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**UNITED NATIONS STATISTICAL COMMISSION and
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CONFERENCE OF EUROPEAN STATISTICIANS**

**EUROPEAN COMMISSION
STATISTICAL OFFICE OF THE
EUROPEAN COMMUNITIES (EUROSTAT)**

**ORGANISATION FOR ECONOMIC
COOPERATION AND DEVELOPMENT (OECD)
STATISTICS DIRECTORATE**

Joint ECE/Eurostat/OECD meeting on the management of statistical information systems
(Geneva, 17-19 February 2003)

Topic IV: Review and follow-up to the activities of the Conference of European Statisticians in the field of statistical information processing

**FOLLOW UP TO THE IN-DEPT REVIEW ON INTERNATIONAL DATA COLLECTION
AT THE 2002 PLENARY SESSION OF THE CONFERENCE**

Draft proposal for discussion by UNECE and OECD

1. The Conference of European Statisticians reviewed, at its June 2002 plenary session, in-depth the collection and processing of statistical data by international organizations. A paper prepared by Statistics Norway and a joint paper by IMF and OECD served as a basis for the discussion. The Conference asked that the international organizations follow up on the following six points:

- a) To investigate the possibility of developing a common system (portal) for monitoring data collection activities by International Organisations;
- b) To ensure the development of data sharing models;
- c) To give both NSOs and other data providers easy access to statistics available at the international organizations in a form allowing comparisons and usage in national dissemination programmes;
- d) To put in place secure and operational methods and tools for the transmission of sensitive information. The experiences from the STADIUM/STATEL solution supporting GESMES CB should be considered in this context;
- e) To investigate the possibility of defining a standard codification scheme for economic time-series (for national accounts and balance of payments) with an initial focus on short term-indicators;
- f) To work with national statistical offices to facilitate the reuse of their standard products.

a) To investigate the possibility of developing a common system (portal) for monitoring data collection activities by International Organisations

2. The primary purpose of this effort is to increase the transparency of data exchanges between countries and International Organisations and to decrease the response burden through avoiding duplication/multiplication of reporting by NSOs. It is expected that an increased transparency will permit to identify related flows and that subsequent work on the reasons for differences will permit to eliminate duplications. It should be noted that a large number of bilateral co-ordination arrangements have already been made between international

organisations in the area of data collection. The joint paper by IMF and OECD discussed at the CES meeting in June 2002 discussed this issue and provided a list of such joint data collection activities.

3. A methodological issue will be raised during the work for identifying “overlapping” and “identical” flows. This is related a number of properties of each flow, including, for example, to the level of detail (e.g. variable definition or data set definition) or the timing and periodicity. Another question to be considered is whether to take into account all data flows, or to limit (at least in the first phase) the efforts only to “reasonably reusable” data flows – that is to exclude flows established for monitoring of treaties, with confidentiality issues, etc.

4. The recommended actions taken in this respect are:

- a.1) To define the scope of the future portal and to take stock of existing best practices:
- with respect to the international organizations to be included;
 - with respect to the categories of data flows to be included; to establish a typology of flows and to agree on coverage (e.g. general flows, monitoring of treaties, confidential data, etc.);
 - to agree upon the desired level and structure of detail and on to be recorded of each data flow concerned.

time frame: 2004

responsible agency: to be determined

agencies to be invited to participate: Eurostat, OECD, UNSD, UNECE (?)

- a.2) To define the details and structure of metadata to be stored by the portal required to satisfy the functions defined under a.1), and, based on it, to estimate the volume of data and the resource requirements.

time frame: 2004

responsible agency: UNECE

agencies to be invited to participate: Eurostat, OECD, UNECE

- a.3) To identify an existing tool which may be extended to serve the purpose of the portal and/or find out whether a separate tool/structure is to be developed. The possible products to be considered are:

- existing structure as identified in a.1; or,
- use of new technologies to submit questionnaires to a central body (the CES?).

time frame: 2005

responsible agency: to be determined;

agencies to be invited to participate: Eurostat, OECD, UNECE, UNSD

- a.4) To establish a final definition of the portal project, based of the outcomes of the above, with the technical specifications, contents, responsibilities and time frame.

time frame: 2005 (2006?? ...)

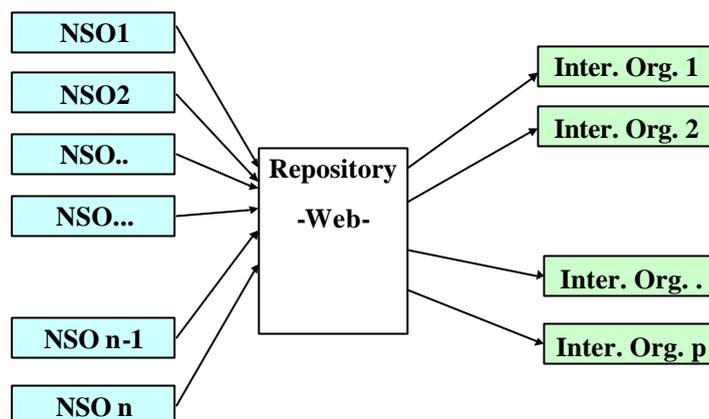
responsible agency: to be determined;

agencies to be invited to participate: Eurostat, OECD, UENCE, UNSD

b) To ensure the development of data sharing models

5. In the “data-sharing” model NSOs upload their data to a common repository accessible to all International Organisations. This model avoids the multiple transmission of data between all the parties. Given the current technology, the common repository does not need to be a single database or server but can simply be the Internet. If NSOs data have the same format and the same codification scheme they can easily be presented as in a common database. A simple form of the data-sharing model is the situation where NSOs have all the required data available on the Internet in their web databases.

Data-Sharing model



6. This model is very efficient from the data provider's point of view and the receiving organisation would benefit from quality standards that data providers apply to their regular Web products. In that model the dissemination of NSOs is the collection of International Organisation. The other important advantages of this model are that it offers important opportunities for automatisisation for all parties involved.

7. Investigations should be made on a mechanism to publicize to all partners any corrections to data errors. Another area of investigation or experimentation would include how to use the repository as a virtual database with the development of a central catalogue. The main disadvantage to this model is that it might not be feasible in the short-term as it would require a high degree of cooperation and agreements among data providers and data collectors. Nevertheless, new technologies, such as XML, would greatly facilitate the implementation of this model. Two main and complementary projects are working towards the implementation of the data sharing model, the SDMX project and, on a smaller scale, the NAWWE project.

8. During the past year SDMX¹ initiated a work program that consisted of four projects addressing batch data exchange, metadata repositories, metadata vocabulary and emerging technologies for the exchange of statistical information. The latter consider, in particular, the implementation of data sharing.

9. Since the June 2002 meeting of the CES, the OECD Expert Group on National Accounts has launched a pilot project for the implementation of the Data Sharing model in the area of National Accounts. The project is call "National Accounts World Wide Exchange, (NAWWE)²". The OECD is managing the pilot project and the main objective is to investigate further the practical implementation of such a model, both from the statistical point of view and the technical point of view in close co-ordination with SDMX. In particular, the issue of the implementation of a change in the protocol of data interchange will be examined.

10. The recommended actions taken in this respect are:

- b.1) To finalise the NAWWE pilot project and draw the first conclusions in term of requirements in the areas of: statistical co-ordination, technology and dissemination policies in NSOs. Refine the specifications of the data sharing model.
time frame: 2003.
responsible agency: OECD
agencies participating to the project:, Statistics Canada, Australian Bureau of Statistics.

¹ See <http://www.sdmx.org>

² See the OECD NAWWE Document discussed at the October 2002 National Accounts' Experts meeting.

- b.2) To follow up on the NAWWE pilot project with SDMX according to the preliminary conclusions.

c) To give both NSOs and other data providers easy access to statistics available at the international organizations in a form allowing comparisons and usage in national dissemination programmes

11. The experience of international organisations collecting data, as well as the voiced requirements by the NSOs prove the importance of giving free access to data collected by the international organisations. Most International Organisations already provide free access to their data on-line to NSOs. For example, the OECD provides free access to all its datasets on OLISNet and Eurostat provides access to New Cronos.

12. The quality of this access (users friendliness, reliability, etc.) is also important. A question can be raised, in this connection, what standards have to be met in order to consider this access “easy”, reliable, etc. As an example of the past activities, the Conference approved the recommendations on formats relevant to the downloading of statistical data from the Internet (published in 2001, available on <http://www.unece.org/stats/publications/downloadingformats.pdf>). Another example: the UNECE Statistical Division has established a Task Force mandated to make a recommendation for the data dissemination from the UNECE’s statistical databases by April 2003. In addition, it is necessary to apply the data sharing model described above to the dissemination of statistics by International Organisation to NSOs.

13. It is necessary to seek for the NSOs’ requirements, confront them with the possibilities and present practices of the international organisations before creating a common model. Possibly various intergovernmental meetings (workings groups, etc.) periodically organised by the international organisations (e.g. Eurostat’s Dissemination Working Group, UNECE’s meetings on dissemination, MSIS meetings, etc.) would be an ideal forum to seek for the necessary information.

14. The recommended actions taken in this respect are:

- c.1) To investigate the application of the data sharing model by International Organisations and to identify a forthcoming (possibly join UNECE, Eurostat, OECD) meeting and launch a call for countries’ requirements for dissemination by the international organisations, along with taking stock of the present (best) data dissemination practices of the international organisations.
time frame: 2003-2004 (possible meeting date in 2004)
responsible agency: UNECE
agencies to be invited to participate: OECD, Eurostat, UNECE (inviting contributions from other organisations)
- c.2) To launch the work on developing a set of recommendation for “improved” dissemination by the international organisations to NSOs:
- to be specified after completion of c.1)

d) To put in place secure and operational methods and tools for the transmission of sensitive information. The experiences from the STADIUM/STATEL solution supporting GESMES CB should be considered in this context

15. The discussion at the 2002 plenary session of the Conference showed, that GESMES CB became a success story. In addition a unified format for data transition, the security and confidentiality issues are to be addressed. These are dealt with in various ways – Eurostat is using the STADIUM/STATEL solution, while ECB and BIS have their proprietary solution to protect the sensitive financial data, etc.. In spite of progress in related standardisation activities it may not be possible to arrive quickly to a generalised solution, considering that the security requirements are different for different data exchanges.

16. The recommended actions taken in this respect are:

- d.1) To continue the maintenance of GESMES CB standard in the SDMX framework.
time frame: ongoing
responsible agency: SDMX BDE convener
agencies to be invited to participate: SDMX BDE membership

- d.2) Study applicability of existing solutions (STADIUM/STATEL) with a view of making specifications for standardised secure and operational methods and tools for transmission of sensitive information. This may require setting up a task force comprising international and national statistical agencies.
time frame: to be determined
responsible agency: to be determined
agencies to be invited to participate: to be determined

e) To investigate the possibility of defining a standard codification scheme for economic time -series, with an initial focus on short term-indicators

17. Generally speaking the common portal, data sharing models, reliable access to and correct interpretation of data collected by different international organisations and successful electronic data interchange (point a) to d) above) are all dependent on common understanding of statistical concepts, use of standard classifications and therefore, availability of a standard codification scheme. Such a codification scheme should be based on existing sectorial concepts, definitions and classifications and already exist in some important areas of statistics such as National Accounts. It is a requirement of the data sharing model that statistical standards include standard codifications for data elements. Its development should be followed by a life-long maintenance. As all this is visibly linked to metadata, the activities would be probably best placed within the SDMX context – as a part of the existing projects (e.g. common vocabulary or metadata repositories) or as a new project.

18. The recommended follow up is:

- e.1) Use the NAWWE project to demonstrate the need for codification standards by subject matter areas for an efficient data sharing mechanism.
Time frame: 2003;
responsible agency: OECD
agencies participating: OECD, Statistics Canada, Australian Bureau of Statistics.
- e.2) To encourage the introduction of a standard codification scheme for economic time series in the work plan of experts' groups on statistical standards.
timeframe: 2003-2004
responsible agency: UNSD
agencies to be invited to participate: Eurostat, OECD, IMF, UNSD

f) To work with national statistical offices to facilitate the reuse of their standard products, so as to make the data collected by International Organisation the data disseminated by NSOs

19. As pointed out in the papers by OECD and Norway, the main issue appears to be the need for standardisation of the data sets/databases available on the web by various NSOs. One example was already mentioned: recommendations on formats relevant to the downloading of statistical data from the Internet approved by the Conference, but more concrete recommendations and guidelines are needed (e.g. standard codification schemes and some sort of a national statistical website "aquis").

20. On one hand the requirements of the international organisations with regards to completeness of the coverage, appliance of standard concepts, definitions and classifications, technical reusability of data, etc. have to be taken on the account. On the other hand the possibilities and present practices of the NSOs should be respected. Therefore, this work can be undertaken only jointly by the national and international statistical agencies.

21. As far as the ongoing activities are concerned, the IMD's GDDS and SDDS belong to this category, and should be reflected in the website aquis. EU has its own aquis which has to be reflected as well.

22. Finally it should be stressed that the website aquis should not be too ambitious, but it should be formulated in such a way that most of the NSOs would be able to comply easily with it. Only in such case it would be possible to meet the aim – to decrease the burden on NSOs and satisfy the international organisations.

23. The following is the possible follow-up:
- f.1) To collect national and international reports of the “best practices” in web dissemination, possibly through the existing UNECE-Eurostat work session on statistical metadata (METIS) or other joint meeting co-sponsored by the Conference.
time frame: 2003-2004
responsible agency: UNECE
agencies to be invited to participate: Eurostat, OECD, IMF, UNSD, and NSOs
 - f.2) To collect applicable standards already in force within the UN system, EU and OECD.
time frame: 2003-2004
responsible agency: UNECE
agencies to be invited to participate: Eurostat, OECD, IMF, UNSD
 - f.3) To formulate draft requirements (“aquis”) for national and international statistical websites.
time frame: 2005
responsible agency: to be determined
agencies to be invited to participate: Eurostat, OECD, IMF, UNSD, and NSOs

Conclusion

24. These proposals represent an attempt to outline the follow up by the secretariats of the international organisations. We understand that establishment of such programme needs to be discussed by the involved international organisations and the national statistical offices. The work programme should respect the requirements and possibilities of both national and international statistical agencies, and therefore, good compromises may often lead to quicker results than ideal solutions.
