**UNITED NATIONS STATISTICAL COMMISSION and
ECONOMIC COMMISSION FOR EUROPE (ECE)
CONFERENCE OF EUROPEAN STATISTICIANS**

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

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

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Topic (iii): XML and web services

USING XML AND WEB SERVICES IN THE MANAGEMENT AND SHARING OF STATISTICAL DATA AND METADATA

Invited Paper

Submitted by the Organisation for Economic Cooperation and Development (OECD)[1]

Summary

1.   This paper describes the ways in which OECD is making use of XML and Web services in the management of statistical data and related metadata. Data management is a decentralised activity at OECD. XML provides a needed "lingua franca" for export of validated statistical data and metadata from a variety of "production" database hosting environments, to the Organisation's central data "warehouse", OECD.Stat. Extensive use of XML is also made within the OECD.Stat data warehouse. Metadata, for example, are stored in XML format. Finally XML and Web services are key building blocks for processes that permit easy retrieval of data and related metadata from OECD.Stat, and transforming the outputs for a variety of different uses – for producing printed publications, HTML for display via Web browser, Excel tables, outputs to PDAs, CSV files for bulk download, etc.

2.   The paper also describes development work at OECD involving use of XML and Web Services for sharing of data and metadata with its partners. Practical implementations will be described, highlighting lessons learned, including methods of invoking Web services, performance and security:

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- **Exchange of national accounts data between the OECD and Member countries**: The aim of the NAWWE project is to establish a Web-based mechanism for exchange of XML files containing national accounts data;
- **Joint UN/OECD World Trade Database**: XML and Web services underpin the replication of international trade data between OECD (Paris) and UN (New York);
- **Joint IMF/OECD Technical Collaboration Project**: This project involves the practical use of Web services to modernise the on-going exchange of datasets between the two organizations.

3.   The paper additionally describes initiatives involving use of emerging technology standards such as Scalable Vector Graphics -- a graphics file format and Web development language based on XML -- for generation of graphical outputs for both printed and online publication.

4.   The OECD is progressively aligning its XML schemas to the newly-released SDMX standards, and bringing its Web services into line with SDMX guidelines. Progress in these areas will be described, as will various initiatives being taken with statistical agencies in member countries to adopt SDMX standards for reporting statistical data to OECD.

5.   A "toolkit" will be presented, aimed at facilitating implementation of "consumer" Web services for accessing data and metadata in the Organisation's statistical warehouse, OECD.Stat via its "provider" web service.