonization of published international trade statistics; (c) higher level of data quality; (d) full accountability in the treatment of trade data; and (e) availability of a complete set of metadata. In addition, as an integral part of the application, an automated transfer of the processed data at a detailed level will feed into the trade databases of the World Bank and FAO and into the joint World Trade Organization/United Nations Conference on Trade and Development (UNCTAD)/International Trade Centre (ITC) database. This should lead to a very close alignment of the detailed trade statistics among international organizations.

D. Data dissemination

18. Although synchronized, both organizations will continue to keep separate (institutionally and legally) international merchandise trade statistics databases to ensure the rights and ability of each organization to pursue its own policies with regard to: (a) storing various data in addition to those agreed in the Joint System (for example, historical data, memorandum items, derived data, etc.); (b) developing additional analytical and presentational functionalities and controlling user access to them; and (c) dissemination practices, including pricing of user access to the database services, entering into contracts with users, etc. Each organization will maintain its own brand name for use in data dissemination activities. The current names of those databases are UN Comtrade and OECD ITCS Database.
II. Plans for further cooperation

19. The possible areas of future cooperation include: (a) development of a common strategy for maintenance and dissemination of the tariff-line data; (b) evaluation of the possibility of collecting, processing and disseminating trade data containing additional features (for example, mode of transport, nature of transaction, additional partner country attributions, etc.); (c) further standardization and enhancement of the metadata; and (d) evaluation of the experience gained for use in similar activities in statistics of international trade in services.

20. A new memorandum of understanding on the cooperation between the Statistics Division and OECD is scheduled to be completed and signed at the beginning of 2006, after the Joint System has been officially launched and reviewed by countries.

III. Cooperation with other organizations

21. The Statistics Division and OECD would like to acknowledge the significance of the cooperation with other international organizations members of the inter-agency Task Force on International Merchandise Trade Statistics, to ensure the successful completion of this project. All Task Force members were supportive during the period of development of the Joint United Nations/OECD System and provided numerous valuable comments regarding its design. Both the Statistics Division and OECD would like to invite all international organizations to continue this fruitful cooperation so as to ensure further improvements in availability and quality of international merchandise trade statistics.

Notes

3 Studies in Methods, No. 52, Rev.2 (United Nations Publication, Sales No. E.98.XVII.16).