STATISTICAL COMMISSION and **COMMISSION OF THE EUROPEAN**
ECONOMIC COMMISSION FOR EUROPE **COMMUNITIES (EUROSTAT)**

CONFERENCE OF EUROPEAN STATISTICIANS

Joint ECE/Eurostat Meeting on the Management of Statistical Information Technology
 (Geneva, Switzerland, 14-16 February 2001)

Topic (ii): Challenges and opportunities for statistical offices working in a network environment

TOPICS FOR DISCUSSION

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ROOM PAPER

Introduction

The papers received for this topic show that it is a very broad subject. Some of them attempt to cover the whole range of issues; others concentrate on very specific topics, such as security or web design. In addition, we must remember that metadata plays a major role in the dissemination of statistics via networks, as discussed at the METIS 2000 meeting. But a number of common themes emerge, and the new Internet technologies feature prominently.

It is useful to break the subject down into three areas relating to the statistical process – collection, processing/production, dissemination – plus horizontal issues (such as management and support) which are relevant to all. It is impossible to cover all the points which are worthy of discussion. The following questions are meant to be representative, raising the key issues and covering the range of these four categories, looking both at opportunities and challenges. They are deliberately expressed in very open terms to encourage a free and wide-ranging discussion and should be regarded as a starting point.

Discussion questions

Issue #1. Electronic collection of raw data (e-CoRD) using Internet and web technologies has the potential to improve timeliness and reduce administrative costs. But take-up in the real use of such solutions is relatively low at present. What are the factors blocking exploitation of this opportunity, and

how can Statistical Offices overcome them?

Issue #2. Security and data protection are identified as important challenges in several of the papers, but the available technology (e.g. SSL, Public Key Infrastructure, VPN) seems relatively immature or difficult to implement. What level of security is needed for e-CoRD solutions, and what is the best way to achieve this?

Issue #3. Several of the papers point out that a network environment can give the Statistical Offices the opportunity to share data and meta-data, and to eliminate data redundancy. Who has experience of this in practice, and what are the key benefits to be gained?

Issue #4. Not all the statistical information required by users can be found at one national or international Statistical Office's web-site. But the Internet and World Wide Web can make data available from anywhere – the problem for the user is to find it. METIS 2000 has suggested more integration of data and metadata between international organisations, with links inserted from the websites of international organisations to the more detailed metadata on national networks, and access via a single portal which would be based on the IMF Dissemination Standards Bulletin Board (DSBB). Is this desireable, and what would be the key problems to solve (e.g. language, harmonisation of terms, variation of structure, resources)?

Issue #5. The World Wide Web has a great potential for improving dissemination of statistical products, but there are difficult associated challenges. The use of new technologies increases users' expectations with regard to timeliness, availability, accessibility, intelligibility and usability. Methodologies, tools and techniques exist for evaluating and improving the design of dissemination web-sites and web pages. Who has experience of using these or other ways of meeting the users' heightened expectations? What can be learned from these experiences?

Issue #6. The new Internet technologies also have potential to facilitate groupworking by the creation of Extranets on the public network, and one of the invited papers gives examples of a range of different projects which exploit this. These cover sharing of professional documentation, using groupware, accessing datawarehouse tools remotely via a browser and knowledge management. What is the potential for future developments in this area? Can it have applications in the ESS? Do we have all the tools we need, or are there gaps in the market?

Issue #7. One issue, which is horizontal in that it touches the use of a network environment for data collection, statistical production and dissemination, is the need for real time support. Where networks are used in-house by Statistical Offices, the challenge is to maintain a communication system at a high level of performance; where services are provided over the internet for data collection or dissemination, the users expect support to be provided outside usual working hours. They also expect web-based facilities to be available 24 hours a day, 7 days a week and to give a rapid response. The support needs to be both technical and functional. Can Statistical Offices provide such a service? If not, how can they manage the expectations of their users?