



UNITED NATIONS
DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION

IG/19
24 June 2008

Seminar

Addressing Information Gaps in Business and Macro-Economic Accounts to Better Explain Economic Performance

New York, 23 – 24 June 2008
United Nations, Conference room C

SDMX initiatives on data and information preparation
Rene Piche



SDMX Overview

Addressing Information Gaps
United Nations
June 23-24, 2008
New York
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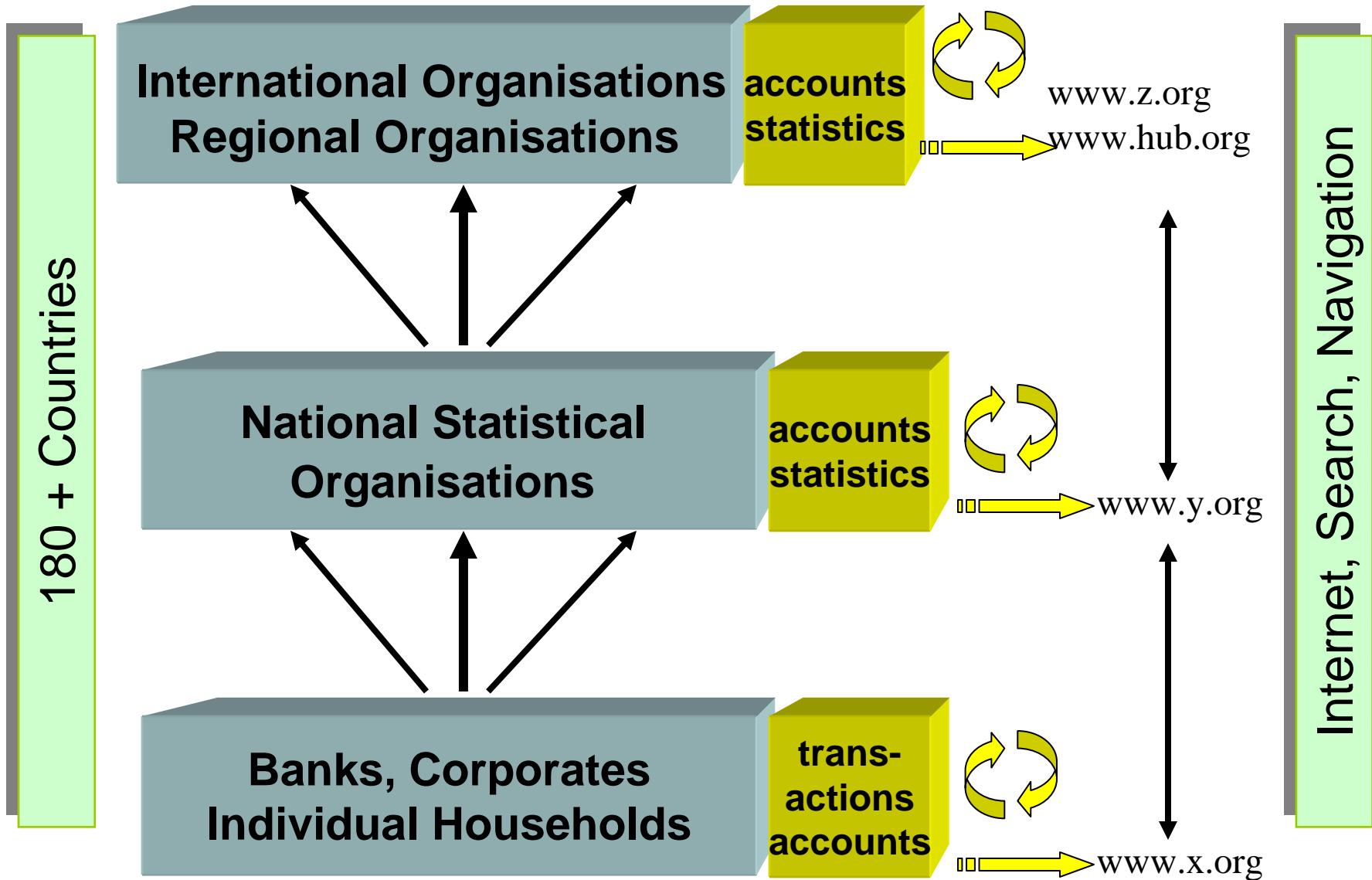
What is SDMX?

- The problem space:
 - Statistical collection, processing, and exchange is time-consuming and resource-intensive
 - Uncertainties about how to proceed with new technologies (XML, web services, service oriented architecture...)
 - Various international and national organisations have individual approaches for their constituencies

What is SDMX?

The Statistical Data and Metadata Exchange (SDMX) initiative is taking steps to address these challenges and opportunities:

- By focusing on business practices in the field of statistical information
- By identifying more efficient processes for exchange and sharing of data and metadata using modern technology and open standards



Historical Note

- SDMX uses an approach based on the 10-year-long success of an earlier standard – GESMES/TS
- GESMES/TS still in use in many countries for collecting, exchanging, and updating statistical databases
 - GESMES/TS is now SDMX-EDI
- Focus is on time-series, and is mostly used by central banks

Who is SDMX?

- SDMX is an initiative made up of seven sponsoring international organizations:
 - Bank for International Settlements
 - European Central Bank
 - Eurostat
 - International Monetary Fund
 - Organisation for Economic Cooperation and Development
 - United Nations
 - World Bank
- The initiative was launched in 2002

Detailed SDMX Goals

- Reduce national reporting burden to international institutions
- Fostering consistency, accuracy, and timeliness of data and metadata disseminated by national and international institutions, ultimately relying on what is decentralized data releases via national websites
- Providing standards for web-based dissemination formats that are computer readable and facilitate updating of users databases
- Enhancing comparison of data and metadata through standard formats and content-oriented guidelines
- Enhancing national statistical processing efficiency, through standard formats for exchanges between statistical silos within institutions and with other national statistical agencies

SDMX Products

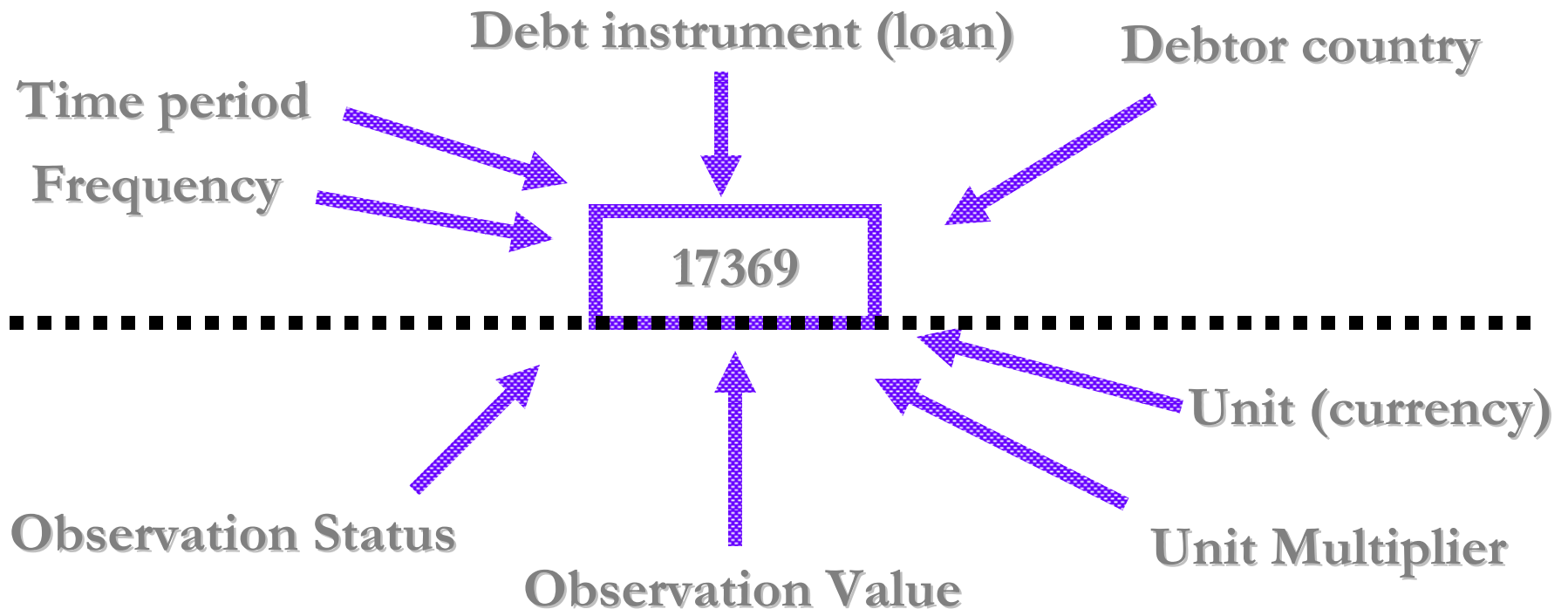
- Technical standards for the formatting and exchange of aggregate statistics:
 - SDMX Technical Specifications version 1.0 (now ISO/TS 17369 SDMX – TC 154 WG2)
 - SDMX Technical Specifications version 2.0 (soon to be submitted to ISO – TC 154 WG2)
- Content-Oriented Guidelines (Feb. 2008 draft)
 - Cross-Domain Statistical Concepts
 - Cross-Domain Code Lists
 - Statistical Subject-Matter Domains
 - Common Metadata Vocabulary

Scope

- SDMX covers three major areas:
 - (Meta)model and XML formats for aggregate data
 - (Meta)model and XML formats for “reference” and “provisioning” metadata
 - Registry-based, distributed architecture
- Technical specifications and “statistical” aspects are cleanly separated

Data Exchange Structure

- Technical specifications provided in the SDMX standards include the data packaging structure – the data structure definition



Alignment with Other Standards

- SDMX was designed to fit into the standards environment:
 - Web-services and Service-Oriented Architecture (SOA) standards
 - ISO/IEC 11179
 - ebXML Registry/Repository specifications
 - Data Documentation Initiative (DDI)
- SDMX and XBRL are working to produce a standard cross-walk

Recent Events

- Jan 2007 – First SDMX Global Conference. Included the launch meeting for SDMX 2.0 Technical Specifications
- February 2007 – Endorsement of SDMX by EU's Statistical Programme Committee
- March 2008 – The UN Statistical Commission recognized and supported SDMX as the preferred standard for the exchange and sharing of data and metadata

Adoption

- By most estimates, the SDMX user base doubled in 2007
- Expectation is that growth will accelerate in 2008
- Areas of adoption include macroeconomic statistics, but also include many other domains: education, labor, population, health, etc.

Implementation - JEDH

- Joint External Debt Hub: SDMX Pilot Project Implementation – www.jedh.org
- BIS-IMF-OECD-WB provide external debt data in SDMX format – from creditor and market sources and data from national sources – processed by an “SDMX agent” and automatically updates a database which supports web-dissemination

Implementation - ECB

- European Central Bank – SDMX-EDI (aka GESMES-TS) used in all data file-based exchanges in the European System of Central Banks, with Eurostat, BIS, IMF.
- SDMX-ML: Used for ECB data warehouse on the web and for dissemination of selected euro area aggregates/national breakdowns by NCBs (<http://www.ecb.int/stats/services/gesmes/html/index.en.html>)

Implementation - IMF

- Data exchanges (SDMX-EDI) with BIS-Eurostat, as well as directly with countries
- Metadata repositories project: Development of a Metadata Web Service Extension designed for exchange, collection and processing of reference metadata information
- Enhancement to the IMF Integrated Correspondence System to support exchange of SDMX-ML files
- Development (with ECB, Eurostat) of a data structure definition for the exchange of external sector's data (balance of payments, debt, international reserves)

Implementation - Eurostat

- SDMX Open Data Interchange (SODI) project – to cover the data sharing of 19 key short term indicators
- ESA95 Transmission Programme - project: Reporting of national and financial accounts data from the national statistical institutes to Eurostat and ECB using SDMX formats and technologies

Implementation - UNSD

- Comtrade project: Use SDMX standards for the exchange of merchandise trade data between OECD and UN.
- Comtrade uses the SDMX cross-sectional format v1.0
- The on-line database supports SDMX downloads

Implementation - OECD

- National Accounts NAWWE project: DSD developed using the “pull” approach for the sharing of national accounts data
- <http://stats.oecd.org/nawwe/>

Adopters/Interest

- The following are known adopters (or planning to adopt):
 - Food and Agriculture Organization
 - Millennium Development Goals (UN System, others)
 - International Labor Organization
 - UNESCO (Education)

 - US Federal Reserve Board
 - Federal Reserve Bank of New York
 - The Philippines (National Statistical Coordination Board)
 - Australian Bureau of Statistics
 - Mexican Federal System
 - Vietnamese Ministry of Planning and Investment
 - Qatar Information Exchange



Questions?