

CONFERENCE OF EUROPEAN STATISTICIANS

ECE Work Session on Statistical Output  
for Dissemination to Information Media  
(Geneva, Switzerland, 28-30 October 2002)

Topic (a): Review of the draft of the “Statistics in the media – handbook on best practices for statistical offices in dealing with the media”.

**Suggestion for revised structure of chapter V<sup>1</sup>:**

**TECHNIQUES AND TECHNOLOGIES FOR IMPROVED INFORMATION FLOW  
BETWEEN STATISTICAL OFFICES AND THE MEDIA**

**Impact of Internet dissemination on the structure, functioning and resource requirements of public relation offices in statistical offices 5.2**

**Who is the customer?**

**The expanded audience for statistical data introduced by the Internet 5.2.2**

**Do statistics need news media? 5.6.3**

**Change from mediated to self-serve access to statistical data (Italian IP)**

**What is the product? 5.2.4**

**From database to magazine 3.6.5**

**Departing from the publication approach (Hungary CP)**

**Web only presentations (U.S. IP)**

**Pricing of Internet based services 5.3**

**Vision of statistical libraries’ mission 5.5.2**

Also reference to 3.1 “Shifting from print to electronic products”

**Organizational and functional changes required by Internet dissemination 5.2.3**

**Who supports the web?**

Also reference to papers in section 3.6 concerning costs, efforts, organization, etc.

**Policies needed regarding Internet dissemination**

**Internet distribution of time sensitive reports 5.2.1**

**Handling data revisions to data sets on Internet 4.10**

**Premature releases, broken embargos, etc. New**

**Making a good website for information media: “What is a good website?” 3.6**

**Overview of sites 3.6.7**

**How to attain electronic visibility? 3.6.8**

**Special needs of journalists New**

**Usability New**

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**Design Heuristics for Data Access Tools (U.S. CP)**  
**Web style standards and audits (U.S. IP)**

**Finding what you want and understanding what you find?**

**Improving data sets and metadata released through the Internet to media 4. 9**

**“Push” techniques 4. 9. 1**

**How to help user via Internet 4.9.2**

**“For concepts and methodology, click here” 4.9.3**

Also use materials from section 3.6

**Performance and user feedback**

**Measurement and evaluation of Internet use/use of Internet by the media 5.4.**

**Assessment of Internet use by hits, visits... 5.4.1**

**User sessions in focus 5.4.2**

**Web customer feedback (U.S. IP)**

**Experiences in evaluating the quality of communication with media 5.6**

**Reports about the press 5.6.1**

**Using customers’ feedback 5.6.2**

**Using feedback to formulate content (Czech IP)**

**Communications technologies for supporting contact with the media 5.5.1**

Also reference 4.7.4.2 concerning Extranet for journalists and embargoed material

**Emerging issues**

**The electronic press release**

**Wireless transmission and new delivery devices (telephones, PDA’s, etc.)**

**Web services: Direct delivery of statistics**

**The government-wide brand: Country portals**

**The digital divide**

**Sections that should remain in original chapter**

**4.9.4 Showing metadata in news releases: how much or how little?**

**4.9.4.1 Early attempt to tailor metadata**

**4.9.4.2 Eurostat’s guidelines for highermetadata coverage**

## **V.1 Impact of Internet dissemination on the structure, functioning and resource requirements of public relation offices in National Statistical Offices**

### **V.1.1 Who is the customer?**

#### **V.1.1.1 The expanded audience for statistical data introduced by the Internet**

Prior to the Internet, most of the National Statistical Offices viewed most of their customers a small but elite group of experts with a high degree of interest in and knowledge of the data. Frequently, these highly motivated customers were willing and able to pay for data. With the advent of the Internet, the customer base of National Statistical Offices expanded so that any citizen with a computer and Internet connection can access statistical resources online. This has resulted in the democratisation of data and has presented National Statistical Offices with many new challenges. Many new customers are not statistically literate or as familiar with subject matter concepts as the original customer base. User needs are broadened as the types of users become more diverse ranging from school teachers to investment bankers to government policy makers. This has propelled many National Statistical Offices to change their dissemination orientation to be more “user” focused as opposed to “product” focused.

#### **V.1.1.2 Do statistics need news media?**

Before the Internet, National Statistical Offices relied on the media to be a primary disseminator of statistical data to the citizens. Now that citizens can access the information directly on the Internet, the role of the journalist in disseminating statistical data may be changing. The process in which raw data can be transformed into knowledge is the added provided by the “intermediation” of professionals – information brokers, journalists, professional disseminators. In addition, with the ever expanding information market, National Statistical Offices still need to compete for journalists’ attention to direct interested citizens who might use statistical data occasionally to the National Statistical Offices information.

#### **V.1.1.3 Change from mediated to self-serve access to statistical data**

Before the “web revolution”, users were required to contact the National Statistical Offices directly for data and interpretation. Such mediated access ensured that appropriate metadata would accompany the statistics. Direct contact between the staff of the National Statistical Offices and journalists and other users was expected. As National Statistical Offices moved their content to the Internet where it was widely available, self-serve access allowed users to browse on their own and, with the help of search engines, to find the relevant information. With the Internet, National Statistical Office staff members who knew the data and the metadata are not always mediators between the user and the data. With the Internet expanding the customer base, National Statistical Offices had to consider how to provide more access to a less sophisticated audience. Issues of statistical literacy and interpretation of data need to be reconsidered in such an environment. The press office is still contacted by journalists, particularly when finding the data they are seeking is difficult on the web. Outreach to journalists may be necessary to avoid negative coverage and misinterpretation of the online resources.

### **V.1.2 What is the product?**

Prior to the Internet, National Statistical Offices primary method for providing statistics was through printed publications. Many offices were also providing data on tape and

CD-ROM to expert customers who were conducting their own analysis. With the Internet, National Statistical Offices began by publishing electronic versions of their publications. However, the data was locked in formats that limited the user's ability to manipulate the data and lost the computational properties of the numbers. Spreadsheets and data files were also made available online. As technology to interface databases via the Internet became available, many National Statistical Offices moved to data warehouses which were available online. According to a UNECE 2001 study, 15 National Statistical Offices provided access to their databases online. Altogether, National Statistical Offices were able to provide a wider variety of products and more timely data through the Internet.

The focus on many sites remains providing data in tables. (Perhaps this method needs to be rethought.) Many countries are moving away from the publication approach. Many publications are being replaced by electronic dissemination (See Chapter 3 for additional information about deciding when and whether to move from print to electronic only).

Despite the movement to interactive, online database access, several countries also began to prepare web products targeted at media or as an alternative to paper publications including:

- The Daily – Statistics Canada
- Statistics Netherlands Web magazine
- U.S. Energy Information Administration online only presentations – designed for the web

One emerging trend is the recognition that writing for the web is very different than for other purposes. Using the techniques used by journalist like the inverted pyramid, short sentences, and short paragraphs along with subheadings, bulleted list and keywords results in a better web product.

#### **V.1.2.1 Pricing of Internet based services**

For many National Statistical Offices, cost recovery has been a goal. When all data was only available in publications, data tapes, CD-ROMs, or through special request, knowing what to sell and how to price it was not difficult. With the Internet, the pressure has been to provide more and more data free; striking a balance between revenue generation and the public's right to information. Many National Statistical Offices continue to charge for hard media like printed publications and CD-ROMs; some sell these products through their Internet site using a shopping cart application. Others have limited access to databases to paying subscribers, have provided special computations or consulting on a fee basis, or have provided special services or notification to paying subscribers. In most instances, the paying customer is generally an expert who was paying before the Internet. Private companies, other ministries, and academic institutions are generally in this category. While press releases are free, the degree that Internet information is available without charge to journalists varies.

#### **V.1.2.2 Sharing data across the web**

Sharing data is another activity made possible by the web. Several of the international organizations looked into methods to share data electronically using XML and other technologies. Harmonization of data for sharing is one of the biggest challenges although the movement to the European Union has facilitated this. In the future, web services will

allow others to directly display data from National Statistical Offices. This has many implications. While the National Statistical Office will have control of the data, the customer will have control of the presentation. How will it be attributed? How will this be priced? Who will ensure that the proper metadata is presented?

### **V.1.3 Organizational and functional changes required by Internet dissemination**

The Internet changed the way National Statistical Offices operated. Initially they did not have staff with the technological skills to create and operate a web site, the processes and procedures to publish data on the web and provide customer support, nor the policies required to operate a web site. In order to move to the web, National Statistical Offices had to hire staff with new types of skills and had to train existing staff to varying degrees. Most recognised that the Internet is not cheap and does not reduce their workload. Providing adequate resources has been difficult. In addition, the traditional organization and procedures of National Statistical Offices were not geared toward web publishing. In some, it has been very difficult to get the data producers to change their methods and orientation. The Internet also caused National Statistical Offices to face issues concerning the consistency and currency of the data published on the web

The initial focus on moving publications to the web maintained the existing systems used to generate products before the Internet. As National Statistical Offices are moving to data warehouses and web only presentations, the organizations are facing additional change. As technology continues to change, the pressure will be for the National Statistical Office to change as well.

#### **V.1.3.1 Who supports the web customer?**

As National Statistical Offices launched their web sites, many had to consider how they would support their customers who use the web. Considerable retraining of customer service staff was required. Agencies who were used to receiving most inquiries via telephone or mail were faced with a barrage of email. National Statistical Offices had to determine who would handle these requests and how they would be handled. With the expansion of the customer base to less sophisticated customers, the demands on customer service increased as they were more frequently handling issues of statistical literacy and subject matter familiarity. Press offices also had to learn new technology and dissemination methods to work with the press.

#### **V.1.3.2 Policies needed regarding Internet dissemination**

##### **V.1.3.2.1 Internet distribution of time sensitive reports**

Prior to the Internet, most sensitive reports were released on paper in person at the National Statistical Office. Some agencies imposed lock downs to allow the media time to digest the material but they were not allowed to communicate with the outside. Once the National Statistical Offices created their web sites, they had to consider how to coordinate release on the web with the official published release times. Although initial efforts resulted in delays on posting information on the web, the goal was simultaneous release. National Statistical Offices need to develop policies and procedures to coordinate the release in the lock ups with the release on the Internet including the establishment of what are considered acceptable delays. The goal must be efficient, timely and equitable access.

##### **V.1.3.2.2 Premature releases, broken embargos, etc.**

Many National Statistical Offices automated the release of information on the Internet. Unfortunately, the automated routines sometimes released the data prior to the official release time. Such errors are in direct conflict with the standards of equal access for all and can result in manipulation of the markets by the few who were aware of the information. National Statistical Offices need to have procedures in place to ensure that these errors are not made. At the same time, they also need to have procedures on what to do if the error is made. Clearly, all of the normal notification processes must be operated so that everyone knows that the data is available. In addition, press offices need to be involved in establishing the agencies public response. (See also, the sections on crisis management and dealing with negative press coverage in Chapter VII.)

Many National Statistical Offices will provide certain materials to the media prior to the official release under an embargo. For some data, it must be shared with contributors prior to release. Both circumstances offer the possibility that the media or the contributors could prematurely release the data prior to the expiration of the embargo. When this happens, it is incumbent on the National Statistical Office to immediately update its website and notify everyone who received the embargoed material that they may use it early.

#### **V.1.3.2.3 Handling data revisions to data sets on Internet**

Because the customers of web sites are frequently anonymous, handling data revisions on the Internet posed a perplexing problem. The ease and speed with which the content of web sites can be revised increased the number of revisions. A printed erratum was no longer needed to signal a change. Existing files could be updated and reloaded without the user ever knowing that a change had been made. Some National Statistical Offices require that all material be dated to allow for version control while others clearly indicate that a revision has been made, the date of the revision, and the nature of the revision. National Statistical Offices should have policies concerning who can authorize changes, how they will be noted on the web, and what if any additional efforts will be made to notify customers of the change. They should also consider under what circumstances a press release should be issued signalling the revision.

### **V.2 Making a good website for information media: “What is a good website?”**

A “good” website can be defined according to whether or not the user gets what they are looking for quickly and easily. This means that it must have good, up-to-date content that is prepared for web consumption; consistent navigation designed for the content; a search option that defines the scope of the search; clear presentation of text; understandable links; and little jargon or technical terms. For additional information on what makes a good website consult the UNECE publication “Best practices in designing websites for dissemination of statistics.”

#### **V.2.1 Usability**

The best sites involve users in their development through feedback, focus groups and usability testing. A 2001 UNECE survey of 44 existing websites of National Statistical Offices and 14 international organizations found that most of the websites were aimed at a group of professional users and were designed accordingly. Only a few had features especially designed for a web surfer coming across the page without a clear idea of what he/she is looking for. Surprisingly few websites collected information about their visitors that could inform them about who the real users are. As many National Statistical

Offices recognize that their customer base has expanded, they may want to consider these new users in their designs.

### **V.2.2 Special needs of journalists**

Because press releases usually served as one of the main channels to disseminate new statistical information, it is very important that they are immediately visible on the site. The 2001 UNECE survey found that “News” or “Press Releases” were generally the most consistently updated sections with the most recent updates usually on the basic economic indicators such as unemployment and inflation figures. Releases were generally presented either by release date or by topic, although one site gave the releases in random order. Only a few of the websites surveyed include links to further information in the electronic versions of their press releases, a practice that could improve this type of dissemination. Since journalists are usually under deadline, it is particularly important that they be able to find the press releases and related information they are seeking as quickly as possible. To accomplish this, some sites are organized around the “news” and others prominently feature a link to press releases. In addition, several National Statistical Offices offer WAP phone service for the latest CPI and GDP figures.

### **V.2.3 Improving access to databases**

With the increased reliance on databases to disseminate data, the interfaces to these databases are critical to the success of the site. Even expert users can have difficulty extracting the data they want if the interface was not developed with the user in mind. Many National Statistical Offices are turning to database delivery instead of printed publications in order to improve the utility of the information and achieve cost savings. Users who are unsuccessful often resort to contacting the agencies directly at a much greater cost. Recent research has resulted in 10 design guidelines for building data access tools. When combined with user testing, the database interfaces should successfully deliver what users want.

### **V.2.4 Web style standards and audits**

When web development is distributed across the organisation, the result can be inconsistent presentation and unconnected navigation. The creation of web style standards permit continued development without a reorganisation while avoiding presentation problems. Combining the standards with a web audit helps to erase the differences by helping the authors to identify what they need to change.

### **V.2.5 Competing in the Internet’s information market**

National Statistical Office websites do not exist in a vacuum. They are a part of the larger government and the information space we know as the Internet. They need to consider strategies that will ensure that people looking for their statistics will find them. The 2001 UNECE survey also conducted an assessment of how the major search engines responded to queries about statistical data. They found that the search engines gave very low results; only one or two of the first 50 links were to National Statistical Office sites. The survey outlined a number of ways to improve the results including the use of keywords in the meta tags on web pages and improved marketing by the National Statistical Offices.

## **V.3 Finding what you want and understanding what you find?**

Improving data sets and metadata released through the Internet to media

The data about the data, metadata, is particularly important on the Internet. National Statistical Offices need to consider two types of metadata: discovery metadata that helps users find what they are looking for and interpretative metadata that helps them understand what they find. The former can be built into each page and file in order to assist users in finding what they want. Some websites include indexes or lists of terms (A to Z, Glossaries, etc.) to help users find what they need. Frequently, technical terminology and jargon are an impediment to users who are not familiar with such terms. Most National Statistical Offices continue to struggle with this issue as users' concepts of what they want to know conflict with the perspectives of the staff about the statistics they produce. Concerning the interpretative metadata, National Statistical Offices have provided alternatives to methodology sections of traditional publications including links to descriptive information, building metadata into web content and press releases, and building metadata repositories to go with the online databases. The challenge is to get users to access and consume this metadata when web behaviour is to avoid as much reading as possible.

## **V. 4 Performance and user feedback**

### **V. 4.1 Measurement and evaluation of Internet use/use of Internet by the media**

National Statistical Offices want to know who is using their website as well as what is being accessed. The Internet provides users with great anonymity that makes finding out who is using your site difficult. Web logs record every transaction on the web server. Originally, these data were intended to allow web masters to understand the traffic and errors occurring on web servers. Since they capture every page requested, when it was requested and what IP address requested it, they are a rich source of information about the site. Hits, page views, and user sessions measure traffic. Since hits are the requests for all files that make up a web page (html pages, graphics, etc.), they tend to over count the activity on a site. Page views counts only the basic pages requested and not the auxiliary files used to make up the page. Page views inflate the numbers when a site has many pages devoted to navigation to get to content. User sessions parse all the activity from a particular IP address during a set period of time. Web logs do not provide exact measures since some IP providers cache popular sites to speed delivery and switch IP numbers during sessions to handle the load. In addition, web logs tell us little about who the user is only about who the IP provider is. Despite these limitations, analysis of the logs can provide useful insights on how much traffic the site is getting and what users are interested in.

### **V. 4.2 Web customer feedback**

Some National Statistical Offices are providing feedback forms and conducting surveys of web customers in order to determine who they are, what they want, and if they got what they wanted. These surveys are not completely scientific because they are based on a sample of convenience rather than a scientific sample. They can provide useful insights to the problems that may exist. Other National Statistical Offices register users in order to get access to statistics. This can provide good information about who is using the site but can also drive away customers who do not want to register. Some offices are using commercial ratings and tracking programs to assess satisfaction with their websites.

### **V. 4.3 Experiences in evaluating the quality of communication with media**



Many National Statistical Offices conduct a variety of activities to gain feedback from the media including media tracking (following how many articles, radio shows, and TV clips include NSO data); interviews with journalists; feedback from office call centers, press offices, and other staff; and reviews of public opinion data. Offices used most of these techniques before the Internet. Since the Internet, they need to expand the material they review to include the content of news organizations' websites especially those that did not exist before the Internet, email questions, and general web surveys who is using the Internet and what types of websites they are visiting. The focus of this monitoring should not be limited to the number of mentions in stories or the types of information desired by journalists but should extend to the accuracy of the reporting. Such monitoring usually follows releases and events to determine the saturation and success of a release or campaign. It can also be prospective in anticipating issues that are of interest or potential issues or problems that may crop up.

#### **V. 4.4 Using feedback to formulate content**

Most National Statistical Offices use feedback to determine what users are interested in and what kinds of information they want to know. Such feedback can determine the type of products that are prepared as well as the mode of dissemination. Several National Statistical Offices have created short presentations of information on topics of interest that is included on their home page or topical pages. Another new development is to use the questions that users ask and the answers the staff provides to dynamically create content. This dynamic application produces a frequently asked questions section with the supporting answers that is actually based on what users are asking instead of what offices want to answer. National Statistical Offices need to consider how to get the feedback from users to the staff members who decide about what content should be presented.

### **V. 5 Communications technologies for supporting contact with the media**

New communications opportunities allowed National Statistical Offices to offer new ways to contact and meet the needs of the media especially broadcast media. Video and radio outlets have particular needs that are often not met by the traditional press release or news event. Some offices began using a wide variety of techniques to meet this need including video new releases, video new feeds, satellite media tours, stock shots for television, public service announcements, special event videos, radio media tours, audio news releases, daily radio programs, digital photographs, and national news briefings. Internet technologies such as streaming video and audio, file transfer protocol, extranets, and simple email, allow National Statistical Offices to reach far greater numbers of journalists. While some of these technologies are in their infancy, others are currently feasible. For example, live news conferences that provide support for remote reporters to email in their questions or extranets that allow reporters to get embargoed releases and supporting material prior to release (See Chapter 4 for more information on using extranets for journalists and embargoed material.) As these technologies improve and proliferate, the Internet will offer many more opportunities to communicate with the media.

#### **Emerging issues**

**The electronic press release**

**Wireless transmission and new delivery devices (telephones, PDA's, etc.)**

**Web services: Direct delivery of statistics**

**The government-wide brand: Country portals**

**The new publication and presentation system – data unlocked from paper**

**The digital divide**