

# The challenge of communicating statistics

91<sup>st</sup> DGINS Conference

Copenhagen, 26-27 May 2005



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THEME  
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# Programme

## 91st DGINS CONFERENCE

### “The Challenge of Communicating Statistics”

26th – 27th MAY 2005

EIGTVEDS PAKHUS, COPENHAGEN, DENMARK

<b>Thursday, 26<sup>th</sup> May 2005</b>
-------------------------------------------

**9.00 – 9.20      Opening session**

Bendt BENDTSEN, Minister of Economic and Business Affairs  
Jan PLOVSING, Director-General, *Statistics Denmark*

**9.20 – 9.50      Keynote address**

Henning CHRISTOPHERSEN,  
former Vice-President of the European Commission

**9.50 – 11.00      Session 1 – PROFESSIONAL USER REQUIREMENTS OF STATISTICAL DISSEMINATION**

*Chair:* Luigi BIGGERI, President, *ISTAT, Italy*

**1.1**    Ulrik NØDGAARD, Deputy Permanent Secretary, *Ministry of Economic and Business Affairs, Denmark*  
“What is important when using official statistics in government analysis?”

**1.2**    Steven KEUNING, Chief Statistician, *ECB*  
”Meeting user’s demands for truly European Statistics”

*Discussant:* Heinrich BRÜNGGER, Director, *UNECE Statistical Division*

**11.00 – 11.30      Coffee break**

**11.30 – 12.45      Session 2 – RESEARCHER REQUIREMENTS OF STATISTICAL DISSEMINATION**

*Chair:* Carmen ALCAIDE GUINDO, President, *INE, Spain*

**2.1**    Pedro DÍAZ MUÑOZ, Director, *Eurostat*  
”Disseminating statistics to the Research Community”

**2.2**    Niels PLOUG, Research Director, *The Danish National Institute of Social Research*  
”European data sources – an opportunity and a challenge”

**2.3**    Svante ÖBERG, Director-General, *Statistics Sweden*  
“National Statistical Systems and Researchers”

*Discussant:* Ullrich HEILEMANN, Vice-President of CEIES

**12.45 – 14.15      Lunch break**

**14.15 – 15.30      Session 3 – NON-PROFESSIONAL USER REQUIREMENTS OF STATISTICAL DISSEMINATION**

**Chair:** Tadeusz TOCZYNSKI, President, *Central Statistical Office of Poland*

**3.1**    Aija ZIGURE, President, *Central Statistical Bureau of Latvia*  
"Focusing on non-professional data users"

**3.2**    Michel GLAUDE, Director, *Eurostat*  
"After the 'Free Dissemination', an integrated Strategy of Communication"

**3.3**    Gunnar SAHLIN, National Librarian, *Sweden*  
"Official statistics – can they be used more efficiently?"

**Discussant:** Hallgrímur SNORRASON, Director, *Statistics Iceland*

**15.30 – 16.00      Coffee break**

**16.00 – 16.45      PRESENTATION OF THE DANISH STATISTICAL SYSTEM**

Jan PLOVSING, Director-General, *Statistics Denmark*

**18.30                Social activities (Official dinner at "Louisiana Museum of Modern Art" with guided tour through the exhibitions)**

**Friday, 27<sup>th</sup> May 2005**

**9.45 - 11.15**

**Session 4 – DISSEMINATION TO THE NEWS MEDIA**

***Part 4.1: Expectations of the news media***

**4.1.1** Jim SAFT, *Reuters*

“The needs of the media in covering official statistics”

***Part 4.2: The national statistical institutes and the requirements of the news media***

**Chair:** José MATA, President, *INE, Portugal*

**4.2.1** Len COOK, Director, *ONS, United Kingdom*

“The challenge of communicating statistics”

**4.2.2** Leif BECK FALLESEN, Editor-in-chief, *Dagbladet Børsen, Denmark*

”21<sup>st</sup> Century statistics please - From counting pigs to measuring knowledge”

**Discussant:** Péter PUKLI, President, *Hungarian Central Statistical Office*

**11.15 – 11.45**

**Coffee break**

**11.45 – 12.45**

**ROUND TABLE – “TO WHICH EXTENT ARE THE NSI’S READY TO MEET THE FUTURE CHALLENGES OF DISSEMINATION?”**

**Chair:** Donal GARVEY, Director-General, *Central Statistics Office, Ireland*

**Participants:** Günther HANREICH, Director-General, *Eurostat*

Johann HAHLEN, President, *Statistisches Bundesamt, Germany*

Heli JESKANEN-SUNDSTRÖM, Director-General, *Statistics Finland*

Irena KRIZMAN, Director-General, *Statistical Office of the Republic of Slovenia*

Gosse VAN DER VEEN, Director-General, *CBS, Netherlands*

**12.45 – 13.00**

**CLOSING SPEECH**

Jan PLOVSING, Director-General, *Statistics Denmark*

# Opening session

Bendt BENDTSEN  
*Danish Minister for Economic and Business Affairs*

Good morning,  
Distinguished Directors General of the European Statistical System,  
Former vice-president of the European Union  
Distinguished delegates,  
Ladies and Gentlemen.

I would like to thank Jan Plovsing for inviting me to open the ninety-first DGINS-Conference.

It's a great pleasure to be here at Eigtveds Pakhus which hosted many EU meetings during the Danish Presidency in 2002.

The former chairperson of the Commission, Romano Prodi once said:

“A few, well-chosen, well-presented figures can be much more enlightening than hours of talk”.

In spite of Mr Prodi's remark, I will talk to you today - but not for hours!

Reliable and professional independent statistics are one of the pillars of a democratic society. Because statistics are used to form opinions, do research, and make political decisions on a sound basis.

The need for comparable data has always been the basic principle of co-operation within the European statistical community. Comparable data enables us to plan, monitor and evaluate policy initiatives.

As our countries are tied closer together in the global economy, this need becomes increasingly urgent.

That is certainly the case in the Lisbon process which makes use of Structural Indicators on such areas as employment, innovation and research.

Statistics also forms part of policy making in individual countries. For example, the Danish government has set up a Globalisation Council which is mandated to assist the Government in drawing up a strategy for Denmark to meet the challenge of globalisation.



One of the key tools employed by the Globalisation Council is benchmarking towards other countries.

As you can imagine, this benchmarking process relies heavily on comparable statistics.

The crucial role of statistics in policy making makes it increasingly urgent to ensure the openness, reliability and professional independence of statistical institutions - at national as well as European level. Lately the Ecofin Council has dealt with this challenge in the European Statistics Code of Practice.

In order to ensure this openness, the need for good communication becomes obvious - which brings us to the theme of this conference: **“The Challenge of Communicating Statistics”**

One of the challenges of communicating statistics is to determine which statistics we “*need* to know” - and which statistics are only “*nice* to know”.

Sometimes, it is difficult to make the distinction on what you “need to know” and what is “nice to know” - it depends on who you ask.

In my view, digital technology may serve as an important tool in communicating statistics. A tool which can transcend the dilemma of “need to know” and “nice to know”.

Today’s digital technology can create a business on demand. By setting up interactive databanks or “datashooting” - users can subscribe to precisely the statistics they want. The technology is available. Now we have to use it!

It is obvious that new demands for statistics will arise in a society that constantly develops.

Issues like globalisation and the “knowledge-based economy” are high on the political agenda in many countries.

But important decisions should not be rushed through overnight.

Important decisions require thorough analysis and due consideration.

Important decisions require trustworthy, impartial and accessible statistics.

I think there is a potential for improving statistics which describe globalisation. Therefore, I urge you to consider the need for trustworthy, comparable statistics on globalisation.

However, it is also important to balance the need for new statistics with the need to keep the response burden in check. This is an important trade-off.

The European Statistical System is currently discussing how to balance new demands against existing - as well as prioritising among new demands. In line with the latest signals from the Ecofin Council, I can only encourage you to continue along that line.

The issue of choosing which data to make a priority is linked to the broader issue of reducing the total administrative burdens on the business community.

The Danish government is determined to contribute to reducing the administrative burdens carried by the world of business. Since the bulk of administrative burdens are common to all EU-members, we should also co-operate on finding common solutions to our common burdens.

Reducing the statistical response burden is an important political goal. Not because statistical reports constitute a large burden in their own right. In fact, in Denmark the statistical response burden only accounts for about one percent of the total administrative burdens on businesses.

But statistical reports are sometimes seen as unnecessary - perhaps because their purpose seems remote. As opposed to for example tax returns which are perceived to serve a much more tangible outcome: The funding of our welfare services.

Therefore, we should continue our effort to balance and prioritise statistics.

In concluding my address, let me return to the outset - the quotation by Mr Prodi.

Our goal must be to obtain "well-chosen, well-presented figures".

It is my hope that the discussions over the next two days will help us meet the challenge of communicating statistics.

I also hope you will find time to enjoy Copenhagen and its wonderful sights.

I hereby declare the 91st DGINS Conference in Copenhagen open – I wish you all an inspiring conference and an enjoyable stay in Copenhagen.

Thank you.

# Welcome address

Jan PLOVSING  
*Director General, Danmarks Statistik*

Minister, former vice-president of the European Commission, Colleagues,

It is a great honour for me to welcome you all to the 91st DGINS Conference here in Copenhagen. This old restored Warehouse was built more than 40 years before the French revolution, at a time when Denmark was a major power at sea. I hope that this setting will provide a good and satisfactory setting for the Conference.

I want to thank you – Bendt Bendtsen – for your welcome speech. I am sure we all appreciate your frank and clear message. You emphasized four of the key challenging issues - that in recent years have been at the top of the agenda within the European statistical community. You addressed the question of 1) optimizing the use of modern communication means 2) the need of prioritizing the work programme 3) the need for a reduced response burden on businesses and finally you stressed more than one time the need for trustworthy and comparable statistics on globalization.

Now that we are at this historical place, which is connected to Danish overseas trade, it gives me associations to highlight that statistics have historically been subject to many important decisions. From being internal affairs of the national state in the past, the National Statistical Institutes will now - and in the future - always serve a dual purpose: which is to meet both national and European and even international statistical needs simultaneously.

“Time for numbers – numbers on time” is the tagline from the presentation of Statistics Denmark which you, my dear colleagues have received in your welcome present. This year’s number seems to be 200. And why, you may ask? Because one of the greatest communicators, was born 200 years ago – the fairytale writer Hans Christian Andersen.

Statistical facts are not fairytales; somebody would even say that they are very dry facts – that’s a misunderstanding. The figures tell you about people and their lives. Statistics and fairytales have one thing in common – they both intend to send out the message in an easily accessible way. Accordingly, we statisticians have to be excellent communicators to make our efforts worthwhile, and our numbers should be on time to make a difference. I believe that: “Numbers exist for the users” and communication of statistics should mirror this paradigm. My view is quite simply: that if our statistics are not used, our efforts are wasted.

Official statistics help people and governments to understand the world we live in, and to make informed decisions about the future. Statistics are a central source of information in the “knowledge-based economy”. We take note of the increasing requirements to quantify the political goals, and as a consequence, further demands for statistics are constantly requested. That is not surprising, because statistics exist for the functions of democracy and the economy.

An example in this respect is the extended administrative use of statistics at the political level, which was also mentioned by the Minister. EDP-statistics and Structural Indicators are just a few out of several examples within EU policy-making.

The NSI’s represents a vast warehouse of knowledge on people and society. To benefit from this enormous quantity of statistical knowledge, we must make it available in various forms. Statistics must be presented in ways that reflect separate user needs. Consequently, digital communication is highly prioritized – and users and business respondents should primarily be served electronically.

Accordingly, I would rather prefer to talk about communication than dissemination of statistics, to indicate the necessity of an interaction between user and producer, as well as the need to launch a more differentiated approach.

In the set-up of this conference, we made a practical distinction between four different user groups – each represented by a separate session. The four sessions deals with the requirements of:

- 1) Professionals
- 2) Researchers
- 3) Non-professionals
- 4) News media

A round table discussion will conclude the conference, addressing the question "To which extent are the NSI's ready to meet the future challenges of dissemination?"

I hope that the conference will disclose new perspectives ensuring that our expertise in the field of communication is always at the cutting edge.

With this statement, I bid you all a warm welcome to the 91st DGINS Conference on **“The Challenge of Communicating Statistics”**.

# Keynote speech - Statistics produced by independent institutions versus statistics stemming from official sources

Henning CHRISTOPHERSEN  
*Former Minister of Foreign Affairs and Finance*  
*Former Vice-President of the European Commission 1985-95*

Quality and reliability of statistical data are an extremely important issue for all decision-makers in our modern democratic societies.

But quality and reliability are not the only needed requirements. Statistical data must also be comparable over a period of time, and in a more and more integrated Europe the data must also be comparable across our borders.

Legislative and commercial decisions can only be taken by the politicians if these preconditions are in place.

Let me mention a few examples.

The European Central Bank, ECB, can only perform its responsibilities if there is a large number of data available. Balance of trade statistics, GDP statistics, inflation figures. The so-called euro zone can only have a steady and reliable monetary policy stance if these data are available.

The European Union's own resource system, the allocation of structural fund resources and proper application of numerous other items of EU legislation can only work if the Commission and the other institutions have a large number of comparable, high quality data from all Member States.

European companies with activities in more than a single Member State can only take commercially defensible decisions about investments, marketing, price-fixing etc. provided they have access to another large number of data about the functioning of the single market and all its sub-markets.

Can we be satisfied with the present state of affairs? Are all these data and many more available? Are they of good quality? Are they comparable? Can we be sure that they are supplied by agencies with a high degree of independence and transparency? These and many more questions must all the time be asked. We know by experience that there are weaknesses in all administrative systems. Also in the statistical agencies of the European Union and its Member States. For a number of reasons.

We have recently had problems with the reliability of the statistical information from some Member States concerning the requirements of the stability pact. Are the data about public budget balances and public debt good enough? Certainly not!

There are big uncertainties connected to the quarterly GDP figures in some Member States. We have had a discussion about inflation data for the introductory period of the euro.

And we have seen a question mark placed behind Eurostat itself, because of obvious problems with a proper application of the financial regulation of the European Commission.

So let us have a look at the situation. And let us have a discussion about how it could be improved.

Statistical data were in the past normally based upon information collected for some other reasons.

Trade statistics were originally the secondary result of the collection of custom duties.

Tax and income statistics were in a similar way a secondary product of the collection of fees, income taxes, property taxes etc.

Balance of payment statistics were, to a great extent, made possible from the beginning of the thirties, when the gold standard became suspended and the countries needed to have a clear picture of their bilateral payment balances.

Unemployment statistics had their origin in the functioning of the trade union movements' widespread network of unemployment insurance agencies.

Wage statistics were mainly due to the result of the work of the employers associations, which wanted to get a picture of how industry was coping with wage claims.

And so on and so on.

All this statistical information became gradually a source of information for national statistical agencies, but it took a very long time before the national statistical agencies got the right or the possibility to define their own requirements to the quality and reliability of the data.

The public interest in the statistics and their role in the political and commercial decision-making process is a rather new thing. And the right of the public administration and the political decision-makers to define their statistical needs, and to impose obligations on private enterprises, local and

regional governments and private associations to collect, to process and to present data is of a quite new age.

It was only when the European post-war industrialisation process and the development of the European state of welfare in the sixties and the seventies of the 20th Century began to gain momentum that it became generally accepted that society had a right to insist on transparency in a large number of economic and social areas, and therefore had the right to ask for the collection, processing and publishing of highly sensitive data.

Nevertheless, the process was still a very national one and a process under political control.

I remember personally how the political establishment of my own country in the sixties took the political decision to exclude increases in duties and indirect taxes from the calculation of the monthly price index to avoid the triggering of new automatic wage increases.

I remember also how I much later, together with all the other European ministers of finance in 1984, had to approve the Fontainebleau agreement, which contained a completely flawed statistical calculation of the Member States, the so-called net balances to help Mrs Thatcher to get a rebate on the United Kingdom payments to the treasury of the European Union.

And I remember how a number of Member States in 1989 – when the famous fourth resource was introduced as part of their own resources system – insisted on the right to keep their own definition of their GDP.

They did not succeed in that exercise, and from there you can see a road forward to where we are now in the European Union as far as statistics are concerned.

In the Member States, the collection, the processing and the publication of statistical data have increasingly become the responsibilities of national statistical agencies. In the European Union, the task to define, to collect, to process and to publish statistical data from the Member States has more and more been the task of Eurostat.

But is it good enough? Is the present hybrid system, where national agencies with different legal statuses are in charge of the definition of needs, of the collection, the processing and the publication of the data sufficiently good? Can we be sure that we get data of the highest possible quality?

The answer to that question has very much to do with the real independence of the national agencies and of Eurostat. Are they genuinely independent or are they still under a certain political command? Can nods and winks still have an influence on what we are going to get as the final product?

The story of the stability pact is important in that context. A number of Member States submitted via their input from their statistical agencies and from their treasures, insufficient information about the real state of affairs.

What have struck me is the fact that a number of national statistical agencies were unable to deliver what they must have known were the right numbers. And Eurostat was unable to communicate to the Member States and to the institutions of the European Union what they should have known were more correct numbers.

Would it be possible to find a solution to these problems?

Is the way forward simply to impose an obligation on the 25 Member States to improve the quality of their statistical agencies or would it be better to discuss some more radical ideas.

After having had the responsibility for Eurostat over a rather long period of time, after having been a minister, who had to rely on statistical data to a very large extent, and after having been a teacher in statistics – when I was much younger than I am now – I have come to the conclusion that it would be right to discuss how we in the European Union could give the statistical services of the Member States and of the Union itself, a much more independent and coherent position.

An obvious example of how this could be done is, of course, the European Central Bank System.

We had until the nineties a very complicated system of central banks within the European Union. Some of them, but only very few, were completely independent of the government. The Federal Republic of Germany, the Dutch central bank and the National Bank of Denmark were the most prominent ones. Most of the others were under the instruction or quasi instruction of their governments.

The result was that the monetary policy of the Member States was pursuing many different goals.

One of the most important results of the Maastricht Treaty was the creation of a completely independent central bank system in all Member States belonging to the euro-zone and beyond. For example, the Bank of England became independent in 1997, the network of independent central



banks at the same time a part of a European central bank system managed by The European Central Bank, ECB.

The results of this process have – among many other things – become a completely harmonised gathering of information, a completely harmonised processing and presentation of data.

But the harmonisation of the work is not a top-down product but a bottom-up product. The work of the ECB is to a very large extent the result of the influence of the national central bank representatives on the decisions taken by the governing bodies of the ECB.

That is why the future of the EU statistical agency structure in my view should be modelled in accordance with the ECB format.

How could this be done?

The first step should be to establish the European Statistical Agency. The ESA could be established by a new treaty ratified by the Member States but it could also be established in the same way as a number of other EU agencies.

A new treaty or a Council decision must contain the definition of the competences of the new body, and the objectives of the new body.

Most likely, the objective would be to supply the European Union and its institutions with all the relevant statistical data needed for a successful achievement of its objectives. And the competences must be the right to define the needs of statistical information related to the achievements of the objectives of the European Union.

The role of the national statistical agencies should in the European context be to facilitate the achievements of the European Union, and to facilitate the work of the European Statistical Agency (ESA). These agencies could, of course, have other tasks than those related to the work of the ESA, but the institutional structure of the national agencies must meet the requirements of genuine European institutions. For that reason, the national agencies should be structured in such a way that there is no doubt about their political independence.

The task to accomplish all this is, of course, to get a decision taken by the European Council and legislation in the form of relevant Council decisions and regulations.

The legal basis for such a decision could not be difficult to identify. Statistical data are horizontal preconditions for the successful implementation of EU policies.

Already the existing treaty – Nice – provides the Union with a legal basis for the creation of a new independent statistical agency ad modum EFSA.

What should be the competences of a new European Statistical Agency? A number should be mentioned.

The first competence should be to identify the objectives of the ESA and thereby the national agencies.

The second task should be to establish a good code of conduct of the business of the ESA and all the national agencies, including defining the independence of the national agencies.

The third task should be to establish a long-term work programme for the ESA and the national agencies as far as their European responsibilities are concerned.

The fourth task should be to establish independent scientific and advisory bodies for the ESA and recommendations to the national agencies in this area.

The fifth task should be to develop the cooperation with the private sector. They could be trade unions, industrial associations, non-profit foundations, NGOs, etc. The purpose of this is to discuss new prospects and ideas related to the role of statistics.

The sixth task could be to develop ideas and concepts about publishing the results of the work of the ESA and the national statistical agencies.

Ladies and gentlemen,

I have tried to outline how I see the future work of the national statistical institutes and Eurostat. I think that we have an immense load of work to do. I believe that we can do it.

And I am convinced that we will be successful in doing that.

Thank you very much.

# Theme 1 - Professional user requirements of statistical dissemination

# 1.1 What is important when using official statistics in government analysis?

Ulrik NØDGAARD

*Deputy permanent secretary, Ministry of Economic and Business Affairs, Denmark*

The Danish government is a heavy user of statistic both official and statistic from other sources. In analysis it is important to have a high quality of statistics. The quality of official statistics is characterized by several factors like timeliness, comparability and reliability. Unfortunately the current official statistic do not always fulfil these demands, hence there is some room for improvement in the European statistical system.

## 1.1.1 Statistics used for government analysis

In the analysis for the Danish government different sources of statistics is used both official statistics produced by national statistical institutions and other sources produced by private or government institutions. Usually the official statistics is preferred because it generally has a higher quality but when it is not available other source must be used.

If the official statistics shall be useful it must meet several requirements. The official statistics must be timely, reliable and comparable. Though these requirements should not be attributed the same weight. It will not make sense to have timely data if the consequence is unreliable data.

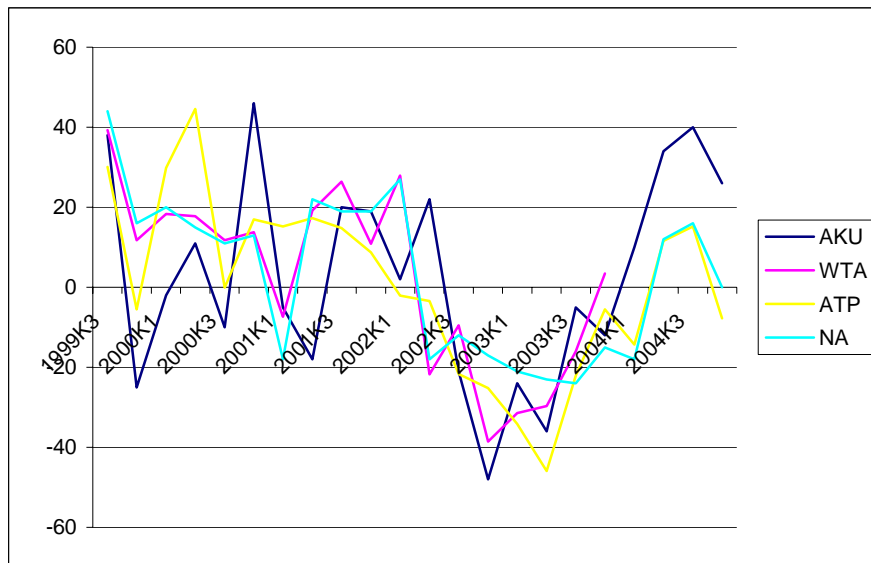
## 1.1.2 Labour market statistic

The development on the labour market is one of the key elements to monitor when making forecasts of the economic development. The reliability of the forecast will to a large extent depend on the quality of the data provided by the national statistical institutions.

To the naïve user it may seem pretty straightforward to produce labour market statistics. In principle it is only a question of adding up the numbers of people working. In practice it is a lot more difficult and there are several measures of the number of people employed.

In Denmark there are 4 different measures of the development of the employment. Namely national account, working time accounts, ATP and labour force survey. Generally it is preferable to have several measures for the development in the labour market. Unfortunately in Denmark the measures have at some point in time given different indications of the development.

**Figure 1 Development in employment using different measures**



The different developments in the employment using the different employment measures has at times diverted the focus from the underlying development on the labour market and instead towards a debate of which measures is the best measures to analysis the labour market. To avoid such derailing of the debate it is of vital importance that the statistical institutions explain the reasons for the different developments. Unfortunately such explanations are not often available or if available they are difficult to understand even for the professional users of statistics and almost impossible to comprehend for the general public.

Explaining the differences in the various statistics should be an area which the national statistical institutions improve in the future. Not only on labour market statistics but in general. It will not be an easy task to do this but if successful the value of the different statistical sources will increase significantly.

### 1.1.3 Timeliness

Trying to monitor the economic development of the general economy it is essential to get up to date information about the recent development in the employment, industrial production, foreign trade and national account. Getting these information's with too big a lag will significantly reduce their value for monitoring the economy.

But getting the information early just to have them revised significantly every month for the next couple of years will not necessarily be an advantage. Hence if getting the statistics fast involves a

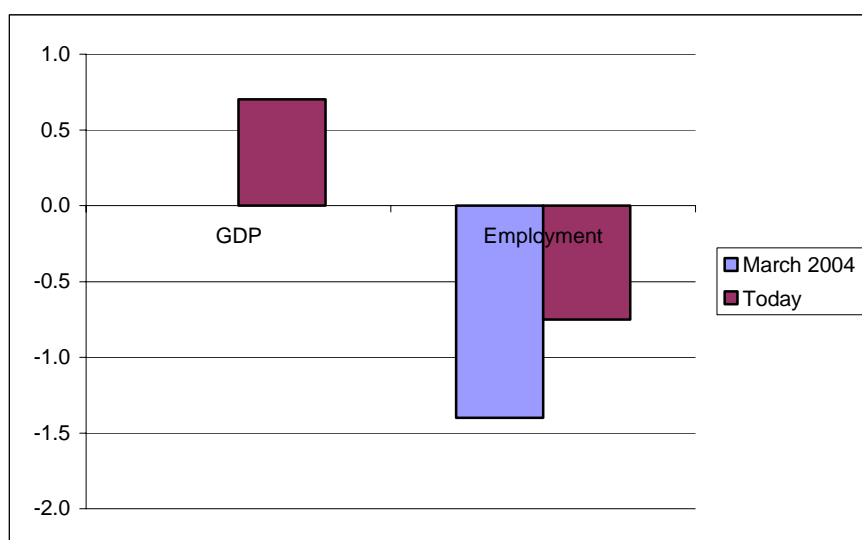
large uncertainty on the initial publication it might be better get the information with a somewhat bigger lag and smaller revisions.

So there should be some consideration to the trade off between fast data and the average revisions the faster availability will lead to. For instance the balance of payments is traditionally revised every month and the revision is often significant. This has led the users to consider the first publication with some reservations and wait until there has been a process with the first rounds of revisions. Therefore faster balance of payments data is not really very interesting. It will be of a greater interest to get more reliable balance of payments data even if this would involve a longer processing period in the statistical institutions.

In the beginning of 2004 the Danish government were worried about the lagging growth in Denmark following the international downturn. The growth in 2003 had been nil according to the first publication of the national accounts and there were a significant drop in the employment, conf. figure 2. The slow growing economy led the politicians to act to stimulate the economy by cutting taxes.

The latest data is quite different. The growth in 2003 was still low but it was 0.7 pct which is far less dramatic than a situation with zero growth. The drop in the employment is also a lot less dramatic compared to the initial drop. Hence it is possible that the Danish politicians would have acted differently with the current information's. Fortunately the following economic development has shown the stimulus package to be justified.

**Figure 2 Growth and employment in 2003 at different points in time**



This leads to a conclusion that the preliminary releases from the statistical institutions can have a large - probably too large - impact on the economic policy of a country, which is a bit disturbing if the initial release is followed by significantly revised data. Obviously it is the responsibility of the central administration to inform the politicians that the initial release may be subject to revisions. So there is a shared responsibility between the statistical agencies and the rest of the administration.

#### **1.1.4 Comparability over time**

Trying to use data it is very important that the data is comparable both over time and between countries. If the data is not comparable it will become impossible to make any serious analysis of the development over time or between countries.

The issue must to a certain extent be governed by the United Nations given it is the only forum covering all nations. But within the European Community there is and must continue to be a significant effort to improve the comparability between the countries.

The comparability over time is to a large extent the responsibility of the individual national statistical institutions but sometimes Eurostat will give some guidelines.

One example where Eurostat gave quite specific guidelines concerning the comparability over time is the national accounts revision where it was stated that all the Member States should implement ESA95 and construct time series back to 1970 for certain variables. Such backwards calculations may be very difficult and time consuming to implement but they will be of vital importance to the users of statistics.

A time series of national accounts that has got breaks every 5 or 10 years will be of little use if you will try to study structural developments of the economy. Whereas a time series of 30 or more years will open up a whole new area of possible structural analysis.

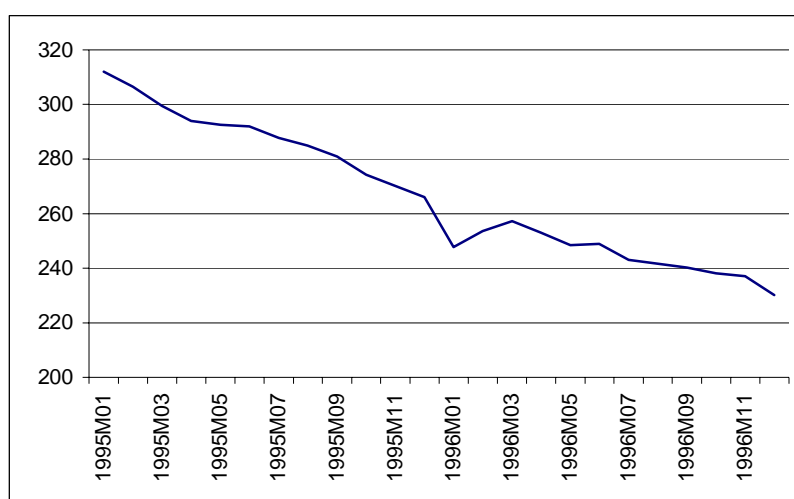
Generally national accounts and populations statistics is probably the area where most countries have the longest time series of compatible data. But other areas are also important. It is very useful to have long time series of for instance labour market statistics like unemployment rates or employment over a time. So if the individual statistical agency makes a revision of the statistic they should attempt to have a time series as long as possible.

In these areas there will be possibilities for the national statistical institutions to improve. Such an improvement will result in a large increase in the value for the user of the statistics. So backwards calculations of historical data should be considered when there are changes in the sources or

methods of different statistics. Even if it involves the use of resources that could have been used in other areas the increase in the value caused by the long time series will under many circumstances be more important from a user perspective.

The Danish unemployment statistic has experienced large breaks in the series which can make it difficult to use the data for analysis of longer periods. The main break is several years back to January 1996, conf. figure 3. This is a fairly long time ago by now but when the revision in statistic was initially made the time series was very short. Future revisions of for instance the seasonal adjustment of the number of unemployed could shorten such a series significantly which would reduce the value of it from a policy standpoint.

**Figure 3**      **Number of unemployed**



### 1.1.5 Comparability between countries

If all the national statistical institutions use their own methods for compiling statistics it will be impossible to make any use of official statistics to compare different countries. Hence this is an area governed by the United Nations to give universal guidelines to all countries. But to make a compromise that can cover the needs of all will lead to some fairly general guidelines. Therefore Eurostat has got an important role in the standardisation of the statistics of the individual Member States.

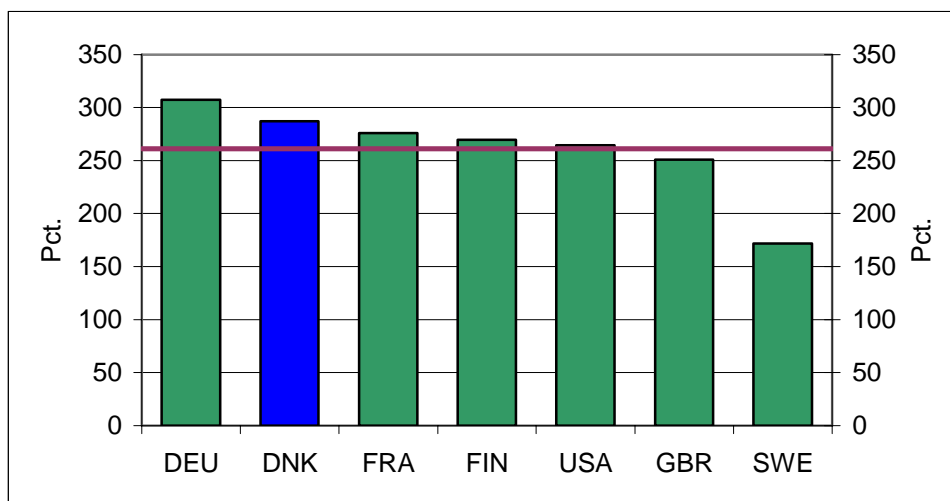
Eurostat does make a huge effort in standardization of the Member States statistics so much that a majority of the production of the national statistical institutions is actually covered by Eurostat regulations. So the general framework for a standardized statistical is already in place.



What is lacking is the dissemination. With Cronos there is a forum to publish the results from the Member States. Which is very useful since it make it fairly easy to find the data from one sources instead of having to collect it from the individual national statistical institutions. But despite the effort done in the Member States there still seem to be some variations in the method use. So the data in Cronos is not fully comparable between the Member States.

During a bench marking exercise in Denmark a few years back a lot of areas of the general economy were covered. Including the capital stock. In this exercise large differences in the net stock of capital to GDP varied significantly, conf. figure 4. The differences is in the numbers is probably bigger than the real differences and is due to different methods of compiling the data. Especially the Swedish number (from Cronos) seems very low compared to the other countries and further investigation at the time revealed that Sweden did not publish figures for capital stock at that point in time; hence the source of the numbers is uncertain.

**Figure 4 Net capital stock as a percentage of GDP, 2000**



Source: Eurostat, BEA, ONS, INSEE

The lack of comparability that sometime is present in the data significantly reduces the value of the data. There are different approaches to this issue one could be to further increase the number of regulations from Eurostat and make the existing ones more detailed. This will involve a large effort from the national statistical institutions and probably also lead to increasing burdens on the corporate sector. One solution to the comparability issue that will put a significantly smaller burden on the producers of statistic will be better documentation. Just telling the users where there are differences and how they can interpret these differences will be almost as useful as completely comparable data.

Unfortunately documentation is an area that generally lacking in many countries and for Eurostat as well. Obviously from a producer of statistic point of view it will often appear to be more important to produce timely and accurate statistics than to document the statistic. From a user viewpoint this is definitely not the case a documentation of the data is vital to be able to understand the data. If the users of statistics do not understand the data well enough their analysis will very likely be inaccurate and maybe even misleading.

Given the great value of documentation of the statistics this would be an area where Eurostat and the individual national statistical institution could do a lot to improve the usefulness of there products. The documentation of the data in Cronos is either not very good or it is difficult to find. It could be connected to tables in Cronos so it would be easily available. Included in such documentations should be information about differences in the data from the individual countries pointing out where there is differences that are caused by different ways of compiling the information's. Ideally there should be made an attempt to try to give boundaries for the possible variations caused by different compilations methods but just pointing out the main differences will be of great value to users.

#### **1.1.6 Significant gaps in the statistical system**

Even though the statistical system is comprehensive there is still some significant gaps there is not covered by official statistic at least in some Member States.

Among the areas not covered by official statistics in all the Member States are productivity calculations, balance sheets and databases on firm level. These areas are all of great importance for the analysis of the economy. Fortunately there is progress on some of these areas.

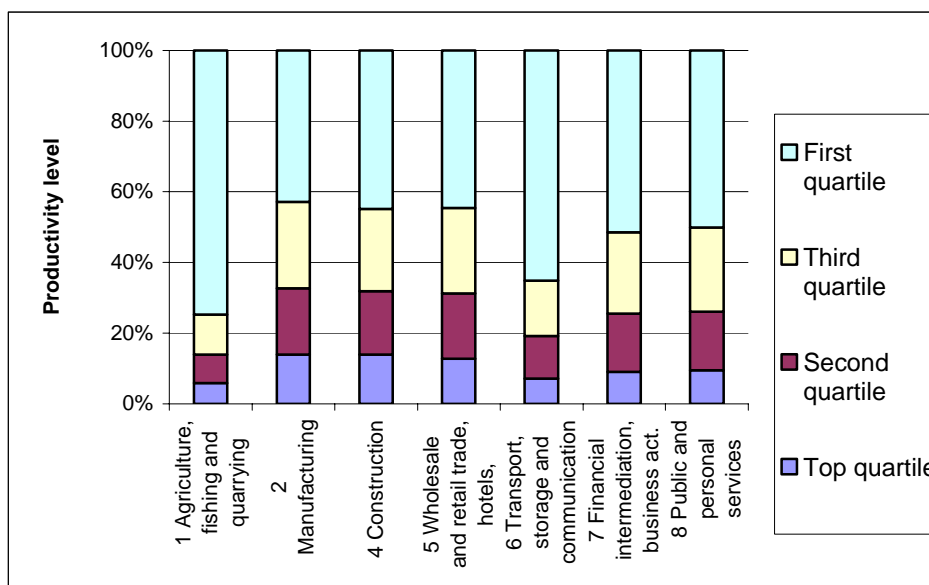
When it comes to productivity there is an EU project trying to produce series back to 1970 for the several Member States. This is not a project primarily run by national statistical institutions but the cooperation between researchers and statistical institutions will hopefully give some important information about what are the main drivers of productivity growth. Ideally such a project should be undertaken by the national statistical institutions but when this is not possible because of problems concerning financing or issues about the methods of compilation over such a long period. Then cooperation between researchers is better than not producing the data.

Hopefully the project will result in new and significant information that will increase the understanding of the drivers of economic growth in the European area.

Another important issue is the knowledge of the individual firm. Where it is very interesting to understand how the lifecycle of firms influence on the productivity growth of countries. There are several studies on the subject but they often use private databases because of the lack of an official database in the countries. It is of course always a possibility to use other sources but information's about individual firms should be an area of importance to the producers of official statistics. Hence a Pan European database covering these kind of information's could be included in the future work of Eurostat most of the data must already be available in the individual Member States.

A database of individual firms will be of great interest not only for the government users of statistics but also for the research community will find it very interesting. One clear advantage is there will be the same criteria for the data in all the countries which is not necessarily the case with a privately supported database.

**Figure 5 Production by firms with different productivity levels**



In Denmark cooperation between the ministry of Economics and Business Affairs and Statistics Denmark have lead to some of the first results using official data from a database of all Danish companies. So for the first time it has been possible to use official data to study for example the contribution of the firms with different productivity levels. It turned out that the top 25 pct of firms with the highest productivity levels create about half the value added in the Danish economy, conf. figure 5. Just one year ago such an analysis in Denmark would have been impossible.

In most countries there is very limited information about the national wealth. Even though the subject have been of interest to economist for centuries. But only a few countries around the world actually have a full set of balance sheets. Europe is unfortunately not among the international leaders on this area.

The first steps have been made to improve the situation. There is now a set of financial accounts for the majority of the Member States and several countries have already reported capital stocks. But there is still the question of other assets foremost the value of land which is only available in very few countries. The fact this production factor is not covered by statistics means that it is not possible to fully understand the influence of land on the economic growth of countries. Which makes the estimates of productivity of some industries highly uncertain mainly agriculture but also other industries that use land to a large degree in there production.

The treatment of research and development will probably be one area of increasing interest in the coming years. This is also one area it will be important to include in the balance sheets as soon as possible even though it is not for the moment recognized as an asset in the national accounts. But there is already a lot of interest on the effect of research and development on economic growth and the producers of statistic can give an important input in this debate by providing a better quality of data than the data which is currently used for analysing the effect.

## 1.2 Meeting users' demands for truly European statistics

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This paper reviews some ideas on how to improve effectiveness and efficiency in the provision of European statistics. The credibility of European statistics is currently of much interest to the users. Statisticians should use this “window of opportunity” to improve the ‘fitness for use’ of statistics. In an environment of growing users’ needs as well as scarce human and financial resources, statistical authorities must find effective ways of rebalancing priorities and organising the collection of statistics in a more efficient way. Moreover, there is no use in producing high quality statistics if communication with the users is poor. Statisticians are called upon to refine their “art of external communication” in statistical issues.

### 1.2.1 The “art of external communication”

The European Central Bank (ECB) attaches the highest importance to the “art of external communication”. As the President of the ECB stated in a recent keynote speech (Trichet, 2005), *“Transparency, candid explanations given to investors, savers, market participants, households and, last but not least, to our 306 million European fellow citizens are of the essence for the ECB and its Governing Council. It is fair to say that communication is an integral part of monetary policy”*. In the practical implementation of the ECB’s communication policy, the ECB relies on a wide range of communication tools. Statistics and statistical publications are, of course, an integral part of this policy.

The Directorate-General Statistics (DG-S) of the ECB provides statistics and accounts in the following main areas<sup>1</sup>: (i) monetary, financial and operational statistics for the euro area (on monetary aggregates and counterparts, interest rates, securities issues, investment funds, other financial market operations, minimum reserves, etc.); (ii) euro area external statistics (balance of payments (b.o.p.), the international investment position (i.i.p.), external reserves and effective exchange rate statistics); (iii) euro area quarterly financial and non-financial accounts for institutional sectors (balance sheets and transactions); and (iv) some other general economic

statistics (some government finance statistics, the house price index, seasonally adjusted price indices, etc.).<sup>2</sup>

The ECB is obviously an important user of its own statistics, as well as of statistics produced by other institutions, in particular Eurostat. Examples of the latter are the HICP (the Harmonised Index of Consumer Prices, used in the definition of price stability in the euro area), other prices and costs statistics, GDP and breakdowns, labour market statistics and a wide range of other economic statistics (in particular short-term statistics).<sup>3</sup> As *provider of statistics for the euro area* on the one hand and *one of the main users of Community statistics* on the other, the ECB is fully aware of the constantly growing users' requirements - including its own - both in terms of *enhanced datasets* and of a *better accessibility to statistics*. The ECB recognises the difficulties in managing these growing requirements in view of limited financial and human resources and of the sometimes lower priority attached to communication by statisticians. In turn, a good communication is conducive to securing the necessary resources.

This paper assembles some ideas regarding the efficient provision of euro area/EU statistics that are 'fit for use' and easily accessible to policy makers, professionals, EU citizens and others. A major achievement with regard to efficiency gains in the production of euro area/ EU statistics is the Memorandum of Understanding signed by the ECB (DG-S) and the Commission (Eurostat) (see ECB/Eurostat (2003)). It avoids the duplication of statistical work at the EU level. It goes without saying that the process should not stop here. On the contrary, further solutions aimed at improving efficiency in the provision of European statistics will need to be investigated and encouraged. In this context, there is perhaps also still room for negative priorities and saving resources by the European Statistical System, e.g. in the field of financial institutions and financial markets statistics.

The paper touches upon some of these possible further solutions, most notably the adoption of approaches oriented towards a more efficient *priority setting* system (Section 2.1), a more efficient *organisation of statistics* (Section 2.2) and a more efficient *communication* with the users (Section 2.3). Section concludes.

## 1.2.2 How to address the statistical dilemma?

### 1.2.2.1 A more efficient priority setting in Europe

The Ecofin Council Conclusions of June 2004 have emphasised the necessity to allow continuing improvements in European statistics. Discussions taking place since then have confirmed that it is extremely difficult to make choices for European statistics that are agreeable to all EU Member States, in view of different statistical needs, different financial structures and different costs among Member States for a given statistical activity.

Regarding the assessment of the usefulness of statistics, it is important to shift the focus to common EU needs, implying that purely national needs no longer justify the maintenance of European legal acts in the field of statistics. Perhaps the *impact on euro area/EU policy-making* should be the key criterion for prioritisation, meaning that statistics that are crucial for core tasks such as EU budgetary surveillance or European economic policy-making should be given priority over others. This said, the ECB has decided to foster attention on statistics such as *euro area quarterly sector accounts*, *short-term statistics* and *government finance statistics*, while reducing its requirements in other areas such as intra-euro area external trade statistics (i.e. Intrastat). The merits of any new or substantially enhanced requirements for European statistics with potential impact on euro area/EU policy-making may be assessed against the expected costs. The exercise should closely involve the main users of European statistics and, possibly, also the reporting agents.

### 1.2.2.2 A more efficient organisation of statistics in Europe

It is clear that not all user demands can be dealt with in the same manner. Whenever *ad-hoc* user needs arise, ‘short-term solutions’ based on existing data (even if not fully harmonised) and estimations (rather than costly new collection systems) may be investigated. A good example of such initiatives is the publication of “experimental data”. These are statistics that are in the testing phase, or not yet fully developed, or do not meet the quality standards usually applied by statistical authorities to official statistics. Despite these caveats, such datasets provide a valuable service to users, at relatively limited costs. They allow extending the basis for analysis, provided that their status is well explained and understood.

In turn, the collection of regular data should be *organised on the basis of the uses made of the statistics concerned*, and striking the right balance between timeliness, frequency, level of detail and quality is a key challenge in the production of official statistics.<sup>4</sup> Taking as an example several (high priority) European statistics, we observe that there are significant differences in their features and in the prospective use that is made of them.

*Government finance statistics* are typically associated with a census-type data collection (except for small municipalities, where samples are mostly used). In this case, *high quality and detailed data are needed*. In view of the political content of these data, quality is inevitably linked to the independence and accountability of the data provider. In addition to the European aggregates, national data on an annual basis (on general government deficit/surplus and government debt) are necessary to monitor national developments in government finances. Moreover, the ECB needs quarterly national data on government revenue and expenditure within three months after the end quarter. These data should also follow ESA definitions. From its perspective as a user, the ECB is conscious that high quality and detail sometimes have a cost in terms of timeliness. As a consequence, the ECB supports a postponement of the timing of the EDP notifications by one month, in order to allow more time for completing the datasets and cross-checking their quality within a national accounts framework. The reform of the Stability and Growth Pact also brings new challenges for government finance statistics in the EU (cf. Bier *et al.* (2004). Additional data are needed to be in a better position to assess the sustainability of public finances (on public corporations, pension liabilities, guarantees, etc.). By the same token, the quality of the data needs to be undisputable, in order to enhance the credibility of the headline figures.

*Short-term statistics*, in turn, are needed at a *high frequency (monthly or quarterly) and with a short delay*. In this case, timely aggregated results are more important than detailed breakdowns. Good results are within reach for a selected core set of Principal European Economic Indicators (PEEIs). In those cases where high frequency data are now obtained at short target delays, they have proved to be a reliable basis for monetary policy analysis (e.g. the GDP flash estimate). The efforts to coordinate the production, release and revision policy for national data with the needs for euro area/EU aggregates are, therefore, highly welcome. At the same time, there is room for improvement with respect to a number of PEEIs (e.g. labour market indicators) where the targets set for 2005 will most likely not be met. In this respect, we would like to encourage the initiative by France (INSEE), Germany (Destatis) and others to arrive at European employment flash estimates.<sup>5</sup> The ECB also attaches great importance to improvements in the availability of services statistics (turnover and prices), as part of the PEEIs. This is an area in which currently there is a particular shortage of statistical information for the euro area.

Euro area analysis does not necessarily require a complete set of statistical series from each of the Member States. Moreover, a range of methods aimed at ensuring accurate timely statistics and/or reducing the reporting burden may be more widely adopted: European sampling approaches (small national samples combined may provide a reliable and early estimate at European level),



specialisation among National Statistical Institutes (NSIs) (e.g. via work in centres of excellence), differential reporting obligations (less demanding for the smallest countries), centralised estimation of flash indicators and European harmonised reporting formats (e.g. use of standardised software packages for multinationals' reporting on international trade in services).

While recognising the progress achieved, the requirement of professional users for *consistent data* is not yet fulfilled in all areas. For example, despite the increasing integration of economic and social policies in Europe, much remains to be done to integrate economic and social statistics. A key challenge for the coming years will be to develop more comprehensive and consistent indicators and accounts for labour and to ensure their consistency with national accounts. The development and regular compilation of Social Accounting Matrices is highly recommended in order to allow the professional user to bridge economic and social statistics, by integrating national accounts and labour market statistics. To this effect, we would like to recall that Eurostat has compiled a Handbook (consistent with ESA95/SNA93) aimed at helping NSIs to fill in this gap.<sup>6</sup>

Professional users also see *comparable data and methods* as an important prerequisite of the reliability of the euro area/EU aggregates. A lot remains to be done in this respect. For example, while no doubt the coverage and timeliness of the HICP has clearly improved over the recent years, without damaging its accuracy, a satisfactory harmonisation of methods for quarterly adjustment is still lacking. Moreover, expenditure on owner-occupied housing still needs to be incorporated in the HICP. Users have also expressed an increasing interest in the comparison of the euro area/EU with two other large economic areas (the United States and Japan). A joint ECB/OECD project has investigated the comparability of savings ratios derived from national accounts in these areas and illustrates well the (lack of) comparability of the data.<sup>7</sup> In this context, the disclosure of metadata enables users to better understand the factors affecting international comparability (these may be e.g. differences in concepts, in data coverage, in accounting conventions and in compilation practices).<sup>8</sup>

A smooth exchange of information among all key players in the provision of European statistics (ESCB, European Statistical System (ESS), reporting agents) is also crucial to the effective organisation of statistics in Europe. The use of standardised messages such as GESMES/TS by all parties enhances the timeliness and punctuality of the statistics and enables a better harmonisation and understanding of the concepts by a better linkage of the data to metadata.

The ECB attaches high priority to the *sharing of data between the ESCB and the ESS*. Currently, the quality of the statistics of both constituencies suffers from an insufficient exchange of confidential

statistical information across the ESS, across the ESCB and between institutions of each system (e.g. there is an urgent need to share business registers, both on financial and on non-financial corporations). This is also essential to achieving the maximum efficiency of the data reporting systems, minimising the reporting burden and saving resources. The legal framework dealing with confidentiality (Regulation 322/97 for the ESS and Regulation 2533/98 for the ESCB) might need to be amended so as to improve legal certainty and effectiveness. Recently, the Executive Board of the ECB approved the exchange of confidential information within the ESCB under the existing provisions of the Regulation 2533/98 as a transitional arrangement. Moreover, the ECB has decided that confidential statistical data that may be received from NSIs or Eurostat will remain under the framework of Council Regulation 322/97, i.e. will only be used for statistical purposes.

#### *1.2.2.3 A more efficient communication with the users*

Every attempt to achieve and maintain a high quality of statistics will also depend on an efficient communication with the users. The ECB's Directorate-General Statistics has identified a *better dissemination of ESCB statistics* as one of the main priorities for the medium-term. For instance, the ESCB has developed a framework for a joint simultaneous and identical dissemination of euro area aggregates and all national contributions to these aggregates on the ECB's website and the websites of all Eurosystem NCBs that wish to participate. This framework is scheduled to go live this autumn. The solution implies that the ECB website and the websites of the NCBs involved will include tables with both euro area statistics and all national contributions (see Annex). The content of these tables on all these websites is identical because the data are generated from the ECB's Statistical Databank, but the layout and language of the tables is the same as that of the website of the NCB concerned.

The users of statistics produced by the ESS would welcome a better co-ordination of releases and revisions of European and national results. The First-for-Europe principle gives more visibility to the ESS. ECB President Trichet has pointed out on several occasions: *"This practice of publishing simultaneously area-wide and national data follows the "First for Europe" principle. This principle implies that the statistics, at least the Principal European Economic Indicators, are published on the same day for the euro area as for the fastest countries"*<sup>9</sup>. The ECB is determined to adopt, promote and share best practices regarding revisions, co-ordinated releases and other quality dimensions. This will take the format of a Quality Framework for ECB Statistics, which DG-S is preparing. The ECB already has a number of procedures in place (e.g. merits and costs procedure, regular user consultations, confidentiality policy, ECB policy for revisions, annual quality and availability reports, etc.), which will feed into this formal Quality Framework. It is also intended to

publish output quality indicators, as has already been done in the annual quality report for external statistics.<sup>10</sup> The confidence of the users in revisions can best be maintained by providing informed comments at the time of the release of statistics and by regularly publishing the average magnitude of such revisions in the past.

Finally, a more efficient communication with the users necessarily involves a stronger focus on Internet-based solutions, probably at the expense of paper-based publications of time-series. In this regard, the ECB is lagging behind many NSIs of the ESS and will soon invest in a more user-friendly website. Currently, commercial data providers are often re-packaging the data in an attractive and easily accessible way. However, this situation is suboptimal both for the users (involves significant costs) and for the producers (which do not receive the full credit for the valuable statistics they provide, because the public and the media perceive these data as being produced by the private sector). Therefore, the so-called “European Statistical Data Support” initiative (which nearly all NSIs have joined) and Eurostat’s decision to make its databases accessible free of charge are both very welcome.

### 1.2.3 Conclusions

The credibility of European statistics is currently at the heart of the statistical debate. NSIs in the EU are called upon to use this “window of opportunity” and to improve the ‘fitness for use’ of their statistics. To this end, statistical authorities will have to find effective ways of rebalancing priorities and to organise the collection of statistics efficiently. The production of high quality statistics and their communication and accessibility are two sides of the same coin. In order to improve the situation, we, European statisticians, should explore the avenue of the “art of external communication of reliable, cost-effective European statistics”. This, in our view, will be part of the mission for European statistics in the years to come.

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<sup>1</sup> See Bull (2004) for a detailed description of the development of ECB statistics.

<sup>2</sup> DG-S has prime responsibility for monetary, financial institutions and financial markets statistics, while Eurostat is the main responsible party for general economic statistics. The responsibilities for b.o.p. and financial and non-financial national accounts by institutional sector are shared by the two institutions.

<sup>3</sup> See ECB (2004) for a review of the ECB’s requirements in the field of general economic statistics.

<sup>4</sup> See Cordier, J. (2004) for a detailed discussion of these trade-offs.

<sup>5</sup> Cf. FROCH Group (2004).

<sup>6</sup> See Eurostat (2003).

<sup>7</sup> See ECB/OECD (2004).

<sup>8</sup> See ECB (2005) for a more detailed discussion.

<sup>9</sup> Trichet, J.-C. (2004).

<sup>10</sup> ECB (2005b).



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Template on international reserves

## Official reserve assets and other foreign currency assets

2004-12

2004-12 Go

EUR millions (approximate market value), unless otherwise stated

	Euro Area	ECB	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT
<b>A. Official reserve assets</b>	284572.8	34185.2	10068.0	67006.7	2061.0	16396.7	64715.8	2201.5	37502.6	223.1	14357.3	9159.0	98
<b>1. Foreign currency reserves (in convertible foreign currencies)</b>	113503.7	23491.2	5832.6	31283.9	468.8	8835.2	21509.4	1612.8	15598.4	93.3	5386.1	5567.2	34
<b>(1a) Securities</b>	106017.9	24242.6	4086.4	18389.5	251.9	5862.2	18035.8	877.1	15177.7	47.4	1700.3	3868.5	23
<b>of which: issuer headquartered in the euro area</b>													
<b>(1b) total currency and deposits with:</b>													
<b>(i) other national central</b>	12708.7	2351.4	497.5	1944.6	117.2	279.2	761.3	1.0	1962.4	60.0	1922.4	395.9	13

# Theme 1 - Professional user requirements of statistical dissemination - Some comments

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All producers of statistics at national and international level are confronted with issues of trade-offs in the products they disseminate. The two main papers of session 1 analyse these trade-offs from different angles and give several examples where the balance is questionable. International statistics are lagging behind in the quality and documentation of on-line dissemination as compared to the best national practices.

## 1.3.1 Introduction

The two invited papers for this session, by Ulrik Nødgaard [1] and by Steven Keuning and Alda Morais [2], offer a rich range of views on professional user requirements for dissemination of both national and international<sup>1</sup> official statistics. Nødgaard is a professional user of both types of statistics coming from a national ministry. Keuning and Morais represent a European agency that is at the same time a producer of international statistics and a big user of statistics; as a producer, the statistical division is confronted with a very intensive in-house user demand combined with high attention from external users to their output, which is based on inputs received from national producers and other international organizations.

The Nødgaard paper is particularly stimulating because it contradicts some of the beliefs of NSOs and of statistical units of international organizations about dissemination. As an example: we statisticians too often believe that dissemination to professional users does not need to be associated with the same amount of annotation and documentation (metadata), because professional users are aware of the concepts behind and limits in interpretation of statistical results anyway. The pretence that dissemination of official statistics via on-line databases to the public is mainly for professional users is an erroneous assumption that has been an excuse for keeping the metadata part of such databases to a minimum, thus avoiding tedious documentation work and difficult software development. As a regular and professional user, Nødgaard argues convincingly that annotated data with sufficient documentation are an absolute must for all dissemination, including to professional

users. As a user of national statistics in a country (Denmark) that has one of the best-documented on-line databases, his criticism about lack of documentation is mainly addressed to international organizations and to Eurostat's Cronos in particular. But looking at on-line databases from other countries, his criticism would also be applicable to some NSOs. It is clear that the challenge of providing sufficient metadata is greater for international statistical databases compared to national ones, because the amount of metadata in the form of footnotes required for individual countries or specific results is certainly much higher than at national level, due to the inferior degree of standardization.

### 1.3.2 Trade-Offs

Both papers mention that national and international statistical producers are confronted with trade-offs, involving two or more of the following aspects of statistical results:

- timeliness;
- frequency;
- amount of detail in terms of break-downs;
- reliability;
- comparability/consistency in terms of:
  - time;
  - between regions;
  - between industries/population groups;
  - across countries.

Users like Nødgaard recognise that NSOs and international organizations, when confronted with these trade-offs in a time of limited resources, have to give priority to one or more aspects to the detriment of others. However, some of the choices do not meet the real needs of users, and some of the strategies developed by NSOs to get out of a trade-off situation are not really considered value-added by users. An example mentioned by Nødgaard: the release of provisional estimates in order to satisfy timeliness without losing reliability for the final results is of no use if the discrepancies between provisional and final results are substantial, i.e. if provisional estimates are not reliable. In this case, the release of provisional estimates is more confusing, or even misleading. One way in which NSOs might respond to this criticism is that they formulate quality requirements not only for the final results, but also for the provisional results, with the difference between the two vintages as

one important quality dimension for the latter. If provisional estimates repeatedly prove to be very different from the final result, their release should be suspended until a method with a better match has been tested successfully, because, to use Keuning's and Morais' terminology, provisional results would not "be fit for use". As a more general strategy to meet Nødgaard's criticism, NSOs should discuss more systematically with main users about trade-offs, and about the value-added to users of producer-initiated new products.

Other examples of trade-offs mentioned in the papers: at European level between "flash estimates" for the euro zone, and the perceived need to provide reliable results at the level of each member country, or between the introduction of new concepts and methodologies leading to better coverage, but at the same time to break in series, and the additional efforts necessary to recalculate final results of past periods in order to re-establish comparability over time for a sufficiently long period.

### 1.3.3 Multiple Series

One of the most important criticisms from Nødgaard is that official statistics release various similar, but not identical, series about the same phenomenon. He uses different series of employment statistics from Denmark to illustrate his point. When even professional users are confused, how will non-expert users cope with this abundance of series? If they develop in the same way, the question as to why all series should be necessary is legitimate, and if they show contradictory moves, as in Nødgaard's example, what are the conclusions users should draw?

NSOs are not research institutes that may come out with conflicting results from different research activities; they are producers of authoritative information about the society, and authoritativeness suffers if results of official statistics responding to slightly different concepts are published like competing products in the same supermarket, accompanied only with technical explanations about the various definitions, coverage and sources, but without real guidance for either professional and non-expert users. On the other hand, NSOs do not invent additional series for their own sake; either they meet the requests of specific users, or they are an answer to some of the trade-offs listed above (e.g. in employment: the same series cannot provide break-downs by industry and monthly periodicity, so two different series are necessary to address the two information needs), or they reflect different concepts or units of measurement.

How can NSOs and international organizations reconcile responding to user needs that cannot be met with one single concept on the one hand, and the plea for consistency and authoritative series on the other? A full discussion of this issue is beyond the scope of this paper (see [3] and [4]). One possible way to guide users is for the NSO to introduce a kind of tier-system into their series, as is



the case, for example, in New Zealand [5]. The first tier would consist of the main indicators in each area with the broadest coverage such as GDP for general use about where the country stands. These series will be given the highest visibility in the dissemination process by the NSO. They have to be produced in full compliance with the UN Fundamental Principles of Official Statistics, notably professional independence and impartiality (which, among other things, imply that the terminology used in dissemination is decided by statisticians). In many cases, such first tier results are obtained through a combination of various sources at national level. The second tier would consist of additional series that might be necessary because the first-tier series do not allow for sufficient timeliness, breakdowns or international comparability. Their production is also fully in compliance with the fundamental principles, but in their dissemination the complementary character to the first-tier indicators has to be explained very clearly so that they are not taken as a full substitute for this first tier. The third tier, finally, are series based on concepts (and terminology) defined by specific users, and not by statisticians, that deviate from the first (or second) tier concepts for specific purposes such as the monitoring of specific policy programmes, the allocation of funds or decisions on eligibility of regions/municipalities.<sup>2</sup> I would call this third tier statistical services, to distinguish them from the results of official statistics that are in the first or second tier, because the statisticians' responsibility in the third tier is limited as compared to the first two. These differences should be reflected in the way results are disseminated, and such a differentiation would visibly turn what look like competing and unrelated products for many users into an interrelated and mutually complementary single product line.

The introduction of such a tier system for the dissemination of national statistics is not without problems, especially if production is not concentrated within the NSO and other producers would be reluctant to adjust their dissemination accordingly. However, for users, the necessary producer is unimportant; it is the authoritative series of national official statistics that counts. The coordination principle among the UN fundamental principles not only addresses data collection, but applies to the whole process of producing and disseminating official statistics, and can therefore be invoked to establish a tier system for the whole system of national statistics, and not only within a NSO.

As an example: it is still surprising that unemployment rates based on LFS (or on a combination of LFS and register-based data for short-term changes as is the case for some countries when compiling the internationally standardized unemployment rates) in many countries still do not have first-tier status, in spite of the inadequacies of the purely register-based unemployment rates that offer great problems of interpretation every time the administrative rules for registration (and for unemployment benefits) change. The reason may be that both products are released by two different

agencies, and that the coordination prerogatives of the NSO do not extend to dissemination. Nødgaard is right in that a national statistical “system” should be expected to look at and solve such problems from a broad user perspective in a more consistent way.

### 1.3.4 Specificities of International Statistics

Nødgaard recognizes the problems international producers of official statistics are confronted with in their task of converting national statistics from various countries into comparable international statistics that ideally fulfil the same quality criteria as national statistics. He acknowledges the huge efforts of Eurostat and others in developing standards for national statistics so as to make international comparison easier. As an external user, he comes to the depressing conclusion, however, that “what is lacking is dissemination”. How does he come to this harsh statement, with the growing quantity of statistics made available by international organizations on the web, which, to the great benefit of many users, are increasingly accessible free of charge?

Using Cronos as an example, his complaints are:

- data are difficult to find (there are many blanks that appear in a user’s selection on the screen);
- data are not annotated to guide the user about proper use, so documentation is either missing or is not geared to user needs;
- data overstate differences between countries, in part due to methodological differences, and not to reality (however, methodological differences may also imply that differences are smaller than in reality);
- breaks in series (caused by changes in methodology at national level, or by changes of standards at international level) are not smoothed.

Unfortunately, the tight resource situation within statistical units of each international statistical organization usually leads to the data and metadata maintenance being the first victim, not allowing the same degree of quality assurance as in the best national systems. In addition, there is an erroneous assumption playing a role also at international level: that adopted standards, especially those adopted at EU level in the form of legal acts, automatically lead to national statistics being immediately comparable between countries, thus allowing Eurostat to invest less in the data and metadata work. Nødgaard presents a very telling example on savings rates where, in spite of very strict European standards for national accounts, the data for one country is a kind of outlier,

although it may be perfectly in line with the national interpretation of the European standards and be consistent at national level. The systematic search for such outliers, the research into the reasons behind them, and the adjustments to be made to make the outlier comparable to the rest is time-consuming, with resources made available only in cases of direct relevance of series to international policy such as government debts and deficits in the EU. However, concentrating all the attention of quality assurance work on a narrowly selected range of indicators, and not having instruments in place for detecting errors or gaps in all the other parts of international data disseminated to users, is a risky strategy which, with a growing number of users of international data from media, the research community, business and financial world, and the public, will inevitably lead to a growing number of complaints similar to Nødgaard's, with some of them made in the public sphere. This undermines the credibility of international statistics at a time when it is under attack for other reasons.

The root of this problem has been that international agencies have started to “produce” international statistics mainly for use by other departments in the same organization, and not in a multi-user framework and with public dissemination in mind from the outset, as is the case for national official statistics. Professional internal users within the organization, if their use is regular, will rapidly detect any errors and complain internally; for them, ad hoc documentation of metadata may be sufficient as well. If internal use is not regular, however, there is no systematic feedback other than the quality assurance framework of the statistical unit, which, for the reasons given above, may not exist or may not be applied across the board. The result is clear: there is an increasing risk of international statistics being disseminated that are not authoritative in the same way as national statistics, and which do not fulfil the quality requirements normally expected from official statistics.

Unless gaps and flaws in international statistics appear in the media, NSOs do not regularly follow the output of international organizations in terms of data dissemination either. They would be in a position to detect strange or second-best data for their own country in a more reliable way, but this would require a systematic effort from them with negative resource consequences for other activities that, unlike the quality of international databases, are the direct responsibility of NSOs. The main focus of the NSO has been the burden caused by international data collection, especially possible duplications between organizations; this has been successfully addressed through joint questionnaires between international organizations, the increasing use of direct access to national databases by these organizations, and the data sharing between these organizations. The dissemination side of international statistics has not been given the same attention so far from NSOs.

As a summary, the present system of all international organizations producing some form of statistics, of which only a certain part is publicly accessible, and for which quality checks and documentation are sporadic, may serve internal users (but even internal users may be better served with another system), but is certainly not a service to external users that is up to the standards of good official statistics. In addition, public dissemination is sometimes delayed in comparison to access for users in other departments of the same organization, which is not in line with the principle of simultaneous dissemination. One way suggested in the Keuning/Morais paper (coordinated and simultaneous dissemination of national and international data on the web) is promising, but it presupposes strictly harmonized statistics being produced at national level, and this requirement is unlikely to be fulfilled in the near future in many subject areas, even in those covered by international statistical standards.

In the more immediate future, international organizations could help users by introducing, in addition to good metadata, some assessment of international (and intertemporal) comparability through a kind of scale. This would permit outliers to be marked, and data that have been thoroughly checked and adjusted (or smoothed in the case of intertemporal changes) to be distinguished from others. But agreeing on a scale of degrees of comparability is certainly not a trivial task, and since data are shared between institutions, it would have to become a generalized practice. On the other hand, just giving a lot of technical explanations on national differences, without condensing them into a kind of overall impact, is not enough for most users, including professional users. Let us take up these challenges in a constructive way, and with NSOs actively involved!

### **1.3.5 Other Issues**

The two papers, and especially the Keuning/Morais paper, address many issues other than dissemination, the organization of statistics at European level or the issue of European vs. national needs. I will only comment on one of them, the issue of data sharing between international organizations in general, and between ECSB and the ESS in particular.

Data sharing is understood here as an exchange of data before these data are disseminated to the public, or of data that will not be disseminated to the public at all because of confidentiality reasons, or because they lack sufficient quality. The issue in the Keuning/Morais paper is with confidential data in the sense of data subject to national rules of confidentiality as defined by a combination of national and European legislation. Since both the ESS and the ECSB have legal frameworks in force regarding statistical confidentiality, the prerequisite for such data sharing seems to be in

place so as to allow this exchange to materialise. However, looking at this issue from the point of view of the 6th UN fundamental principle, which stipulates that such data are to be “used exclusively for statistical purposes“, there is one major problem with the ECSB regulation 2533/98. Its article 8, paragraph 5 (c) allows data collected as “statistical information” to be used by the ECSB “in the field of prudential supervision”. The interpretation of the UN principles, and of all national statistical laws I am aware of, is such that use for prudential supervision of individual actors in the financial market is clearly a non-statistical use and therefore incompatible with statistical confidentiality. NSOs and other national producers receive information from respondents (including economic actors) under the strict clause that the individual information will only be used for statistical purposes, and no respondent would interpret statistical purposes as including prudential supervision. The paragraph in the ECSB regulation is therefore a problematic way of disguising a possible non-statistical use as part of statistical use under the umbrella of official statistics. If the potential non-statistical use were to become reality, this would not only be a breach of national statistical legislation, but also of the ESS regulation 322/97. It is encouraging that the authors recognise the need to amend some of the legal acts at European level, and I hope that the suppression of this part of article 8 in the ECSB Regulation 2533/98 is among these amendments.

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<sup>1</sup> The term “international official statistics” will be used in this paper for simplicity to cover official statistics originating both from international organizations such as the various UN agencies or OECD, as well as from supranational institutions such as Eurostat or the ECB. The author is well aware of the institutional differences between international and supranational official statistics, but from the user’s point of view in the context of dissemination, this should not be a relevant issue.

<sup>2</sup> All indicators defined by international summits would also fall into this category, because in many cases their concepts and the terminology used are not statistical standards decided by statisticians.

# Theme 1 - Professional user requirements of statistical dissemination - Discussion

The discussion following the presentations touched upon the following issues:

## ***Dissemination of statistics vs. communication of statistics***

Mere *dissemination* of statistics was clearly not considered equivalent or sufficient in order to *communicate* statistics – it is only a first step. And whereas statistical organisations are generally good at disseminating statistics, they are not always so good in communicating them. Specific policies and additional resources are needed to ensure real communication, i.e. to make sure that *the story is told* and reaches the users and other target groups.

Similarly, *accessibility* and *access* to statistical data should not be confused. The mere fact that “our data is on the web” does not ensure equal *access*. This requires that statistical offices tailor their policies and practices to reach different audiences.

It was suggested that statistical organisations could preferably make use of more frequent press briefings; both when important new data are released, but also when important events or changes in society takes place. Especially, it is important to tune the communication when releasing statistical data which could be politically controversial and subject to criticism, and to be prepared to give more explanation than what may be needed for other statistics. However, also important figures that do not show significant changes or controversy should be communicated actively and carefully in order to avoid misunderstandings.

Also, it was emphasised that communicating statistics is a special job, which requires special skills. However - it was claimed - statisticians often see communication as “not part of their job”, so this points to a need to invest in a cultural change among staff.

## **The processes of *producing* statistics vs. processes of *using* statistics:**

The question of compatibility between the statistical organisations’ processes for dissemination and communication and the processes of the users was discussed.

It was argued that statistical organisations need to integrate their processes with the processes of the users in order to ensure that the statistical information is delivered in a way that makes it immediately useful to the user. This implies, among others, that statistical organisations need to constantly monitor whether they meet the users' needs and what purposes the statistical data are used for in order to enhance the understanding of the users' needs and processes.

### ***Assistance and service to users vs. interpretation of data***

The question of which information users expect in order to understand and make good use of the statistics made available to them and how to balance this against the need of statistical organisations to remain impartial vis-à-vis interpretation of data was discussed.

The answer from the users was that assistance is needed in understanding the figures, definitions used, how data are compiled etc. (incl. differences between different sets of figures) – not with regard to interpretation or assessment of the economic and/or policy implications of the statistical figures.

### ***Provision of metadata vs. use of metadata***

It was argued by representatives from statistical organisations that users always claim more and better metadata, but often only make limited use of metadata or using it only when it supports a certain interpretation of data. Also, it was felt as if metadata was sometimes used to question statistics and misuse statisticians.

The tentative answer from the user representatives was that there is probably scope for more and better use of metadata, but that good metadata are indeed needed and appreciated.

## Theme 2 - Researcher requirements of statistical dissemination



## 2.1 Disseminating statistics to the Research Community

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The dissemination of statistical data to researchers is influenced by several tensions. The risk of identification of individuals, the enormous information contents of the data not fully used, and the perception of the society both as data reporters and data users are the most relevant factors that, being in contradiction, entail these tensions. After an analysis of these factors, the paper discusses the measures taken at the European Union to facilitate the access to data by researchers and proposes a set of actions for future improvement.

### 2.1.1 The information contents of statistical data

#### 2.1.1.1 *The gap between what is published and what could be published*

Statistical data contains much more information than what a statistical office normally publishes. Consider first the case of a sample survey. In principle, all possible cross tabulations of the categorised variables collected can be produced. This means that the number of possible aggregated data cells can be obtained by the product of all the possible occurrences of the categorised dimensions. There are two types of limitations for a release of data with such a detail. On one hand, the size of the sampling errors prevents to estimate indicators on too small domains as their accuracy will be low and the values thus misleading. On the other hand, the risk of identification of the individuals is higher as the number of statistical units in the sample diminishes. Thus allowing secondary use of the micro-data faces two different risks. That of identification of the individuals and that of erroneous inferences due to the lack of accuracy of the information produced.

The second case is that of data obtained from an exhaustive investigation such as a census or a register. Again the possibilities of producing aggregated data can be enormous and can be quantified as the number of cells in all possible cross tabulations of the categorised variables collected. Theoretically no accuracy problems are to be expected here even though there might be some response errors that will have an impact mainly in those cells which have very few individuals represented. The identification problems however are even higher than in the previous situation since any matches found refer with certitude to single individuals.

Another important information feature of statistical data is their potential by means of the linking of different data sources at micro level through the use of common identifying variables. An additional risk should be added in this case to those already mentioned above. This risk derives from the hypothesis underlying the data matching and the eventual lack of coherence of the data sources. It is worth noting that in certain cases some of the data sources used for the linkage have not been created for statistical purposes and consequently their quality may not be fit for the purpose of the statistical investigation.

The above-mentioned cases show that the amount of information that can be extracted from statistical data is much larger than what a statistical office normally publishes through all the dissemination means. Provided that precautions are taken in order to prevent the risks already mentioned, it is a responsibility of statistical offices to facilitate the secondary use of the data in order to optimise its utility.

#### *2.1.1.2 Examples of secondary use of statistical information*

There is fortunately a wide diversity of uses of statistical data. Thus, trying to be exhaustive in describing them is an impossible task. I will just give some examples.

The proceedings of the 19th CEIES Seminar: Innovative Solutions in providing access to micro-data [1], Lisbon on 26-27 September 2002 provide several examples of use of statistical data for research purposes. Three of them can be specially mentioned. First, Richard Blundell who shows how the use of individual longitudinal data on health, ageing and retirement can help to analyse the potential effects of population ageing and the economic impact of increasing demand of health and social services as the ageing phenomenon progresses. The data used in this case corresponds to the English Longitudinal Survey on Ageing (ELSA).

Second, Robert Erikson, provides an interesting example of cross-referencing three data sources to obtain a distribution of average marks among pupils from the working class who finished their compulsory education and the probabilities of transition to upper secondary school. The sources used were data from the 1990 population census on parents' occupation, average marks from a dataset of school leavers, and information on higher secondary education from a file listing admissions to this education level.

Third, Niels Westergaard-Nielsen stresses the use of linked employer-employee (EE) data which makes it possible to study differences across firms and the reactions to various policy interventions. The linked data answers policy-relevant questions on where jobs are created and where destroyed;

and on how policy interventions affect firms and their demand for labour. The paper presents a very interesting description of the requirements of the data sources for the EE linkage to be possible.

Furthermore, the table below presents a synthesis of the projects reported by those research institutions which, during 2004, submitted to Eurostat requests of micro-data of the European Household panel (EHP).

<b>Research contracts using EHP data. Year 2004. Main Topics</b>	
<i>Studies of specific sub-populations</i>	<i>Studies of specific phenomena</i>
<ul style="list-style-type: none"> <li>• Elderly</li> <li>• Poor</li> <li>• Regions</li> <li>• Long-term unemployed</li> <li>• Married women</li> <li>• Female participation in labour</li> <li>• Divorced</li> <li>• Temporary Workers</li> <li>• Persons at end of working life</li> <li>• Youth</li> </ul>	<ul style="list-style-type: none"> <li>• Mobility</li> <li>• Income inequality</li> <li>• Transition employment &lt;-&gt; unemployment</li> <li>• Taxation, subsidies</li> <li>• Intra-family transfers</li> <li>• Inequality in income and education</li> <li>• Wage changes</li> <li>• Education and Health</li> <li>• Labour market participation and fertility</li> <li>• Childcare</li> <li>• Discrimination</li> </ul>

A very interesting example of use of micro-data is Euromod, this is a tax-benefit model based on household micro-data. This model estimates the effect of changes in social and fiscal policies on measures of personal income and household welfare. It has been used to evaluate European and National policies. For more information: <http://www.econ.cam.ac.uk/dae/mu/emod.htm>.

The examples shown above, should not give the impression that researchers are solely interested in micro-data. There is an important class of researchers whose main interest is to analyse the economic evolution and to identify relations between the macro-magnitudes. Their work needs extensive amounts of historical series in raw form, that is, without any treatment such as seasonal or trading day adjustments which could perturb the basic signal to be extracted.

### 2.1.1.3 Abuses of statistical data

Fortunately not many examples can be found of bad use of statistical data. Regarding confidentiality breach, the reason could be that the protective measures taken by statistical organisations are sufficient. It could also be that statistical information doesn't permit easily to carry out identifications in a sufficient scale that would make this a profitable practice. Nevertheless, it is worth describing some possible fictional bad use of statistical information as this could be very damaging to the trust of society on the statistical system and, consequently, all means must be put for their prevention. This is done in the next paragraphs; note that the scenarios presented go beyond disclosure breach issues to others linked to misleading information or incorrect treatment of data.

- Listing of persons with high income levels can be extracted from a register of individuals including economic information, such as tax registers. These registers could be further linked with other statistical datasets such as census samples or budget surveys.
- Journalist attack against well known people (on the principle of the right to information) (for instance, "Some newspapers in Finland do take the trouble to process (and publish in the net) data on the richest persons (usually the names of the 1 000 persons who had the highest incomes and exact data on their yearly earnings, capital income and property value); local newspapers<sup>1</sup> have published all available tax data concerning all persons in their local area. The same income variables are also used in the Finnish EU-SILC data").
- Nosy neighbour scenario: try to identify his neighbour in a micro file on the basis of a few key variables (type of dwelling, number of persons, sex, age, occupation ...).
- Linking micro or very detailed economic information to registers of individuals in order to provide a file for marketing purposes.
- Obtaining ratios of economic information of enterprises in order to identify sectors on which specific examination of individual companies can be done for administrative purposes.
- Misinterpretation of statistical results by persons not aware of basic statistical principles (for instance, deduction of causal relation where there is spurious correlation).
- Inconsistency between statistics derived from perturbed released micro-data and official aggregated statistics.

- Production of aggregated data based on too few observations thus rendering it meaningless.

#### 2.1.1.4 Protecting the Confidentiality

There is an extensive scientific literature that describes methods for protecting the data and analysing its disclosure risk. I refer to the work session on statistical data confidentiality held in Luxembourg on 7-9 April 2003 [2] in which most of these methods were presented. It is also worth noting the CASC project under the research Framework Programme 5 that has recently been completed [3]. The following table gives a schematic overview of the different methods currently used.

Methods to protect confidentiality of micro-data files	
• Global Recoding	Several categories of a variable are collapsed into one.
• Local suppression	One or more values in an unsafe combination are replaced by a missing value.
• Top and bottom coding	Global recoding in case of ordinal categories.
• Post randomisation	Deliberate misclassification by changing the value of one or more categorised variables.
• Micro-aggregation	Replacement of individual quantitative values with values computed on small aggregates.
• Noise aggregation	Adding random noise to quantitative data.
• Data swapping	Exchange of some variables between two registers that have common categories for some predefined variables.

### 2.1.2 Supplying data to researchers

#### 2.1.2.1 The trade-offs

The present section sums up what has been said so far. Whenever supplying data to researchers several trade-offs have to be taken into account:

- (1) The identification risk of the data and its sensitivity. One can distinguish here two types of identification risks:

- the nosy neighbour scenario mentioned above: knowing few characteristics of one reporting unit, there is an attempt to identify it and release this information.
- the register attack: a register-commercial database is accessible. This allows identifying reporting unit (name, address) on the basis of few key variables like gender, activity, region, etc. The matching of the register and the micro file could allow for identification of a significant number of statistical data providers.

Nowadays, the second type of risk is considered the most serious because of the current technological developments that permit that a parallel database is developed for non-statistical purpose.

Protection from confidentiality breach is ensured by legal acts that contain provision for disclosure control. Nevertheless these acts provide general rules. Their practical interpretation varies very much from country to country and results in a high diversity of levels of protection.

(2) Capacity of analysis of information. As mentioned in Section 1.1 above, statistical organisations are well aware that what they publish is just small portion of all the information contained of the data. There is a big responsibility of the statistical organisation to facilitate secondary use of this rich information in order to meet specific needs.

(3) Perception of privacy of the society. Beyond the actual risk of identification is the risk perceived by the society. While the legal provisions for disclosure control may be sufficient or even excessive, the perception of the reporting units of the risk of ill use of the data they provide is very high and this could deteriorate the quality of their responses as they may try in the future to hide or distort some characteristics that they wouldn't like to be identified.

(4) Interest of the society in the information. In many cases detailed statistical analysis related to small populations or small areas has a very high interest for policy purposes. As in many other instances a contradiction may occur here: While individuals are concerned about the privacy of their responses, they are at the same time unhappy about this information not being fully exploited in order to identify societal needs and address imbalances in the distribution of wealth or public services.

### *2.1.2.2 Access to micro-data for scientific purposes in the European Union. The Regulation 831/2002*

In order to meet the needs of researchers in the EU, two instruments have been developed in the frame of the basic confidentiality legal acts (Regulations 1588/90 and 322/97). These two instruments are on one hand the statistical confidentiality committee that has the implementation powers in all confidentiality matters and the Commission Regulation 831/2002 concerning access to confidential data for scientific purposes. The reader can find a detailed description and analysis of this legal act in the paper presented by John King and Jean Louis Mercy in the Work Session on Statistical Data Confidentiality held in Luxembourg on 7-9 April 2003. While this regulation sets important hopes for the availability of micro-data to the research community, its implementation has faced several difficulties which have made its development progress at a slow pace.

The statistical confidentiality committee of December 2004 has analysed the progress in the implementation of this Regulation and has agreed on the development of quick procedures to process the requests of researchers and to grant the eligibility of research institutions. At present micro-data for researchers can only be provided for two statistical domains. These are the European Community Household Panel (ECHP) and, since very recently, the Labour Force Survey (LFS). In addition, the Community Innovation Survey Working Group is now discussing criteria to distribute micro-data files of this investigation. Furthermore, a task force has been set up to do the same exercise for the coming Survey on Income and Living Conditions (EU-SILC). In parallel, resources have been allocated so that the backlog in treatment of requests is reduced and the processes are followed with the objective of having an improvement of the situation in the short term.

### **2.1.3 The international reflection. The UN/EC Task Force on Confidentiality and Micro-data**

In June 2003 the Conference of European Statisticians created the Task Force on Confidentiality and Micro-data which was chaired by Dennis Trewin of the Australian Bureau of Statistics. The planned outputs of this activity were the development of agreed principles on the provision of access to micro-data and the presentation of case studies of good practice consistent with those principles.

In May 2004 the Task Force produced a discussion document [4] which addressed the perspectives of NSIs and researchers and how the tensions between these perspectives could be resolved and discussed the different means such as anonymised micro-data files, remote access facilities and data laboratories which could be used for that purpose. A set of principles were proposed and some issues for discussion were brought forward.

In October 2004 the Task Force compiled the comments by countries on a paper [5], providing a summary of these comments. It also included a listing of those issues in which there was a broad agreement and those for which a range of opinions was expressed.

The Task Force plans to end its mandate presenting a document of guidelines of good practice to the CES plenary of June 2005.

#### **2.1.4 A Way Forward**

Several paths can be taken in parallel in order to make the statistical data more useful for researchers while providing sufficient guarantee of non-disclosure. I will develop them now:

(1) Harmonised criteria for disclosure risk. In general the legislation at national and European levels is fairly harmonised with respect to what is considered confidential data. However, when applying this legislation, the criteria used differ considerably from country to country. These criteria have sometimes an important historical weight; sometimes do not have a solid scientific basis; and in many cases lead to conservative solutions because real risks are not well mastered.

This diversity of interpretations is a consequence of the fact that there is no harmonised approach of disclosure risk. To agree on disclosure risk, one should agree first on the sensitivity of the data (how “private” are the variables in the file) and on the possibility to match these data with external sources, that is, to the presence of key variables or identifying variables. Second, there is a need to find a harmonised way to measure the risk. Methodological work is needed to reconcile the different approaches or to express preference for one of them.

It is obvious here the need to have common core criteria which, while providing a satisfactory harmonisation level, allow for a degree of flexibility to adapt to the specific perception of the society in each country. This will also have the advantage of having a more solid internationally agreed basis that better justifies national choices made in the release of micro-data.

(2) The eligibility of researchers and research projects. At present the criteria for eligibility both of the research project and of the researchers are not clear and of course not homogeneous throughout the European Union.

In assessing the researcher, one often tends to assess the research body to which he belongs and try to make a strong link between the researcher and the research body which is responsible for the former. A priori eligibility assessment is one step that deserves much care but an ex-post assessment based on a standard follow-up of the institution and the keeping of records about this institution



seems to be more promising from an administrative and qualitative point of view. The possibility of having a black list including those that have ill-used the data would help to keep pressure on research institutions.

In assessing the research project, the involvement of the technical units which might already have some contact with the researchers and their work, which might have already conducted studies on the topics or might have a direct interest in the study is essential. Note that in some countries such as the United Kingdom, the aspect of interest for the statistical office is prevalent. Other aspects such as the originality of the research, the real need for confidential data, the absence of conflicting interest between NSO and the researcher can be taken into account.

Under the frame of Regulation 831/2002, criteria for eligibility have been developed and the corresponding evaluation questionnaires have been designed. These could form the basis of a set of transparent criteria that will ensure equal treatment of the scientific community throughout the European Union.

(3) Legal provisions in case of ill-use. An important aspect of the protection of the data lies in the awareness of the user of the legal responsibilities that he incurs and on the legal actions that can actually be taken in the event of ill-use. In the case of international use, legal responsibilities have to be established and explicitly communicated.

(4) The role of the CENEX on statistical disclosure control. The task force on Centres of Excellence set up by the SPC has proposed to launch during 2005 a pilot project on the concept of Centres of Excellence (CENEX). Briefly, this concept consists of setting up a team of national statistical organisations that will provide expertise on a specific domain, developing tools or knowledge that will benefit not only the team members but the rest of the ESS community. Statistical disclosure control has been considered one of the two subjects that will integrate this pilot phase of CENEX. Eurostat is at present preparing the documentation to launch this project. The results expected at the end of the pilot, which is planned to lapse one year, will be an inventory of needs, the corresponding development of computer tools and a handbook of common practices for disclosure control.

(5) The code of practice that has been recently approved by the Statistical Programme Committee includes some provisions about the use of a statistical data by researchers and the protection of confidentiality. This code of practice will provide a framework to develop an harmonised activity in this domain.

(6) Remote access for researchers. There is a broad agreement among countries that this is a very promising approach. Nevertheless, the current experiences are rather isolated. One can consider two types of remote access. A first type can be considered remote execution: the researcher submits a programme and the output is later sent to him by email. A second type is properly remote access: the researcher performs the analysis and can immediately see the answer on the screen. Eurostat presented to the IT Directors' Group of October 2004 an analysis of three current experiences of remote access. Two of them, from the US National Center of Health Research and from the Luxembourg Income Study project concern remote execution, while a third one, from Denmark Statistics is an example of remote access.

(7) Public use files. The question of whether it is possible to protect the confidentiality of a file to the point that the risk of breach can be considered sufficiently low so that public access to the anonymised data is possible has been very frequently asked. In the European Union there are examples of public use files in countries such as the United Kingdom, France, Italy and Austria. Of course, public use files do not replace confidential files, the latter giving much more possibilities of the analysis. On the other hand, public use files are produced at a minimal cost and the supply to users can be immediate.

Eurostat presented to the Statistical Confidentiality Committee in December 2004 a strategy for the creation of public use files and a specific proposal related to the Labour Force Survey (LFS). However, this proposal didn't meet with sufficient support from the Committee.

### **2.1.5 Conclusions**

(1) There is an important gap between the information contained in statistical data and what a statistical office actually releases. A way to fill this gap is to supply micro-data files to researchers.

(2) There are also many risks that have to be mastered - these are related to the legal protection of identification of individuals; to the possibility of ill use of the data; and to the perception of individuals of abusive manipulations of their information. These risks should be well managed.

(3) The objective is to fill the gap as long as the risks are satisfactorily managed. For this purpose several legal and technical measures can be explored. The legal measures concern eligibility of researchers and research projects. The technical ones refer to the different methods of confidentiality protection.

- (4) International reflections show that although there is a broad consensus in favour of this supply of micro-data to researchers, there is a diversity of views on many of the more detailed issues. In particular, criteria for considering a file sufficiently safe for dissemination vary widely.
- (5) The EU Regulation 831/2002 is a useful legal frame for the supply of micro-data to researchers. After a difficult initial implementation period, the process and delay established by this act will be examined in order to consider possible ideas for improvement.
- (6) Several lines can be explored to improve the dissemination of micro-data to researchers. First, the development of harmonised criteria for anonymisation and for eligibility of researchers/research. Second, the legal frame to prevent ill use. Third, the application of the code of practice. Fourth, exploring the possibility of remote access to micro-data. Last, the creation of public use files.

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<sup>1</sup> These newspapers have been summoned to appear on court accused of acting against the law on personal data protection!

## 2.2 European data sources – an opportunity and a challenge

Niels PLOUG

*Research Director the Danish National Institute of Social Research*

### **2.2.1 Introduction**

Researchers need data to do their work. They need uncomplicated on-line access to well documented high quality data in order to improve the quality of their research.

In comparison with other areas in the world Europe has a unique chance to face the challenges and opportunities posed by the knowledge society and create the best ever playing field for empirical social research.

This paper outlines the problems and opportunities in this endeavour

### **2.2.2 The need for a European strategy**

The social sciences work to improve understanding and knowledge by focusing on the dynamics and social processes behind the societal, economic and cultural developments of society. In so doing, they contribute to contemporary and future societies. Research is conducted on the basis of many different units – including systems of welfare, markets, organisations, value systems, policies, knowledge, systems, political systems, social and ethic groups and languages – and is conducted at multiple levels of analysis – from small localities to global systems. Evidently, these themes and issues cover a variety of very important facets of modern society, and as such the social sciences also offer the promise of addressing a whole range of pertinent research questions directly related to the challenges facing Europe of today and tomorrow. Thus the social sciences actively contribute to our understanding of the profound social, political and economic changes occurring in Europe as well as the process of European cohesion. In effect the disciplines make important contributions to attaining the strategic goals set up by the European Council in the Lisbon declaration, to strengthen employment, modernise social welfare and educations systems, and to secure economic reform and social cohesion as part of knowledge based economy. Indeed, the social sciences play a significant role in serving this need.

### 2.2.3 The Problems with Data and Infrastructure

For the social sciences data are the fuel of the empirical research enterprise – just as they are for the natural sciences. All scientists need scientifically driven data that are accurate if they are to understand, improve and critically test and validate empirical knowledge about a given subject.

Within the social sciences data consist of human artefacts in the broadest sense of the term. As in other sciences, data are provided through research infrastructures. The social sciences are thus currently not without research infrastructures. Indeed, the disciplines are supported by a wide array of very different research infrastructures, such as cross-sectional or cohort databases based on surveys or administrative registers, libraries, and citation indexes. Such research infrastructures also come in all shapes and sizes and on different geographic levels – local, national, regional, European, global – and can be private or public, large and small, systematic and ad hoc.

In fact the last five to ten years has seen an upsurge in the development of the collection of instruments available within the social sciences at European level – some partly financed through the framework programmes. Among the most notable are the European Value Study, the International Social Survey Programme, the Luxembourg Income and Employment Study, European Social Survey (ESS). Collaboration between data archives in Europe has demonstrated the value of common accessible infrastructures for several decades. This goes especially for the Council of European Social Science Data Archives (CESSDA). To this can be added a number of outstanding national research infrastructures that have been established via specific research programmes and projects. Finally, the official statistical systems, which provide many scientists with relevant data, is also an important part of the existing infrastructure and potentially an active player in the development that is needed.

Thus Europe has the potential to become a natural laboratory for the social sciences, providing data with an optimal combination of diversity and homogeneity – and certainly much more than is the case within each nation-state. Europe could be constituting a world leading “best case” for research in the social sciences.

However, the reality presently facing European researchers within the humanities and social sciences is somewhat bleaker. Despite the positive developments in research infrastructure within the last decade there are severe systematic shortcomings in European research infrastructures, which leave the social sciences under-equipped and failing to reach their full potential. In general terms, and irrespective of specific fields and disciplines, the state of European research infrastructure is hampered by the following problems, which can be categorized into three groups.

### *2.2.3.1 Short on Coherency and Funding*

Traditionally, research oriented data within the social sciences have primarily been collected and stored within the confines of the nation-state and often through specific isolated research projects with little or no follow-up. Alternatively, data are gathered through the agency of international administrative bodies with little focus on the needs of researchers. The absence of coordination at a European level leads to sub optimality and even duplication of efforts and incommensurable local solutions.

The funding of research infrastructures is volatile, often only secured year by year. Funding is most often secured nationally or regionally, but research infrastructures at European level are beyond the capabilities of single countries.

Indeed, the European Union increasingly finances research infrastructures – and especially access – but funding is allocated on the level of specific research projects, consequently only adding to a patchwork of research infrastructures. The lack of systematic, integrated long-term funding at European level is evident.

### *2.2.3.2 Short on Accessibility*

Data and research infrastructures are generally a public good, which calls for public investment. Specifically, this is more true within the social sciences than in other disciplines owing to a perceived general absence of commercial value for the use of data. However, whilst data are not a scarce resource in Europe, they are not as translational available for secondary analysis as they could be.

Access is restricted due to many reasons: legality, privacy, confidentiality, ownership rights, linguistic barriers, financial hindrances, pricing systems, institutional impediments, lack of online availability, and variety of storage formats and so on.

### *2.2.3.3 Short on Standardisation and Quality*

In Europe research in the social sciences is currently often carried out within national contexts and based on nationally generated data, with a large variation in quality. This fragmentation and compartmentalisation has severe implications for the quality of the data in a European perspective, as crossing borders within the humanities and social sciences comes at a cost.

European research based at European level often falls below the standards applied at national level as data are not immediately comparable due to differences in standards and documentation –

sampling, collection, variables, size, formats. In conducting European research, one has to frequently rely on post harmonisation of national data at the level the lowest common denominator. As a result, quality and detail are both compromised.

#### **2.2.4 The Implications**

To sum up, the social sciences are in a situation in which there is an astonishing discrepancy between the potency and research ambitions across Europe and the current state of the European infrastructure backbone, where European-level data either do not exist, are not available or are not comparable. In other words the possible existence of Europe as a natural laboratory for the social sciences is currently left unexploited and uncaptured.

This diagnosis brings with it serious consequences for the conduct of the social sciences. Europe is in a situation where the potential for research in the social sciences is in many ways better than, for example, in the United States and Japan. But the actual possibilities for turning this potential into a competitive advantage for the European research communities is hampered by the lack of research infrastructures.

First, the deficiencies of European research infrastructures effectively prevent the conduct of high-quality research with a clear European agenda and perspective. As a consequence, such research is a scarce commodity and a situation of widespread ignorance therefore prevails. Researchers initially interested in engaging in comparative European research find it both a costly and cumbersome affair – if not impossible from the outset – in which case they invariably abstain from such work. And the research that is actually carried out with a European perspective is most often based on imperfect and inadequate data, with the research questions generating sometimes precarious answers and fragile comparisons.

The resultant research drawn from a European perspective is all too frequently based on non-comparable national data with diverse sets of documentation, and consequently entails the risk of not comparing like for like, or even of comparing apples with pears.

Second, the situation is worse in some parts of Europe than others. Research infrastructures and data are not democratically distributed, as resources and capabilities are spread unevenly across Europe. Today research infrastructure facilities are generally concentrated in northern Europe, leaving southern regions less well equipped. This situation will be accentuated with the enlargement of the European Union. Normally, these concerns are couched in terms of the European Research Area. However, the implications reach further than the scientific community.

Third, the wider socio-economic impact of research in the social sciences is that certain critically important European research questions simply cannot be asked at all and that many of those that can be asked will be answered by empirical findings based on second-rate data. Clearly, this has severe implications for the overall European competitiveness and cohesion.

### **2.2.5 Conclusion**

This calls for a joint effort to create at the European level the ‘dream machine’ for social research – and to join forces in the endeavour to ensure the creation of what will be a major competitive advantages for social research in Europe as well as for the foundation for political decisions.



## 2.3 National Statistical Systems and Researchers

Svante ÖBERG  
*Director General, Statistics Sweden*

In this paper, I discuss the relations between national statistical systems and researchers from the point of view of the statistics producer. I argue for free access to publications and databases on the Internet, for developing systems for online access to micro-data for researchers, and for improving cooperation with researchers. I refer to the situation at Statistics Sweden as an example. I offer these thoughts for discussion without pretending to know how well they would suit individual statistical institutes.

### 2.3.1 Introduction

The research community is an important group of users of statistics. For us at National Statistical Institutes (NSIs) it is of utmost importance to provide researchers with statistics and micro-data as a basis for their research. In this paper I present some thoughts on how in the future to better serve researchers by free access to databases over the Internet and in particular better access to micro-data, which I see as the next step in disseminating statistics in an even more flexible way. I also present some thoughts on how to develop the cooperation with researchers at the NSIs and on the European level.

### 2.3.2 Free access to publications and databases on the Internet

Twenty-five years ago printed tables in paper publications were the normal way of disseminating statistics. They provided little in terms of output flexibility. Typically statisticians had to decide on what tables to publish and design the survey accordingly. If researchers wanted to use the statistics for further calculations they had to transfer the numbers by hand or have them transferred to their own programs.

In the mid 1970s, Statistics Sweden began to build up databases. They were made available on a commercial basis via terminals over the telephone network. We charged the users to be able to finance the work connected with the databases. In January 1997, the databases were made available over the Internet.

In January 2000, we changed our dissemination policy and made the databases available free of charge. Before that we charged each user a yearly fee of SEK 6 000 (about EUR 650). We had

about 350 paying users and some 100 non-paying users (libraries etc). The Government compensated us for the loss of revenues (about EUR 200 000).

Within three months we had more than 10 000 users. The number grew successively to about 30 000 by the time we stopped counting because users did not any longer have to register on our website to get access to the databases. This last change in procedures resulted in a doubling of the number of database withdrawals.

In January 2000 we also decided that all our publications should be made available in electronic form on our website and that we should not charge users for downloading publications. One important reason for not charging users for downloading publications was that it would not worsen our finances. Although our subscription revenues for printed publications would probably be reduced, so would our costs by about as much. The revenues covered only the costs for paper, printing, distribution and administration.

The website is now our main way of disseminating statistics. Last year we had 2.7 million visits on our website, not counting visits from search engines.

This experience shows the benefits of free access over the Internet to publications and databases. There are also good theoretical arguments for considering statistics as a public good, something that should be financed by a general tax and made available free of charge. The main reason is that the marginal cost for disseminating an extra copy of a publication or a database series is very small, much smaller than for a paper copy with the same content, and typically less than the benefit for the user.

At the same time NSIs have to find ways to finance development costs. If it is impossible to get funding by the Government it might be necessary to charge users. Another possibility to reduce the costs for making publications and databases free of charge, is to rationalise the production system by focusing on dissemination over the Internet as the main dissemination channel. When publications are prepared, they should be prepared in a way that allows both printing and downloading from the website without extra costs.

I strongly believe in free access to publications and databases over the Internet. I am particularly pleased that Eurostat recently has changed its dissemination policy in this respect. Statistics on developments in the European Union and in the Euro Area are becoming more and more important as Member States grow more integrated and European policies become increasingly developed.

In this area I have two suggestions. Firstly, I would suggest that the OECD Secretariat changes its policies in the same direction. The OECD Secretariat has very high quality publications and a wide range of very valuable databases that would be used to better advantage if they were made available free of charge. In Europe there has been much focus on harmonisation of statistics over the last ten to fifteen years. It is now time to focus more on the comparability between Europe and other parts of the world, and in particular with other OECD countries. This would be supported by free access to the OECD's extensive data archive.

Secondly, I would also suggest that NSIs that still charge users for publications and databases on their websites to review their policies, assess the arguments for and against free access and consider possible ways of making publications and databases free of charge on the Internet.

### **2.3.3 Systems for online access to micro-data for researchers**

Anonymised micro-data files, i.e. data files with records on individual persons or companies but without identification numbers or similar, can be seen as the next step for NSIs to serve its users with a more flexible output. Databases available over the Internet make it possible for the user to compile a wide range of tables. Anonymised micro-data files provide even more flexibility. Technological advances have also made it easier for researchers to use micro-data in their research and the demand for micro-data is increasing.

Statistics Sweden has a long tradition of collecting administrative data and transforming these data to registers applicable for statistical uses. Swedish statistics are to a great extent based on administrative registers - from 85 to 95 % depending on how we measure. The register system also includes a number of survey-based registers, e.g. results from the Labour Force Surveys. Over a number of years, Statistics Sweden has distributed anonymous micro-data to a large number of research institutions and authorities using magnetic tapes, CD-Rom discs, DVD discs or other formats. The volume has increased at the same time as the number of releases/assignments has increased. Around 170 releases took place last year.

Confidentiality protection of individual and business data is one of the main principles in official statistics and must be addressed when discussing micro-data. The individual is entitled to be protected by unacceptable intrusion into personal privacy. The use of statistical information is therefore normally regulated in the legislation and/or in a code of practice.

In Sweden, the legislation regulating the use of statistical information states that all data, including anonymous data, obtained for statistical purposes are confidential irrespective of the source. Data

collected for statistical purposes may be used only for the production of statistics or for research purposes. Confidential data may only be disclosed to authorised people. Access may be granted in forms, which do not allow direct or indirect identification of individuals or of other data subjects such as enterprises. In practice, Statistics Sweden only provides access to micro-data without name, address and identification number. Legislation in Sweden, as well as in other Nordic countries, does not contain any specific rules that restrict the way of releasing micro-data. As long as the general requirements in the legislation are fulfilled, the most suitable method can be chosen.

At Statistics Sweden, we are now developing procedures that would make it easier, cheaper and more secure to use micro-data in research. The main idea is that we should keep micro-data in physical form at Statistics Sweden instead of distributing micro-data to research institutions using CD-Rom discs etc, develop techniques to make it easy for researchers to make calculations over the Internet on micro-data at Statistics Sweden, and seek funding for developing and managing the system to make the marginal cost for the individual researcher very low.

A unit was established last year to take charge of this initiative. It is called Register Coordination and Micro-data Access and is placed at the Department of Research and Development. One of the objectives is to build a comprehensive register system, the Statistics Sweden Data Warehouse, in which variables and populations in different registers are standardised and interlinked, responsibilities are clarified for each register and for different stages in the coordination work.

A system for online access to micro-data at Statistics Sweden has been developed. The system, which has largely been inspired by a similar system at Statistics Denmark, is called MONA (Micro-data Online Access at Statistics Sweden). It allows researchers to have online access to specific servers at Statistics Sweden. A desk top with relevant software (e.g. SAS or SPSS) and with access to micro-data is made up for the researcher, who can work with the data quite freely, compile his/her own data sets, carry out calculations and the like. However, all data processing will be carried out on the server at Statistics Sweden and no downloads are allowed. The results are frequently sent by e-mail to the researcher as tables.

One important aspect in future development is to compile several new thematic registers tailored to better meet the needs of the research community (e.g. LISA – an integration register on illness leaves and employment). To accomplish this, considerable work is needed, engaging both methodologists and subject matter experts. Another future trend is to develop techniques that allow linkage of data from different sources, both within and outside Statistics Sweden.

However, improved access to micro-data involves relatively high costs. Without funding from the Government, which we do not have, costs must be borne by researchers. Because of this, Statistics Sweden has approached The Swedish Research Council suggesting funding from the Council of a system of micro-data access. Such funding would give researchers lower marginal costs when using micro-data. This would foster an increased use of micro-data in research. Experiences from other areas where basic financing has been arranged and researchers only pay for low marginal costs have been very positive. Such a solution would include full IT-support for online access via Internet, a front office to serve and advice the researchers, and thematic databases.

Statistics Sweden gets many requests for micro-data from universities and research institutions in the United States, who want to enrich their own research databases with, for example, census data and register data from us. For several reasons, including legislative restrictions, we are not able to satisfy such requests, if they require data to be physically moved abroad. However, there seem to be technical possibilities to develop the Danish/Swedish model described above into a more general, international network solution, where all data could physically stay where they belong, while making them at the same time available to researchers all over the world. On a national level, this kind of network solution is being implemented in Australia at present, the so-called National Data Network (NDN), where the Australian Bureau of Statistics is one of the nodes in the network, which also contains other agencies and research institutions.

In this area I have three suggestions. Firstly, I would suggest that NSIs that are ready to develop systems for online access to micro-data form a network to exchange ideas and experiences. I am convinced that research community would benefit substantially from access to such facilities. Statistics Sweden is moving in this direction and we would certainly want to take an active part in such a network.

Secondly, I would suggest that in the international context, we take a step-by-step approach, first agreeing on some guidelines on confidentiality and micro-data. Such guidelines are now being developed under the auspices of the Conference of European Statisticians by a task force led by the Australian Chief Statistician Dennis Trewin. Attempts last year in both the Statistical Programme Committee at Eurostat and the Committee on Statistics at the OECD to rush developments did not obtain strong support.

Thirdly, I would suggest that we explore the possibilities to create international micro-data networks, enabling researchers from other countries than our own to get access to our data in a safe way.

#### **2.3.4 Organisation of the cooperation with researchers**

Most if not all National Statistical Institutes have some kind of organised cooperation with researchers. This cooperation may take different forms depending on the size of the country, traditions etc.

At Statistics Sweden, we have twelve user groups for different subject matter areas: economic statistics, welfare statistics, demographic statistics, regional statistics etc. These user groups consist of external experts including researchers and they advise us on the development of statistics in their areas of interest. We also have a Scientific Council, a Consumer Price Index Committee and a Building Index Committee with representatives from the research community. This year we established a National Accounts Committee to give us advice on methods used in that area, of course within the framework of the European System of National Accounts.

Furthermore, there is an organised cooperation with the Universities of Stockholm and Örebro in particular, the cities where we have our offices. A cooperation agreement with the University of Örebro was signed in 2001. It includes a shared professor in statistics, shared financing of PhD studies, and regular courses, seminars and summer schools. I am a member of the Board of the University of Örebro and several professors at the University of Örebro are members of the different groups I mentioned above. A professorship at Stockholm University is especially dedicated to official statistics, and the professor spends part of his time at Statistics Sweden.

In addition to these more formalised and extensive types of cooperation, there is widespread cooperation between different parts of Statistics Sweden and researchers in many areas. Some of our staff members are teachers at universities and some university researchers work part time with us. Finally, we conduct regular user satisfaction surveys that are directed towards researchers, among others.

Comparing Statistics Sweden with other NSIs, I have noted that we do not have the benefit of such an extensive cooperation with universities as in the United States. NSIs in some other European countries such as the United Kingdom and France are also in a much better position in this respect than Statistics Sweden. Also, we do not have much in-house research and analyses like NSIs in other countries such as Canada, Australia and Norway. And we do not have in-house higher education in statistics like INSEE in France.

In this area, I also have two suggestions. Firstly, I would suggest that in most NSIs we probably could and should strengthen the cooperation with researchers. I believe in benchmarking and in

learning from good examples in other countries. In fact many of the changes that are now taking place at Statistics Sweden originate from visits to other countries. I do not envisage that we should adopt the same kind of organisation of the cooperation, but that we could pick up ideas that would suite our particular national systems.

Furthermore, I have also been struck by the difference between NSIs and Eurostat in how we treat relations with users. In most NSIs we have very elaborated systems for dialogue with users. They vary from country to country. Some have National Statistical Councils that cover the whole spectrum of official statistics. Some, like Statistics Sweden, have a number of user groups for different areas of statistics. Most NSIs have frequent contacts with branch organisations etc.

Most of this is lacking on the European level. We do have the CEIES, which is now under review. I think it is not unfair to say that CEIES has not played an important role as a user group. Instead, user views have been channelled through the different General Directorates of the Commission and the working groups and committees of Eurostat. However, the seminars CEIES has organised have been of high quality and much appreciated.

My second suggestion in this area is therefore that Eurostat takes an initiative to assess how to develop its relations to users including researchers, taking into account experiences in member countries. Would the European Statistical System benefit from user councils for European Statistics as a whole or for different areas of statistics? Would it benefit from a Scientific Council or from special Councils for National Accounts, Consumer Prices, or other areas of statistics? Would it benefit from user satisfaction surveys covering different areas of statistics?

### **2.3.5 Conclusion**

In this paper, I have discussed the relations between national statistical systems and researchers from the point of view of the statistics producer. I do see possibilities for us to improve our output and make it more valuable to researchers. In particular, I argue for free access to publications and databases on the Internet and for developing systems for online access to micro-data for researchers. Also, I do see possibilities to improve cooperation with the research community. I offer these thoughts for discussion understanding that other solutions might be more relevant for individual national statistical institutes.

## Theme 2 – Researcher requirements of statistical dissemination – Some comments

Ullrich HEILEMANN

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1. I am very honoured to have the privilege of taking part in this conference. The topics addressed and discussed are not only extremely significant and topical in their own right, but they are also of particular interest for the work of CEIES and its Bureau. I have the pleasure of commenting on the papers for this session, the subject of which is “Researcher requirements of statistical dissemination”, a topic which for various reasons has gained rather unexpected prominence. Only a few years ago it was impossible to imagine that access to statistical information and data would become a virtually free commodity for society or, at least, for the research community. For National Statistics, too, markets forces and price mechanisms seemed at that time to be the only way forward to allocate resources and guarantee efficiency – and now it has become the “free lunch”! Though, to be honest, in this particular case it might not have needed much effort to convince governments to make statistics freely available on the internet. Anyway, revenues from publication cover only a small part of the costs involved in producing statistics and, in the end, most research is financed by government anyway. But there is nothing wrong with the “march of liberty” being backed by a marginal principle.

In a sense, the topic of this session may be seen as a very special chapter in the longstanding process of “removing borders” [Entgrenzung], *vulgo* globalisation. We stand at the beginning of “free dissemination” and, not surprisingly, the operation, implications and consequences of this gift for which many have strived so long are probably not yet fully understood. *Freud* is reported to have said there are two reasons for depression, one is *not* to reach what one has strived for. The other is – *to reach it*. I am pretty sure that for some time to come, we will have to cope with the second cause of depression, not least because we may not be properly prepared yet to grasp all the implications for producers and consumers of statistics. However, we have not reached “the end of history” and this kind of depression is presumably much easier to deal with than the first kind.



Speakers have to be brief and hence they have to be selective. In addition, my remarks will not be without a kind of “home bias”: an *institutional* bias because of my affiliation with CEIES; an *occupational* bias, because I am a member of the research community and, lastly, a *national* bias, insofar as I am German and we Germans tend to see difficulties and problems where others see chances and opportunities. What makes my task easy is the fact that DGINS papers are always first-rate papers. Which in turn means my praise of them can be short. However, the papers complement each other to a great extent, and it is difficult to wrap them up in a consistent set of conclusions or discussions. Please allow me instead to raise a number of questions and to go off on a few tangents.

2. The paper by Pedro Díaz Muñoz – Disseminating statistics to the research community – gives an excellent general idea of the topic and its relevance. The author quite correctly points out the various trade-offs for researchers – the risks of the data, in terms of identification of individuals and the risk that the information contained in the data is not fully used. But Mr Díaz Muñoz also refers to the contradictions of society, both as data reporters and data users and the resulting tensions. There is little doubt that this makes disseminating statistics a risky undertaking. But in a time of often disparate battles for public attention within the media but also between researchers and between intellectuals in the public arena, we simply have to be prepared to be confronted with an improper use or even with an abuse of statistical information. Sometimes, the misuse will be out in the open, more often it will be hidden in strangely constructed indicators and rankings.<sup>1</sup>

Hence, the author is quite right to bring up the problem of “eligibility of researchers and research projects”. However, in the age of difficulties of tracing electronic communication, this will not always be an easy task. Most of all, this will be the case if the media and other multipliers – individuals! – do not accept or play by the rules of the game. Allow me to add here to Mr Díaz Muñoz’ statement that the problem of eligibility should be seen in a wider context. Some uses or transformations of Official Statistics data are simply too important for Official Statistics not to have to qualify, license, grade, etc. users or user practices in one way or another. The Commission [2], Eurostat and others are already working on these issues, and the developments discussed here may draw attention to the problem.<sup>2</sup> There is then the closely related issue, once these risks become evident, of possible consequences for suppliers of data and for government authorities. We are indeed, as Mr Díaz Muñoz emphasises, in need of a code of practice. This has to be a code, however, for which compliance must be monitored on both national and international levels. At the same time,

however, we should not be too optimistic in our expectations concerning the use of micro-data and micro files. Much of the present hype surrounding micro-data in social sciences is largely driven by a great interest in new methods. So far, the interest of policy-makers in their results seems for a number of reasons to be still rather limited. One reason is the usually small and sometimes fastidious empirical base; another is that the theoretical foundation is often not very elaborate and, lastly, the predictive content of these results is not very high. But these deficiencies may be overcome when micro-data become a more routinely offered part of Official Statistics. Fortunately, there is already a vast range of methods available to protect confidentiality of micro-data files and a number of avenues and activities to cope with the problems are well under way. The ‘sunlit uplands’ where full use will be made of micro-data may be some way off, but they are in sight for Europeans – and the rest of the world?

3. In a sense, Niels Ploug’s paper – “European data sources - an opportunity and a challenge” – takes up where the previous paper leaves off: “In comparison with other areas in the world, Europe has a unique chance to face the challenges and opportunities posed by the knowledge society and create the best ever playing field for empirical social research”. Of course, researchers will be pleased to find their experiences of underfunded research infrastructure, of being short on coherency and funding, short on accessibility and short on standardisation and quality, expounded so persuasively. The same goes for the CEIES to hear the call “for a joint effort to create at the European level the ‘dream machine’ for social research – and to join forces in the endeavour to ensure the creation of what will be a major competitive advantage for social research in Europe as well as for the foundation for political decisions”.

But as promising as all this sounds, we should also realize the problems which may be associated with these policies. *First*, research in general and research in the social sciences in particular now takes place in a truly global context. In other words, all the “statistical liberalisations” – keyword: remote data access! – will not be confined to European research or researchers and, probably, also cannot be. Social research on European themes in *San Francisco* or in *Beijing* will equally benefit from European improvements and facilitations. Hopefully, sooner or later, Europeans will benefit from similar steps by their NSIs, as researchers in or from these countries will do. – *Second*, standardisation of statistics data is a fine thing – I do not have to explain this here. A lot has been achieved in the last 30 years in Europe as well as on a global level; even if a lot is left to be done, as everybody who is

somewhat familiar with the *United Nations' "International growth competition project"* will know. A coherent and consistent use of this information in social research will not get around the need to trace the standardisations and the way in which they were made. To recall some of the difficulties with which we will be faced, I refer to the 24th CEIES-Seminar and the difficulties encountered in trying to measure the size of the government sector [1]. The risks involved in all this may be illustrated by looking at recent developments of the second cornerstone of empirical research: the methods. Without doubt, the ubiquity of methods of empirical research has greatly promoted not only their application but also their improper use or even their misuse. This happened despite extensive and easily accessible documentation of the methods. Of course, much of the incorrect use had been eliminated in later stages of the research process. But this only underscores the need for some code of conduct – of course also within the research community. Unfortunately, so far one may have the impression that this need attracts more attention outside this community than within it.

4. Like the two previous papers and the paper by Svante Öberg (“National statistical systems and researchers”) we all welcome very much the free dissemination of statistics. His account of the long experience of *Statistics Sweden* with researchers is impressive. I am not familiar with how the cooperation works in other countries, but I am sure that the Swedish example could in many respects serve as a model, and therefore deserves much attention. *First*, a small technical, perhaps trivial comment: leaving the highly matured *Gutenberg* world and entering the new world of electronic publishing has its price or its trade-offs. Not the least will be that the process of printing improved the product in a number of ways. At least I benefited from the various corrections by typesetters and proofreaders. I hope that these, probably inevitable, costs of the new media will be not too high and of limited duration. – *Second*, the close cooperation of *Statistics Sweden* with researchers in user groups for different domains is a good practice and is also established in other countries. However, its success depends to a great extent on the quality and the interests of the researchers involved (not to mention the NSI members). Here some inherent dangers may exist. Most of the policies discussed today in one way or another open the door to new types or groups/circles of consumers of statistics. Their traditions and attitudes sometimes differ from the well established standards and rules of Statistics, their understanding of “privacy” being just one area where they differ. Furthermore, the process of facilitating access to and use of statistics may reduce the dynamics of researchers to develop new statistics, etc. This is a general risk, but countries where empirical interests are second to theoretical reasoning and arguing may

in particular be at risk. (You will probably not be surprised to hear that I would see Germany among them – the days of *Ernst Wagemann* and the *Deutsche Institut für Wirtschaftsforschung* of the 1930s are, of course, long gone). In short: researchers should take care to ensure that better cooperation with NSIs does not become a one-way street but is an ongoing process of mutual reinforcement.

A word about the role of CEIES: Mr Öberg notes that the CEIES did not work as a user group. This is not the place to debate the origin of CEIES and the tasks attributed to it. I would argue that at least the CEIES Bureau tried to take on such a role. The Bureau attempted to ascertain, to communicate and to pay attention to user interests as much as possible – not just to the interests of the European Commission, but to private users as well. But CEIES always kept an eye on the producer side, too. In bundling and discussing user demands as well as producers' and users' concerns about the “burden of statistics”, the Bureau pointed out trade-offs as well as budgetary limits, examining both positive and negative priorities. I am sure that CEIES will have to follow this path even more determinedly in the future. But, of course, there is no doubt that, where statistics are concerned, the community of European users is still in the “taking shape” phase.

5. Let me sum up and allow me thereby also to digress a little. All three papers correctly praise free dissemination. The economists' worries that zero prices might lead to an explosion of demand and recalcitrant supplies are not seen as being of immediate relevance by the three authors; the price elasticity of demand is seen as low and anyway, thanks to the new media, the demand elasticity of supply is unlimited. The need for rules of conduct and closer links between Official Statistics and the research community are well understood. Efforts by Eurostat and others to develop such rules are under way and there are models to follow.

At least the latter aspects fit into what may be called “statistical culture”. Implicitly, all three papers argue that in an age of nearly free information and free access to it, “proper conduct” has to be re-defined or re-thought, when at the same time statistical data and research results of all sorts are becoming increasingly important in the media and in the political arena. Official Statistics will find it hard not to give a lead in this process.

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<sup>1</sup> It is tempting to refer to a rather elaborated theoretical scheme of information assessment developed by *Helmut Spinner* [3], in particular to look for the implications of the process described here for misinformation. This is not the proper place to do so, especially since the audience is also well aware of this possibility.

<sup>2</sup> Cf. for example also the wider activities of the *Conseil National de L'Information Statistique* (CNIS) under [http://www.cnis.fr/ind\\_english.htm](http://www.cnis.fr/ind_english.htm).

## Theme 2 – Researcher requirements of statistical dissemination – Discussion

Several speakers during the discussion stressed the significant costs involved in setting up micro-data access centres which were efficient and secure. Against a general background of budget restrictions, it would seem unrealistic to imagine that such centres could be funded by public money. Users of such data must therefore be prepared to pay for the service which was made available. It was nevertheless pointed out by some speakers that the difficult budget situation was an argument in favour of making maximum use of existing data.

Another major constraint was the differences among national legislations with regard to statistical confidentiality. In some countries the provisions governing the dissemination of micro-data were very restrictive. It was also necessary to distinguish between data on businesses and data on households. In the case of the latter, it seemed easier to implement techniques for rendering data anonymous. Attention should also be paid to the fact that matters of confidentiality did not concern only individual data. Aggregated data could also be confidential.

The discussion also indicated that the risks of improper use of data were low. The countries which had set up micro-data access centres had no instance of misuse of data. The risks existed, however, and they could have a powerful impact on statistical systems as a whole. They needed therefore to be managed accordingly.

## Theme 3 – Non-professional user requirements of statistical dissemination

## 3.1 Focusing on non-professional data users

Aija ZIGURE

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The non-professional data user, how to distinguish non-professional data users from professional users, how to address the needs of non-professional data user? These are questions on which author tries to find answers in the paper.

The increasing number of requests for general, easy comprehensible analysis of the socio-economic situation are mostly directed to national statistical institutes and this is a new challenge to effectively address the needs of these non-professional data users.

The paper describes the approaches of Central Statistical Bureau of Latvia in order to communicate with non-professional data users.

Every day we listen to weather forecasts to know what to put on, how suitable is the next week for a leisure trip, but still most of us do not know of what indicators and analysis the weather forecast is obtained. Non-professional data users take their decisions on the basis of conclusions drawn by others just like we are reading weather forecasts – how many of us can use satellite photos without explanatory texts.

The general public's interest in statistical data without being necessarily connected directly to these domains and statistical data production itself has already changed the presentation of statistics. Statisticians have understood that a balance of short analysis of the data concerned and graphs or maps improves the possibility to pass on to the reader a message making the meaning of the data clearer since the text and image brings to the front something that not always may be perceived by the non-professional data users. The presenting of statistical information is orientated to a specific group of data users: entrepreneurs, students, politicians and others taking into account their profile: professionalism in the branch and statistics. A lot of work has been done focusing on the needs of different non-professional user groups in order to entice their attention and help them getting acquainted with statistics everyday.

### 3.1.1 Introduction

Lately in the society in general there is a growing need for the statistical data analysis because countries, branches and enterprises are dynamic in their development and therefore more and more people need to follow this process in order to take the most adequate decision. The proof of it is the



growing number of successful and profitable enterprises of the private sector that are engaged in compiling different statistical information and providing services of analysis.

This demand for statistics cannot be valued without ambiguity. On the one hand it increases the importance and value of compilation and dissemination of statistical data and their impact on the society. We, who are involved in the formation of the statistical system, can value this only positively. But on the other hand the growing number of data users increases the amount of work for statistical data disseminators. With the growing number of data users that results from the mentioned dynamics of the contemporary economics and society and related to it necessity for information rapidly and irreversibly increases the amount of work that has to be invested to provide corresponding and adequate information services. Thus statistical data disseminators have to extend the range of services by diversifying them, i. e. providing the same information in different ways, to cope with a greater number of information requests and different questions on data availability and nowadays, in e-technology era, on technical problems that arise when using statistical data, which are published digitally, on CD or Internet. Requests for general, easy comprehensible analysis of the socio-economic situation are mostly directed to national statistical institutes, other government institutions, that prove the confidence in data quality.

So that the offered statistical information products correspond to the needs of data users and financial resources invested in the preparation of them are not wasted, statisticians also should apply methods of marketing. That is - they should study the users of their products in order to get a better understanding how to satisfy more rationally their interests by improving products, services and communication.

### **3.1.2 Who is a professional and who is not?**

I shall begin with this that it is rather impossible to define or classify and separate professional and non-professional data users. Perhaps it is possible more precisely to characterise professionals or at least to adapt evaluation criteria.

As we all represent professional statisticians, initially it seems difficult to identify non-professional data users, but if we look at the problem from the other side, as if from the point of view of some branch where we all non-professionals, then we can acquire a quite different viewpoint.

I want to compare statistics and methodology. Every day we listen to weather forecasts to know what to put on, how suitable is the next week for a leisure trip, but still it is not quite understandable

for us of what indicators and analysis the weather forecast is obtained. In short, meteorologists analyse the available data to make them understandable for the others.

We can attribute the mentioned principle also to statistical data users dividing them conditionally into two groups: professionals and non-professionals. Let us use the definition of a professional data user trying to clear up what is a non-professional data user.

Thus a professional data user with the help of the statistical information at his disposal and applying theoretical and practical methods of the statistical analysis is able to draw conclusions for his further actions and decision-making process. Of course, it should be mentioned that not always the drawn conclusions and made decisions are correct but it more depends on the experience and professional qualification of a data user.

Differently we can characterise non-professional data users – so they take their decisions on the basis of conclusions drawn by others (just like reading weather forecasts – how many of us can use satellite photos without explanatory texts).

In general under this definition the non-professional users consist from the following groups of users:

- public at large (interested citizens);
- teachers;
- students;
- pupils;
- librarians;
- politicians;
- journalists;
- entrepreneurs;
- civil servants.

The last four groups of users might be considered also as professional users (it depends on the qualification in statistics of these users). In any case the main group of non-professional users is the public at large.

### **3.1.3 Groups of traditional statistical data users from a new point of view**

Every data user obtains and uses statistical information for some definite purpose. In most cases the statistical information is only a part of the choice of information at the disposal of a data user that is

used for decision-making. To identify the main groups of data users means to connect the obtained statistical information and the purpose of its use that allows identification of groups of professional and non-professional data users.

Sibylle von Oppeln-Bronikowski, a specialist of the German Federal Statistical Office, the demand for statistics structures on three levels:

- basic information requirement of the general public;
- standard information requirement that can be attached to certain target groups;
- customer-specific information requirement to special users [1].

“This basic information includes press releases, leaflets, small brochures, replies to minor enquiries, statistical publications in libraries, at trade fairs and exhibitions, contributions to events and Internet dissemination”[1, p. 3].

The general public information requirement forms the task of NSIs to produce statistics for all as public property. The information for public at large should be prepared in advance, allowing its dissemination as widely as possible. The best way of dissemination of information for non-professional users is by using multipliers, firstly mass media, teachers, international organisations.

It should be mentioned that a part of standard information requirement could be acquired also by non-professional users.

The experience of dissemination of the structure of the statistical information shows that different groups of users need the survey results in different forms. Every group of users wishes the information in the form that better matches its specific needs. Journalists, politicians and the general public use the statistical information mainly for the participation in democratic processes.

Non-professional users require not only correct and up-to-date information but also simple explanations of data sources and methods of aggregation and calculation of indicators.

A rather large part of non-professional users gives preference to receiving the materials of analysis and interpretation of survey results.

The public at large (interested citizens) require very diverse but not much detailed statistical information. Students are interested also in various statistical domains; they wish more detailed information.

Obviously non-professional users as well as other users require qualitative and timely statistical information.

The non-professional users don't need so detailed metadata as professional users. For example, if NSIs disseminate consumer price index (CPI) to professional users, they present detailed metadata, such as the number of districts and trade and services outlets, in which are recorded prices and tariffs for the basket of goods and services, the number of goods and services in the CPI basket, the total number of prices recorded per month, the sources of weights, the base period for CPI as well as for prices. "For the non-professional user a more general description can be given with some indications on the interpretation, which can be done with examples" [2, p. 24].

It should be mentioned that the public at large is not a homogeneous group. Therefore the user survey often doesn't give a more or less precise information on the interested citizens' requirements to the statistical information.

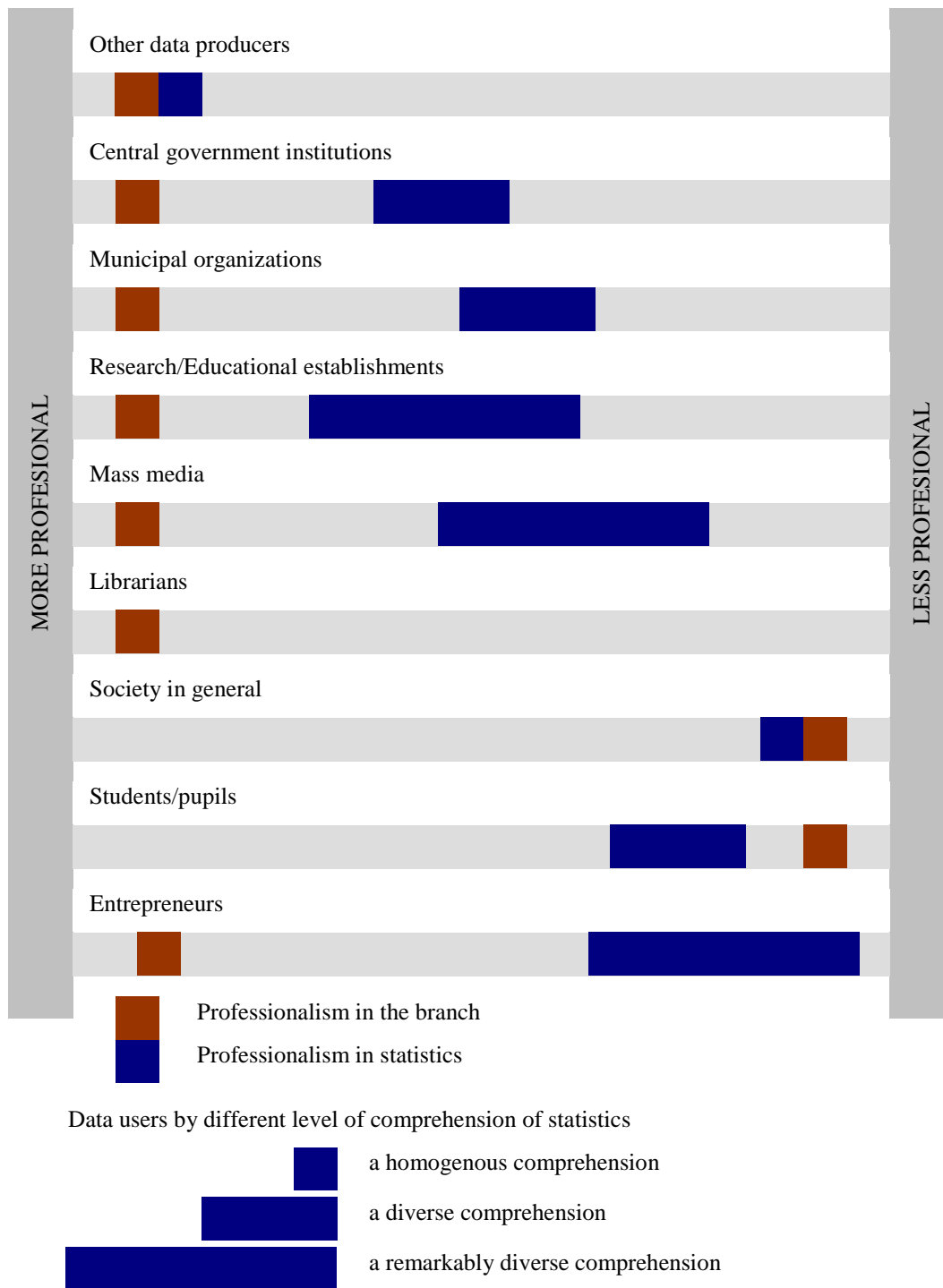
We fully agree to the words of Inge Feldbaek, a specialist of Statistics Denmark:

"Statistics are difficult to understand. Statisticians must accept the burden of making them understandable to the general public, because we depend on the general public, and because we have an obligation to share with them our knowledge of the state of society" [5, p. 63]. We, statisticians should "give the users what they want from us rather than what we want to give them" [5, p. 63].

NSIs in their data dissemination policy should foresee products and solutions for each group of data users.

Data users can be characterised depending on the level of professionalism and this is reflected in Figure 1.

**Figure 1 – Evaluation of professionalism of users of statistical information**



Each data user in the most of cases is a professional in some branch but turning to the professionalism in using and comprehension of statistical data the situation is not so homogeneous. NSIs try to solve the mentioned problem by offering specific products orientated to a certain group of data users in accordance with the level of their professionalism. NSIs in their data dissemination policy should foresee products and solutions for each group of data users.

The central government institutions is a significant group of statistical data users, they mainly use data for the analysis of the economic situation in different sectors of the national economy, for working out development plans, for monitoring of their execution, for making prognosis etc.

Municipal organisations mainly use statistical data for the evaluation of the territorial development and working out development plans. In order to obtain more information on the territorial changes in separate cases they establish also their own statistical services.

These above-mentioned groups of data users can be considered as traditional customers of statistical products and main data users.

Nowadays there is an increasing number of data user groups offering mediation services other users, providing assistance in their choice of information and helping to evaluate the existing phenomena and processes. This group includes people employed in research/education institutions, mass media, libraries/information centres. It should be remarked that NSIs are active in offering services of information centres, publishing analysis on the existing socio-economic processes. The society in general that receives statistical information but some exceptions with the help of the above-mentioned group offering mediation services is numerically the largest group of data users.

The next groups of data users that receive information of their interest from all above-mentioned data sources are:

- students/pupils – predominantly use the statistical information for the educational process needs;
- occasional data users – the statistical information is necessary for carrying out a legal or organisational process.

#### **3.1.4 Presentation of statistics – key to success**

The general public's curiosity about statistical data of different themes without being necessarily connected directly to these areas of human knowledge and statistical data production itself has already changed the presentation of statistics. This we can clearly observe when comparing two publications – one from 1991 and one published last year:

	Gadi	turpinājums		
		Ra- 20% 1991	Ievē- dums 1991	Izlie- tots Latvijā
Vēlmesības sa- taises, tūkst. t	1989	-	192	192
	1990	-	262	262
	1991	-	43	43
Ģimeņu sadzīves sakarības, tūkst. t	1989	-	4.6	4.6
	1990	-	11.7	11.7
	1991	-	3.6	3.6
Pirmās mācības sākuma, tūkst. t	1989	-	360	360
	1990	-	300	300
	1991	-	192	192
Obšervācija alumi- nija, tūkst. t	1989	-	12.1	12.1
	1990	-	9.8	9.8
	1991	-	4.9	4.9
Cinka, tūkst. t	1989	-	11.8	11.8
	1990	-	4.2	4.2
	1991	-	3.3	3.3
Alumīnija vēlmē- jumi, tūkst. t	1989	-	16.4	16.4
	1990	-	16.1	16.1
	1991	-	8.4	8.4
Vara vēlmējumi, t	1989	-	1906	1906
	1990	-	1188	1188
	1991	-	1864	1864
Misijas vēlmējumi, t	1989	-	4480	4480
	1990	-	1959	1959
	1991	-	3253	3253
Bronzas vēlmējumi, t	1989	-	308	308
	1990	-	295	295
	1991	-	315	315
Kautiskā soda (100%), tūkst. t	1989	-	8.0	8.0
	1990	-	6.1	6.1
	1991	-	6.7	6.7
Kalcinētā soda (100%), tūkst. t	1989	-	21.8	21.8
	1990	-	23.9	23.9
	1991	-	-	-
Minerālūdeņģu (nātrija) 100% barības vielu sa- turā, tūkst. t	1989	188	35.1	74
	1990	180	20.7	73
	1991	134	-	37.7

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The first one consists solely of tables while the other has a balance of three elements: the text, tables and graphs.

Nowadays we believe that tables on their own may not be useful in publications intended for non-professional data users as in this case the demand for abstraction and systematisation is greater than a lay reader possesses. The use of explanatory texts and graphs complementing statistical tables is legitimate in any publication that provides some type of information regarding socio-economic phenomena but it is almost obligatory when communicating statistics to the public at large.

Statisticians have understood that visual presentation through graphs and maps is an advancement in search for a qualitative statistical communication helping to comprehend complex or systemising missives of data.

No one, I presume, would object the thesis that a short analysis of the data concerned and the use of graphs or maps improves the possibility to pass on to the reader a message and digestible information making the meaning of the data clearer since the text and image brings to the front something that not always may be perceived by the non-professional data users.

Nevertheless, this awareness alone is not a guarantee of a communicative statistical presentation. The success in balancing the text, tables and visualisation of statistical data depends on several factors such as statistician's

- 1) understanding for non-professional data users' needs for information that is vivid, memorable, easy to read and comprehend, and immediately conveying message,
- 2) creativity to render the solutions that addresses the users' needs working together with the graphical designers,
- 3) and at last but not least, the ability to avoid any distortions to the data and the possible diverse conclusions that can be drawn from it.

As to the creativity, it is quite evident that one does not hope that the same professional may compile and analyse statistics and also produce its illustration using all skills of a graphical designer and the esthetical talent of an artist, but it seems to be clear to us that it is a new statisticians' responsibility to correctly indicate what may or may not become a graphic in this way insuring that the text, table and graphs are balanced. The content of a publication should be thought through with the perspective of users in mind.

Regarding the duty of an official statistical source to render to the public an accurate, undistorted, neutral report on the state of affairs, makes all the above mentioned challenges much more difficult to achieve.

Nevertheless, an effective teamwork of statisticians and graphical designers and the creative work can produce results that would meet both objectives.

### **3.1.5 The CSB focusing on inexperienced data users**

The data dissemination practise of the Central Statistical Bureau of Latvia includes different communication channels but this time I will speak about those that are orientated to non-professional data users.

- Focusing on mass media. Knowing that mass media is a special group of data users regarding both the need for information and the term of preparing data, the CSB of Latvia pays special attention just to preparing information for mass media thus ensuring the correct perception of information by journalists and further undistorted delivery to the society. Contacts with representatives of mass media and preparing of information are co-ordinated by the press secretary. The CSB regional Information Centres in co-operation with regional press have published series of educational quizzes for the newspaper readers, which I can proudly mention as a successful tool to teach new users how to evaluate and analyse statistical data.



- Focusing on users in regions. Since 2005 the CSB has an Information Centre in each region aiming to provide data and service that is fit to the needs of regional users. Taking into account that data users often do not have a proper knowledge of statistics and information about statistical indicators, the employees of the Information Centre act like interpreters between non-professional data users and the world of statistical indicators. Employees at the regional Information Centres are also competent in the choice of information offered by other institutions (Bank of Latvia, Ministry of Finance, Population Register, Eurostat) [6].
- Focusing on educational establishments. The CSB of Latvia offers for higher educational establishments two ways of co-operation:
  - Lectures on obtaining of the statistical information;
  - To obtain for free usage anonymised survey micro-data files of persons thus promoting education of the potential professional data users.

Co-operation with educational establishments at regional level has also been fruitful giving possibility to directly address future statistical data users. As the best examples I would like to mention conducting of some geography lessons, participation in the project work weeks by offering themes for project works and assisting in obtaining data, and organisation of seminars for geography teachers.

- Focusing on governmental institutions. In order to facilitate accurate use of statistical information in the materials prepared by the central government institutions, the CSB offers a wide range of special services free of charge and this includes: statistical publications, tailor made data sets for *ad hoc* requests, verification and proof reading of statistical data included in the documents drafted by governmental institutions. Practice shows that employees of the governmental institutions have remarkably diverse knowledge of the statistical processes therefore in some cases the assistance provided by the CSB is crucial to the accurate interpretation of the data.
- Focusing on municipalities. Obtaining of regional statistics on the one hand is connected with the will of municipalities to obtain impartial statistical data on their administrative territory and on the other hand with costs of data obtaining and respondents' burden. Balancing of these two opposite poles is a painful question for every NSI. It should be mentioned that the experiences and knowledge of municipalities in using statistical information differ a lot. In the case of Latvia it depends on the size of a municipality – the greater is the municipality,

the greater is the administrative apparatus that allows specialising in managing special functions. Thinking about the municipality needs for the statistical information the CSB established regional information centres, one of the tasks of which is to meet the municipality needs for statistical information by acting as a mediator between the municipality and the statistical data sources.

- Focusing on enterprises. Employers are both data users and data providers. It should be mentioned that provision of employers with statistical information at the same time promotes the increase of the response rate. The CSB implements the following solutions in the co-operation with employers:
  - Results of the analysis of enterprise financial activities (in a popular language - ratings) – the CSB informs every enterprise about its place within the branch. This on the one hand helps to evaluate the progress of the entrepreneurship and on the other hand popularises the use of statistics among new data users.
  - Tailor made data sets – rather often data users don't want to search for information themselves as they do not possess the knowledge or resources for this and choose services of tailor made data sets. Contact persons at the tailor made service plays the important role of an interpreter and teacher making the information request understandable for the subject unit statisticians and explaining entrepreneurs the statistical compilation methods in simple terms.

### **3.1.6 Conclusions**

The statistical data become a hot issue for debate in society at large when the data published reflect extremes: obviously positive or obviously negative trends. The changes of consumer prices upon the accession to the European Union is an example still in the headlines of the newspapers. And statistical data credibility is often questioned due to difference in official consumer prices data and inflation level personally experienced.

Not always at such periods of sudden increased interest in statistical data general public is prepared to understand this flow of information and decisions made can be erroneous. A recent example in Latvian retail market was a “salt buying boom” that moved all the salt stocks from the shops and wholesale storehouses directly into the household premises. This event that has secured many Latvian families with salt for many years without any real reasons behind it but was connected to “EU accession fever”.

As non-professional data users in most cases get information via mediators then in order to draw their attention the published indicators should have some "hook" to catch the data users and help them getting acquainted with statistics everyday. We should not wait until a big hook like the EU accession or other similar socio-economic phenomena appears to drag the statistics into the spotlight of mass media which often leads to hysterical reaction of the unprepared public, wrong conclusions and the credit of NSI can only suffer from this.

In order to raise in the society the level of knowledge about statistics – the most important indicators, methods of calculating them, it is important to involve statistics in the whole study process. NSIs of several countries have already made a step in this direction by preparing teaching materials. The resources of NSIs are not sufficient and adequate to go this way alone – it is necessary to co-operate with other governmental institutions, and the result depends on the participation of all parties.

Being aware of the high number of data users that can be labelled as non-professional statistical data users there is an unavoidable necessity to present statistical data appropriately for the general public. The style of presenting statistical information should be orientated to a specific group of data users: entrepreneurs, students, politicians and others. I would like to finish this idea with the words of Mr Svein Longva: “Every possibility for improving the dialogue between the ESS, the users and the respondents must be exploited” [8, p. 14].

To sum up, I would like to say that it is only during the last decades that NSI have made steps to address the needs of non-professional data users, and there is a lot of things to learn for both sides: statisticians and statistical data users. Statisticians should further learn about non-professional data user needs while general public cannot avoid learning more about statistics.

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## 3.2 After “Free Dissemination”, an integrated communication strategy

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After a brief presentation on the initial success stories arising from the decision to make all of Eurostat’s non-confidential data available free of charge on its website, this address will set out the stages involved in the new integrated communication strategy which is being developed: its objectives, priorities, principles for action, etc. Lastly, three examples will be given of how this strategy is to be implemented: the rules for disseminating news releases, the policy for helping certain user groups and a new cooperation policy between European Statistical System websites.

### 3.2.1 The success of “Free Dissemination”

On 1 October 2004 Eurostat made all its (non-confidential) data **available free of charge on its website**, including, in particular, the “NewCronos” database, which gives users more than 4 500 different possibilities to produce multidimensional tables (detailed classification, time series, etc.) as well as detailed external trade and industrial production (Prodcom) data. What is more, all Eurostat publications may be downloaded free of charge.

This decision, which was taken at the beginning of 2004 by Michel Vanden Abeele, led to a great deal of work for Eurostat staff, both on the information technology side (to ensure that the system could deal with greatly increasing demand without the response time suffering) and for the thematic units (to provide the metadata and documentation needed for proper data use).

Four months on, an initial evaluation revealed the success of this decision:

- The number of users of Eurostat’s website **increased five-fold** between September 2004 (150 000) and January 2005 (790 000). The weekly growth rate was in the order of 3 %. The number of extracts from the “NewCronos” database also increased five-fold during the same period, reaching almost 145 000 in January 2005. In particular, downloads at weekends have increased by a factor of 10. The number of downloads of electronic products (PDF) increased more than four-fold between September 2004 and January 2005 (340 000). Extracts from the Comext database (external trade and industrial production) also increased eight-fold.

- In January 2005, the site was accessible 99.5 % of the time, while the NewCronos and Comext databases were accessible 100 % of the time. Around 90 % of download requests were satisfied within five seconds.
- On the other hand, sales of publications seem to have been strongly affected, and have **decreased by a factor of two** (3 800 copies sold in Q4 2004 plus January 2005 against 7 500 in the same period of the previous year).

The Eurostat website is constantly developing, in terms both of IT architecture and ease of access (a new home page is already available), thus allowing us to launch a real promotion campaign for the site.

### 3.2.2 An integrated communication strategy

The major step of making Eurostat's statistical information available free of charge has resulted in great changes to the entire dissemination process (particularly paper publications) and has prompted the management committee to give more wide-ranging consideration to the office's communication strategy. The wish to progress from the simple idea of disseminating (or making available) information to thinking about how it can be communicated is immediately clear. This must involve, on the one hand, recognition of the differences between target groups and users – whose specific needs must be taken into account and for whom messages must be specially tailored – and, on the other hand, Eurostat's wish to become more well-known and improve its image.

At the current (provisional) stage of the consideration process, some initial objectives, priorities and principles for action have been identified.

#### 3.2.2.1 *Three objectives*

- To be the **first-choice source** for European statistical data.

Of course, this objective reflects our mission, but the fact remains that it is not always achieved in some areas where users tend to consult other sites which are better presented, easier to use, or which they are in the habit of using.

- To increase our **level of service** to users, maximise the exposure of our data in general and provide better service to our main users with a public service approach favouring access free of charge.

With this second objective, we aim to balance the levels of priority given to different users (see below) and continue in the direction already taken under “Free Dissemination”.

- To accompany our figures, as far as possible, with **clear and objective comments**.

With this objective, we aim to encourage the use of our data by the wider public.

We should also remember that any communication strategy depends crucially on the **quality of data** available and that the best possible communication strategy would not make up for shortcomings in this fundamental area. However, the quality and relevance of European statistics is the subject of a more general objective above and beyond the communication strategy.

#### *3.2.2.2 Target groups, the media and intermediaries*

So as to try to put in place an integrated communication policy often marked by different types of audience (or target groups) and media (or information carriers), we thought it useful to start from a table cross-referencing precisely these two groups.

Bearing in mind the essential role played by **intermediaries** (journalists, websites, NSIs and commercial redistribution companies), we have included them among both the target groups and the media. The other media (publications, websites) have been broken down into different categories according to their ease of access for the wider public. You will note the particular presence among the target groups of the Community institutions, which are Eurostat’s most important partners.

**TARGET GROUPS AND MEDIA**  
**FOR A DISSEMINATION/COMMUNICATION POLICY**

TARGET GROUPS		MEDIA									
		Intermediaries			Eurostat publications			Eurostat website		Direct contacts	Promotion tools (SIGMA, lists, etc.)
		Journalists	Websites -NSIs	Redistri-butors	Press SIF	Pocket Books	Panorama, DVD	Home page, Summaries	New Cronos		
Intermediaries	Journalists				×	×		×		×	
	Websites-NSIs					×	×	×	×	×	
	Redistributors								×		
General public		×	×					×			
Students, teachers		×	×			×	×	×	×		
Researchers Analysts			×	×		×	×	×	×	×	×
Companies (professional associations)		×	×	×		×	×	×	×		×
European Commission		×			×	×		×	×	×	×
Other European Institutions		×						×		×	
International organisations (incl. ECB)							×		×	×	×



On the basis of the close interactions shown in this table and the objectives set out earlier, it seemed to us that the **target groups** to concentrate on (in order of priority) should be as follows:

- The general public (including students) and journalists (as an intermediary for the general public).
- The European Commission (to contribute to its proposals for Community policies) and the other European institutions (particularly the ECB).
- Lastly, the wider community of researchers, governmental analysts, professional associations and international institutions.

Logically, the following are included among the **media**:

- Eurostat's website (particularly its home page and summaries).
- Short publications (SIF and Pocket Books) and direct contacts.
- Websites of the NSIs (as an intermediary for Community information).
- Lastly, promotional tools (SIGMA, lists of special contacts, etc.).

Does this mean that these priorities must be strictly applied to the actions carried out and to the human and financial resources committed? Is it really possible not to answer a request from a Commissioner's cabinet on the pretext of making the website more user-friendly for students? Certainly not, and the priorities set out above should be understood as entailing preferential, but not exclusive, allocation of resources hand-in-hand with individual treatment of specific cases.

### *3.2.2.3 Principles for action*

Before providing a list of concrete actions, a number of important principles for action should be mentioned:

- The dissemination of statistics must be an integral part of the work of the units which produce statistics.

Although this principle sometimes appears self-evident, we feel it is very important to reiterate it.

- Eurostat must put in place a **system for monitoring** the levels of use and satisfaction of the various user groups.

Currently, this is far from being the case, even though important progress can be expected through intelligent use of the website.

- Efforts must be agreed on for **keeping pace with the current situation** (in political, economic and social terms).
- The **website** must be the main dissemination/communication tool.
- The system of (paper) **publications** should develop in such a way as to increase the relative importance of simple publications dealing with data selected for their broad interest (i.e. which would potentially be of interest to a wide public).
- An active policy for **“training”** our users must be put in place.
- This integrated communication policy should be **followed up** on three levels (new projects to be proposed and evaluated by a group of rank-and-file officials, actions to be managed and followed up by a management-level group, decisions to be taken by the management committee).

At this stage, the overall set of implementation measures for this new communication policy is far from being fully formulated. Nevertheless, for the purposes of this address, we felt it was important to give three examples – which have reached different stages of planning and realisation – of how this strategy is to be implemented.

### **3.2.3 Three examples of the implementation of this strategy**

#### *3.2.3.1 Clear rules for disseminating news releases*

Like many other statistical offices, Eurostat has precise rules (which can be consulted by the public) for the dissemination of its news releases.

Each year, Eurostat publishes around 150 news releases in three languages (English, French and German), which are embargoed until 11.00 CET. These news releases concern two types of statistics: Euro-Indicators (short-term statistics concerning inflation, unemployment, industrial production, etc.) and other statistics covered by different, more in-depth forms of publication (SIF, Panorama), in relation to which, news releases aim to facilitate journalists’ summarising work by emphasising particularly newsworthy aspects.

Every Friday morning at 11.00, the Eurostat press office releases the **publication schedule for Euro-Indicators** for the following week to around one thousand journalists as well as the press

offices of the NSIs. On Friday afternoons, the publication schedule for the other news releases for the following week is available only internally (and not to journalists), as it is not always definitive.

The three language versions of news releases are disseminated **under embargo**:

- On the evening before publication (between 18.30 and 19.00) to the Commissioner's spokesperson, for information and to enable him/her to prepare possible answers to journalists' questions at the press conference.
- On the publication day at 10.00 to accredited press agencies in Brussels (only for Euro-Indicators), the Commissioner and the press offices of the NSIs.

Finally, their general dissemination at 11.00 (in particular on the Eurostat website) enables interested journalists to ask questions during the daily 12.00 press conference which takes place in the Brussels press room.

However, on the evening before their publication, and under embargo, Eurostat sends DG ECFIN the European statistics on the quarterly changes in GDP, because, on the same day, DG ECFIN publishes its growth forecasts for the subsequent two quarters. However, no national data are sent. Similarly, under certain circumstances, news releases on specific areas are disseminated under embargo to the Commission Directorates-General concerned.

With regard to data concerning debt and public deficits, when a reservation is expressed about a Member State, the State in question and the President of the Economic and Financial Affairs Council are informed two working days before publication, in accordance with the code of best practice adopted by Ecofin on 18 February 2003.

A presentation on these rules to the Statistical Programme Committee, and the discussion which followed, revealed that the 10.00 **embargo risked being broken** (with potentially serious consequences for the financial markets) as some Member States managed to get around it by "sealing" journalists in a room without the possibility of communicating with the outside world during the embargo, but nevertheless giving them the opportunity to prepare their reports.

### *3.2.3.2 A policy for helping certain user groups*

Ever-increasing internet access on the one hand, and the policy of free dissemination on the other, have greatly changed Eurostat's approach to its users, an approach previously characterised by the "datashops" system.

Thus, the help currently provided to **users** no longer involves directly giving them the data which they are looking for, but rather gives them the **independence** to help themselves to the data made available to them (free of charge and in a flexible format). So as to do this, Eurostat, together with the NSIs, has organised a basic support network through a system of grants covering between 15 and 20 persons per year in the NSIs (and two or three per year at Eurostat). Help from Eurostat's production units is also possible when requests are too specialised or complex.

This general policy, which takes account of new means of communication and has led to increased productivity, does not completely deal with certain user groups which Eurostat's integrated communication policy aims to favour.

I am referring specifically to **journalists**, given their role as information intermediaries through the press and the audiovisual media, and **officials of the European institutions**, given the high priority assigned to them in the list of target groups set out above.

In 2004, therefore, two "media support" officials in Eurostat replied to almost 1 640 questions from journalists and two others responsible for "institutional support" were consulted almost 1 150 times, without counting replies given by the thematic units. While it is true that the increased level of free dissemination might reduce the number of such requests, we believe the proportional reduction will be limited.

On the other hand, the priority given to the other favoured users listed above (NGOs, international organisations, local governments, commercial redistributors) has been greatly reduced. However, for these users, a very high level of downloads has been made possible within the framework of "free dissemination".

In the longer term, the question arises as to whether this policy of helping users should be extended to other user groups in accordance with available resources (which will possibly be freed up as internet use increases). Perhaps we should turn our attention to the more specific needs of **universities (students and teachers)** over and above the information available online. Given that they are our future professional users, it would be useful to train them to the best possible degree.

#### *3.2.3.3 A new policy of cooperation between ESS websites*

Given the priority assigned by Eurostat and many NSIs to internet-based dissemination, and the policy of "intermediaries" which Eurostat wishes to follow, better coordination of the websites of European Statistical System members is essential. What is more, our users have the right to expect easy and coordinated access to the various different national and European statistics.

While it is true that, at present, there are various links between websites (including, on occasion, direct access to Eurostat databases), the situation remains varied and disorganised.

A number of proposals for increased cooperation have been made within the “dissemination” group organised by Eurostat, which brings together the various Member States. Particular emphasis has been given to flexibility. It has been stressed, therefore, that this cooperation should take place on a voluntary, low-cost basis, with each country progressing at its own pace and aiming for quick and noticeable results (for users).

At this stage, the following four courses of action have been chosen:

- Displaying the **ESS news** on the different sites.

On the basis of some common general rules, each statistical office can make available to everyone a series of “in-brief” news items, which can be taken by other offices and put on their own sites.

- Common news release schedule.

On the basis of a common structure and presentation method, it is proposed that users be able to access the news release schedules of the various offices (including Eurostat) as well as a common schedule (in English). Direct access to the various news releases themselves must also be possible. However, this initiative must be coordinated with a similar IMF project for disseminating certain economic and financial data.

- Sharing reference statistical tables.

A number of national offices already refer to European (or even international) data when disseminating their national data. However, a certain degree of harmonisation is still desirable.

This could be done by starting from a subset of between 100 and 200 reference table chosen from the 1 000 basic (so-called “predefined”) tables already published by Eurostat on its website. Each NSI involved would be responsible for translating the headings and methodological references and for the link to their own national data, which could be more complete and detailed.

- Common “**key words**” system.

Access to data on different websites and user searches are made much easier by having an index of key words. A relatively short list of these key words in the area of statistics, containing about 1 500 words, seems the most efficient way (for users) and the cheapest way (in terms of preparing the index).

Here again, a certain degree of harmonisation between statistical bodies could help users. Thus, it is proposed to prepare this common list of some 1 500 statistical key words, while leaving open the possibility of including a limited number of complementary national terms.

## 3.3 Official statistics – can they be used more efficiently?

Gunnar SAHLIN  
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Official statistics as a resource should be put to far greater use than is the case today. Professional users are more prone to facilitate official statistics in their assignments than the non-professional user; to the detriment of the latter category. By increasing the application of official statistics a surplus value is created, eventually leading to an improved usage of society's resources and its growth rate. Official statistics assures its worth when related to information extracted from individual organisations and used in comparative and planning estimates with the aim of improving our daily tasks. A problem nevertheless is due to the fact that official statistics are often founded on extensive series and the various statistical areas are seldom adapted to current requirements. No doubt, statistical institutions and other mediators of statistical information can contribute to an increased usage by supplying the user with analysis and commentary. Consumers and producers need to share responsibility to stimulate improved usage of these resources. Both parties surely stand to benefit from such collaboration.

### **Official statistics are, to a certain extent, unexplored territory for "non-professional users"**

This paper considers that the field of official statistics is, to a great extent, unexplored territory. As an individual citizen participating in public bodies or working in the public or private sector, I generally have nothing to do with them. I rarely take a statistical yearbook down from the bookshelf and it is easy to count the number of times I look for statistical information on the web. Why this should be so is not the subject of this paper, and there may well already be some treatise in the field of psychological statistics which deals with the matter. If not, it is a topic which should arouse some interest. Society invests heavily in compiling official statistics and this activity is not just an end in itself – the value added is only obtained when the basic data are compared or processed in some other way.

I basically think that official statistics constitute a resource which should be exploited more intensively than is currently the case. These statistics can provide value added which, when coupled with information obtained from within an organisation, is indispensable for planning purposes and for drawing comparisons. My experience is, admittedly, limited to those sectors in which I am, and

have been, involved nationally, although from the international contacts I have made it would not appear that the situation is any different in other European countries.

I am not saying that nobody uses official statistics. The example given above describes the use of official statistics by the “non-professional user” – or perhaps I should say prospective user. “Professional users” make extensive use of basic official statistical data. As a non-professional user, one comes into frequent contact with statistics, but only indirectly after the data have been studied and processed by the so-called “professional users”. Both in our working lives and as individual citizens, the statistics then reach us via promotional material, media or other channels. Economic journalists keep a close eye on statistical data relating to economic trends, GDP, growth, unemployment etc., and report upon them. Politicians and their officials make use of statistics for their own purposes. Academics use the material for their research projects. This information is also sometimes passed on to us, not least when we need to focus on some research area which requires more resources. Official statistics are also, of course, used in education. Other actors who appreciate the value of statistics are those who order data directly from the statistical authorities for subsequent use in their own organisations or for further distribution.

As someone responsible for a government body, I obtain statistical information when a common problem has to be solved and general measures need to be taken. This can relate to sick leave, unemployment measures, etc. In this case, the statistics have been processed by the professional users and the data are of a general nature. The data can be used for comparisons with our own data and can lead to measures being taken in our own field. The main purpose is not then the development of our own activities, but to gain an overview and, in this case, perhaps to develop measures for the whole public sector.

The problem is not therefore that nobody is using official statistics. My point of view is rather that they should be more extensively used by those of us who have no tradition of using official statistics. In doing so, this could create value added leading to the better use of society’s resources and thus contributing towards growth. The statistics produced by each individual organisation have a life of their own or can, at best, be linked to and compared with those from similar organisations through benchmarking. It should be possible to increase the value of an individual organisation’s statistics by coordinating them with official statistics.

The better use of official statistics can also help satisfy my curiosity as a citizen. As an individual citizen I can find out how common a name my newborn grandchild has been given. I just go directly to the statistical website rather than receive the information via the media. It may well be



the case that we are spoon-fed so much data by the media, brochures and other channels that we quite simply cannot manage, or have no need, to go directly to the source to find interesting facts. When I browse through a statistical office website I am struck by how much interesting information is available, whether it be useful or not. Statistics are essential in telling the story of our lives, whether we are talking about the number of cars per capita, living area per family, or students going on to university.

Statistics are a key source when planning for the future, as is clearly understood by professional users, e.g. certain authorities and companies which are in the habit of using statistical data and depend upon them for planning their activities.

Statistical authorities do not therefore feature on my list. The responsibility for not making more use of these statistics lies primarily with me as a non-professional user who should recognise their potential and appreciate the value of using statistics. But there is also a responsibility on statistical authorities to make their valuable data stand out from the abundance of information which characterises our current knowledge-based society. This is an exciting challenge. By making proper use of the official statistics available, it should be possible to make better use of the resources offered by society and different organisations. There is, however, an in-built problem in this, insofar as official statistics are generally based on long series and the different fields of statistics are often not adapted to current requirements.

### **What requirements do I as a “non-professional user” have of official statistics?**

In my own field of activity, the statistical data used is almost entirely that produced by the organisation itself. There are, however, areas of my own activity which could be developed with the aid of other statistics, above all by combining internal information and statistics with public statistics. This could provide opportunities for improving day-to-day activities and creating a better basis for decision-making.

It is admittedly already the case that our own statistics are, to some extent, combined with official statistics. One example of this is that our own statistics on absences due to illness can be compared to the general statistics and thus provide the basis upon which measures are taken.

My organisation’s crucial statistical requirements become evident from annual financial reports and reflect normal information requirements. Statistics are also needed in the area of budgetary planning; financial figures, the number of employees, absences due to illness, etc. Statistics are also

needed to clarify and provide information to responsible authorities, not just to explain developments but also to influence decisions.

The statistics produced within the organisation itself also form part of a culture of quality, providing key figures, benchmarking and performance indicators. Quality requires statistics compiled by the organisation itself. I feel, however, that valuable and relevant information can be obtained from other sources and this could provide a broader basis for ensuring quality.

In the libraries sector, individual libraries supply information which then forms part of official national and international statistics. Within the libraries sector, these figures – the number of visitors, books loaned, books purchased, turnover as a percentage of the whole organisation's turnover, etc.– are used as comparative data to identify trends and problems and, of course, to influence the responsible authorities. We can certainly say that we are thus making full use of official statistics, even if we have supplied the data ourselves. My point, however, is that we do not forge close enough links between the data from our own sector and other official statistics from outside the sector.

One area in which better use could be made of official statistics is the field of prospective analysis. Web services are well developed in the libraries sector, for both information and communication purposes. In 2003, for example, as much electronic full text material was downloaded by research libraries as was lent in the form of printed matter. When planning the future development of library web services, official statistics on the number of PCs per household, Internet use etc. could be crucial.

Key decisions on investment are currently being taken, particularly in the field of IT, and these involve significant costs which can be a burden on operations over a good number of years. They also, however, involve technical and labour-related choices which influence the organisation's ability to perform various tasks. The organisation conducts comprehensive in-house statistical processing tailored to specific requirements, but how often does it open its eyes to the world outside its own sector and make use of the statistical information available? There is always a degree of uncertainty involved in taking major future investment decisions, but a better basis for taking these decisions can be created if a broader range of statistical material is used.

Our inflow of information and ideas is often restricted to the sector in which we operate. At the same time, modern society is becoming more and more complex and investment decisions in one area also have an impact on other sections of society. We need to be even more active within the

networks we are building between different sectors, not least in the field of statistics. In this context, taking advantage of statistical information from other fields can provide one's own organisation with a solid foundation for planning future developments and taking direct decisions.

### **How can official statistics attract more “non-professional users”?**

Official statistics are currently available for use, even for those of us who are not habitual users of statistics – the so-called “non-professional users”. How do we find out what information is available? What is the demand or desire for these data? How do we stimulate interest in this information? How do we come up with ideas about how the statistical information can be used and how do we reach out to non-professional users? These users do of course have the same opportunities as professional users and can click on to the main statistical websites. But, as far as I am concerned, there are still far too few who take advantage of this opportunity. Despite the abundance of statistics available, official statistics remain, for many of us, a vastly under-utilised resource.

People do of course know that there are interesting and useful statistics out there, but they rarely think of the possibilities they offer, and, as I said before, these rarely appear on anybody's wish list. How can the contact between data producers and non-professional users of statistical information be improved?

It is necessary to find ways of drawing the attention of citizens and institutions to suitable applications for official statistics. Despite the fact that IT obviously opens up new opportunities for the dissemination of information, several years have now gone by without any noteworthy progress being made.

The aim is to bring together producers and consumers. Everybody should be able to combine their statistical requirements – and clearly not just those of the professional users – with the statistics available on statistical office websites. As the director of a library, I can envisage libraries becoming more and more important as information hubs in our knowledge-based society. How can libraries be used in this context to disseminate statistics to non-professional users? This is a task which we who are active in the sector need to reflect upon. The statistical institutes can certainly play their part in ensuring that statistics are used more widely by helping out with analyses and comments, but there are undoubtedly other actors too who could play a role in the transmission of statistical information in the same way as intermediaries in many other sectors of society. First and foremost, however, it is the responsibility of both, the prospective users, and the producers of

official statistics to ensure that better use is made of this resource. Both parties would certainly benefit from such an approach.

# Theme 3 - Non-professional user requirements of statistical dissemination - Some comments

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Our users are a very different lot and so are their needs; they change over time and from situation to another. They are dynamic, not static. If we do not keep this in mind we will soon become very outdated. The non-professional users are extremely varied and are the group that requires the most varied solutions in communication. They are unlikely to have a great deal of knowledge about our data sources, the limitations of the data, the classifications we use and the reasons behind them nor the strengths and the weaknesses of the methodology applied. Communicating with them requires a special skill or aptitude which is normally not a part of the training of official statisticians.

Switching to internet based dissemination and communication policy is crucial. The internet allows us to communicate with our users at different levels. This applies to all our material, the statistics, the metadata, guides for the users and the textual and graphic explanations or analysis we may offer. The correct approach is to proceed from the simple to the complex. The internet is the preferred medium by the users. Many users are more comfortable with the internet than with paper publications, it is the quickest way of obtaining information, not least from different sources, and internet information is up-to-date and can be downloaded very easily.

The internet is an extremely flexible tool. The lead-time for internet publication is very short. It can be developed easily and makes it possible to offer personalized services. It allows us to expand our dissemination without major additional cost and to present our information at different platforms which is important for satisfying the demand of our most demanding users – the non-professionals.

The switch to internet based dissemination is likely to release resources. Against this, it is important to allocate resources to develop our website on a continuous basis, seeking new solutions which make the use of the website easier, quicker and more interesting for the user. For this, we might solicit the help of professional communication people. We need also to gauge the quality of the website on a regular basis and conduct user satisfaction surveys.

It is of paramount importance neither to sit back passively nor only to react to chance observation but to be proactive ensuring that we are ourselves in command of the development.

## **Introduction**

First of all, let me thank the three authors, Michel Glaude, Gunnar Sahlin and Aija Zigure, for the thought-provoking papers with which they have provided us for discussion in this session. The papers are quite varied in the subjects they tackle as well as in their scope and fittingly touch upon several aspects of our theme this afternoon.

The structure of our conference and the choice of topics involve both a certain amount of assertions and assumptions about the subject for discussion. This is not surprising nor is it a negative thing; on the contrary it shows that we are approaching the subject from a common and well known ground. In other words, this is basically a sign of the strength and the coordination of the European statistical system and its individual elements, the national statistical institutes.

The main heading of our conference of leaders of NSI's, the challenge of communicating statistics, is quite loaded. It asserts that to communicate statistics is no simple matter but a real challenge. It assumes that it is the role of the NSI's to communicate the statistics and hence that they have to respond to the challenge. This may sound trivial but that is not the case as I will return to later; for the moment it is sufficient to point out that we have in the not so distant past been quite occupied with discussing how to assign properly the different roles or functions of the statistical process to different players on the stage.

Another assertion of our conference is that the challenge of communicating statistics is a manifold one as it is seen to apply differently to different users. Again, this indicates how uniformly we have come to treat the subject; based on our experience and on our concourse we have deemed fit to distinguish between specific groups of users and to acknowledge that they have different needs which require different approaches and solutions.

## **Categorizing the users**

The programme of our conference is mainly structured in accordance with the conventional break-down of the different user groups. I have no quarrel with it as such; it is a reflection of the way in which we the NSI people have been thinking about our users, categorizing them and even labelling them. But it is tempting to stop right here and reflect a little on this break-down; is it the correct one in this day and age, is it helpful or is it perhaps out of date and misleading? Are the users or the user

groups static phenomena? On the contrary; they evolve with changes in the technology of communication and rising level of computer and media skills and develop alongside with the development of the communication policies and practices of the NSI's. In other words; our categorizations are conventionally static but we should be careful and think of our users in more dynamic terms.

I do not intend to discuss our categorizations in detail nor suggest that we alter them. But I think it may be useful to keep well in mind that the users are dynamic - as is the world we live in and hopefully our statistics as well – and that has a direct bearing on our communication strategies. This leads me to a few observations:

- First, the categories are not constant but evolving; what we observe and define as a specific category today may not be the same as yesterday and may not hold constant until tomorrow.
- Second, there will be a lot of dynamism within the categories. The degree of skills and capacity of the users to utilize our data is constantly developing and their degree of self-sufficiency or helplessness, which our information units deal with every day, is changing as well, mainly depending on how well or badly their abilities and technical equipment keep up with changes in technology.
- Third, each user may appear in more than one category depending on his or her interest and task at any given time. The user may be a researcher in one situation but a non-professional user in another, or in other words, he may appear as two users depending on the situation.
- Forth, within each group or category, there are many levels of users and each of the users may appear at more than one level; be very skilled in one situation and unskilled in another, request metadata in one situation and being hindered by it in another.

### **The non-professional users**

I have now spent considerable time and used complicated words and phrases to point out something quite simple which can of course be stated in very simple terms: Our users are a very different lot and so are their needs; they change over time and from one situation to another. We had better keep this in mind all the time; otherwise, we will soon become very outdated.

This applies not least to the user group we have for the sake of convenience labelled the non-professionals. Although the labels researchers and professionals may hide considerable differences it seems evident that the group of non-professionals is the most varied one and the least

homogeneous of the lot. (This is also clearly indicated in the paper by Ms Zigure.) This is also the group that requires the most varied solutions in communication and may be the most difficult one to deal with or satisfy. Let me explain briefly what I have in mind in saying this.

The researchers and the professional users would seem in many cases to have much more clearly defined needs or demands than the non-professionals. While they may require assistance in defining the data, the series, the classifications and the methodology that are most likely to aid them in their research or professional tasks, these are the groups which we the data providers find the easiest to talk to. We the providers and they the users are on quite a common ground as regards familiarity with the subject under scrutiny, to some extent the data, the methodology and we share the professional language to a certain extent. We the data providers are educated or trained to deal and communicate with this type of users and we can safely assume at the outset that we will not be much surprised by the requests we receive from them.

The situation as regards the non-professional users of statistics is quite different in my opinion. The non-professionals are very heterogeneous, they come from a wide variety of backgrounds, their level of education is very different and the same applies to their technical skills. They are not very likely to have a great deal of knowledge about our data sources, the limitations of the data, the classifications which we use and the reasons behind them nor the strengths and the weaknesses of the methodology applied. Their interests or needs are extremely varied, from in depth studies of some phenomena to the most trivial things. We are further from sharing the same grounds with the non-professionals than with the professionals and we cannot use the same professional language or reference frames as when we discuss our statistics with the researchers or the professional users. Moreover, we the statisticians have not been educated or trained to communicate with the non-professionals. Communicating with them requires a special skill or aptitude that is normally not a part of the training of official statisticians.

### **Communicating at different levels**

Our different user groups and the heterogeneity of the group of non-professional users, indicates that we need to disseminate our statistics in various forms and communicate at many different levels with our users. At the same time, it is clear that our human, technical and financial resources for dissemination are limited.

The development of the dissemination technology in the last few years has been very advantageous for both the NSI's and the users of official statistics. The internet has become the main channel for dissemination of official statistics. While it can be said that we started to utilize the internet



hesitatingly it is now clear that we are most of us using it as the main means of communicating with our users. As I mentioned earlier, only a few years ago we were busy designing a complicated dissemination strategy using a combination of different media which we judged to be best suited to reach our different user groups. We were also quite conscious of the fact that there might be a market for our information and a market for communicating our information. In such a world there was room for several functions and actors, we discussed wholesale and retail of statistics and the role of brokers or intermediaries that might be better suited than ourselves for specializing in communicating with our customers. And we spent many hours trying to formulate an effective and equitable pricing policy for sorting out the demand and supporting the rising cost of disseminating our products in several different ways.

Gone are these days and we should be grateful for that. Modern information and communication technology (ICT) has become accessible to the great majority of people in our countries. Not only is the young generation brought up using it but it is also to a considerable extent embraced by the generation born well before the world of PCs, e-mail and internet. With the increasing use of the internet, the cost of dissemination of official statistics has fallen markedly. Utilizing the internet has made our previous calculations of the marginal cost of dissemination irrelevant. Together with the public-good nature of our products and the official policies of making ICT accessible to the citizens at large, this has led many NSIs to utilize the internet for offering maximum exposure to their products free of charge. As is the case in my office, many NSIs have taken the full step of switching to internet dissemination as the main method of dissemination but offering paper products as secondary products on demand.

In my opinion, this step or this change in dissemination and communication policy is very important, even crucial. It changes the whole way of thinking about the communication as it directs the attention to maximizing the use of the internet. At the same time, such a switch is likely to release a substantial amount of human and financial resources which can then be diverted to increase the accessibility, the user friendliness and the content of website of the NSI. In particular, this policy change lays the ground for maximizing the possibilities offered by the internet for flexibility in disseminating the statistics and communicating with the users at different levels according to their needs and skills.

### **Internet dissemination for the non-professional user**

The internet is at present by far the best medium for disseminating statistics to our non-professional users. There are several reasons for this. A major reason is the flexibility of the internet, in

particular the possibilities it offers for presenting the material in a structured way at different levels or platforms. This applies to all the material, the statistics themselves, the metadata, product descriptions or guides to the users, and the textual or graphic explanations or analysis we may offer. What seems particularly fitting is to proceed from the simple to the complex. Starting with the simple is particularly important in the case of the non-professional or casual users; it will help them along while not being a hindrance for the professional or the very frequent users. Another important feature of this approach is that it also provides a good overview of the material which is something both the non-professional and the professional users will appreciate. In the case of the statistics or the data, these should be offered at varying levels of break-down or detail, allowing the extracts to graduate from the simple to the detailed and complex. In the case of the metadata, this needs to be clearly structured with distinctions drawn between general descriptions of the material aimed at laymen and non-statisticians and the more technical metadata on data sources, definitions, classifications, methodology and reliability. As regards explanatory or analytical texts, these should start with short, simple overviews or main findings with links to a fuller text and/or whole reports on the subject at hand.

Another very good reason for concentrating on the internet is that it is the preferred medium by the users. Most of our users, non-professionals no less than professionals, much prefer searching for data or articles on the internet to searching for the same in a paper publication on a library shelf. There are several explanations to this as far as I can see:

- Very many users, students, journalists or media people and probably the younger generation at large are more familiar or comfortable with the PC and the internet than with paper publications, even to the extent that they have a greater confidence in internet based information than the printed one.
- Internet information is usually the most up-to-date one available.
- The internet is the quickest way of obtaining information, in particular obtaining information from many different sources.
- The user can easily and quickly download the data or the statistics for immediate utilization in his or her PC.

What I tend to think of as the flexibility of the internet is another very good reason for using it as the main vehicle for disseminating official statistics, not least to the non-professional users. Here I am for instance referring to the following:

- The lead-time for internet publication is very short. It allows us to update our statistics or publish new things very quickly and with a minimum of fuss.
- It is very easy to change the website and adapt it to changes in demand and to the observed wishes of the users.
- It makes it possible to offer personalized services, such as allowing the user to subscribe to particular information or to create his own homepages with automatic updates.
- It allows us to present our information at different platforms and thus to be better able to satisfy the demand of our most demanding users – the non-professional ones.
- It allows us to expand our dissemination and the exposure of our data without and major additional cost.

I mentioned previously that the switch from the traditional to internet based dissemination is likely to release resources. However, it is important that these resources are to some extent used for developing and strengthening the internet dissemination. Here, I can think of at least two basic issues that we need to give constant attention to. One is that we must allocate resources on a continuous basis to develop the website. Such development involves seeking new web solutions, in particular solutions which increase the user friendliness of the website and make its use easier, quicker and more interesting for the user. For this we may involve trained communication people in the design of our website as well as the way in which we present our information there as well as on paper. We might also utilize such experts for educating ourselves, the statisticians, about the art of communicating our precious information to the users.

Another issue that requires attention and resources is to be active in gauging the strength of our website, the demand for services and the satisfaction of the user as regards the way in which we are fulfilling his or her needs. Here, there are two methods at hand, hiring outside expertise for trying out and dissecting our website and conducting regular satisfaction surveys among the users. This is of particular importance as regards the non-professional users as we are probably more likely to be in frequent and direct contact with our professional users than the non-professional ones.

Through measures of the kind I have outlined here we make sure that we are not sitting back passively while the world goes by and that we are not only reacting to what we may observe by chance. Rather, we are being proactive making sure that we are ourselves setting the course and being in command of the development.

## Theme 3 - Non-professional user requirements of statistical dissemination - Discussion

The following key themes appeared in the discussion:

### **Non-professional user or non-professional users**

Establishing efficient communication of official statistics to the non-professional user presents an important challenge. This is because non-professional users do not represent a homogenous group but can more appropriately be understood as a multitude of heterogeneous sub-groups with diverse and evolving information needs.

### **User groups with special needs**

Visually-impacted people are an important but often neglected group of non-professional of statistics. Since February 2005, the Czech NSI has opened/adapted its website for use by visually impacted people. Special requirements of certain groups of non-professional users will have to be mainstreamed into the design of communication and information strategies for statistical data

### **Mainstreaming the needs of the non-professional user into the production process of statistics**

The non-professional user is not represented in official statistical fora and ways will have to be found to integrate his/her needs in the production process of statistics.

### **Use of audio-visual media to reach the non-professional**

Web-based communication is a key tool to reach the non-professional user at low-cost. In addition, the potential of other audio-visual media (radio, television) will have to be fully exploited as part of a comprehensive and efficient communication strategy with the non-professional user.

## Theme 4 - Dissemination to the news media

## 4.1 Expectations of the news media

### 4.1.1 The needs of the media in covering Official Statistics

James SAFT

*Editor, Treasury News, Reuters*

First off, I'd like to thank the organizers of the DGINS conference for their kindness in inviting me.

Covering economic indicators in major global economies is, if not a thankless task, one with a high degree of risk for the news organization doing so and not a little terror on the part of the reporter doing the reporting. Think, if you will, of the poor reporter squirreled away in a lockup in the bowels of a government department, knowing that literally billions of dollars of investments, currencies and securities, will be affected by the news she is about to report and knowing that the professionals depending on her report expect, no demand, that she get it right. A victory, in most cases, would be counted in seconds, and indeed, in the case of embargos, a victory would only really be possible based on an unfortunate failure on the part of one's opponents.

But a loss, a defeat ... There are many ways to lose, all of them painful. Painful to the news organization, to the statistics-issuing organisation involved and to the readers depending upon our reports to do their jobs. It should be our goal, as a group - news organizations and statistics organizations together - to work to minimise defeat, to squeeze out the chance of error and to deliver to the end user correct information in a format that is easy to grasp quickly and act upon.

We at Reuters consider the coverage of economic statistics to be one of the most important services we perform. Economic statistics are the very lifeblood of the financial markets. Without statistics on which to judge, our clients, and those of our rivals, will make worse judgements about where to deploy capital, leading to waste, to loss and to lower growth than would otherwise be the case. Our clients, be they debt, equity or foreign exchange specialists, be they European, New World or Asian, read about economic data. It is the single most important data and news set we produce.

We take this duty of ours - reporting on the economies of the world - very seriously, as indeed do you take your duty, and a far more difficult and valuable one, seriously. This group compiles the statistics that allow men and woman, capital and labour, to make informed decisions in the global marketplace.

First off, I will except from my remarks and comments about the quality of the data provided by governments. This, while of the utmost importance, is not here at issue. We, of course, do not and will not hesitate to write frankly of these issues, but in doing so we base our writings on the opinions of experts and other involved parties, rather than our own. Our core competency is relaying your important data to the market. And that is what I will discuss today. In doing so we are to be judged broadly in three main areas. First and foremost is speed. Our readers need to know the numbers as fast as possible so that no one might have an unfair advantage over them and so that they may bring their powers of analysis to bear on the data in order to make investment decisions, be they wise or other than wise. Within this we make editorial decisions as to which data to highlight. These are based on our own knowledge and informed by what we are told by professional economists.

Every day I look at statistics to show exactly how long it took us to send stories on economic indicators. We measure in seconds and hundredths of seconds. We do this because we want to know where we have an advantage, and we do seek to get an advantage where we ethically can. But more to the point, we do this because it is impossible, from a business point of view for us to provide these stories late to our readers. We cannot afford to fail.

The second criteria on which we are judged is organisation. We are to be judged in how well we present the data so that it might be quickly understood by those in the market.

Third, and not to be underestimated, is our role just after the data is released. This is where we believe we add much value. As well you know in the moments after a piece of market-moving data is released economists and traders are asking themselves a series of questions: Is the data strong or weak? In comparison to what? Market expectations of the economist's own views? What do other people think? Have I missed something? And even if not, it does one little good, at least in the near term, to be right in thinking a number is inflationary when the sum of market opinion, expressed in asset prices, thinks that it is not. In seeking to answer these questions they look primarily to two sources; price action and the opinion of others.

It is our role, we believe, to act as a clearing house for this kind of after-the-fact instant analysis. We seek to do this by displaying price data and by reporting on price movement. We also seek to speak quickly with economists and other market participants to draw out their views and pass them along.

So then, back to how data is and should be released.

Let us review the ways in which it generally is released now and the implications of these ways for the statistics organizations, media and public. What I believe we will see is a process towards commoditisation of access to the economic data.

The first type, the most exciting from a competitive journalist's point of view, but perhaps the most problematic overall, are statistics which are not released to the media but to a group of paying subscribers. The University of Michigan survey of consumer sentiment is the most famous example, but there are others. These are compiled by profit maximising organisations and are designed to shed light on economic developments, rather than being "official" statistics in themselves. These put the media in the position of having to source the data, usually only headline figures, through subscribers. While this gives media the opportunity to win deliver the information faster and "win" (or lose them) it leads to a high level of uncertainty, to higher probability of error in reporting and, theoretically, to higher levels of volatility in markets influenced by the figures.

The second type of release format for economic data is to release it to the public and media without embargo. This is done in many countries with less liquid financial markets, where perhaps the perception is that the market will not move quickly on such news. These stories are a challenge for the wire services and, while we can compensate for the lack of preparation time through planning and devoting additional manpower, there are higher risks. The first risk is that, in the rush, mistakes are made. This is a negative for the media and the market. The second risk is that the data goes out more slowly and less completely. Under these circumstances we are forced to send iterative stories; short sentences that build to longer stories, perhaps followed by complete tables. This impairs the reader's ability to understand the data, to our detriment and his. If we receive data under embargo we can prepare entire tables in advance for release at the appropriate time.

One thing to note here is that it is very difficult to make sure that a so-called web release is actually available to all at exactly the same time. Web pages can take dozens of seconds to upload, and speed can be very variable. E-mail itself is variable and cannot truly be controlled by the sending or receiving entities.

The third common form for release is to media under embargo, either by email, fax or some other format. In many ways, from the media's point of view, this is ideal. It allows us the time we need to prepare the data properly for release, to consider the story we wish to write so that we can give as true a picture as possible, to prepare tables and other displays of the data. It is also, from our point of view, the most economical, in that it involves no unproductive travel time to and from a lockup.



The fourth common set up is statistics that are released in controlled settings, commonly called “lockups”. These lockups, as you know, allow the governing authority to tightly control access to the information ahead of release. Two important needs of the media in lockups. Firstly, we are given access to the data with enough time to understand and manipulate it for presentation. Secondly, it is important that we be given adequate technical support and access to allow ourselves to recreate the functionality of our offices. If those are given we are able to adequately do our jobs. There is a cost, of course. To the media the cost is in extra labour and man-hours it takes to staff lockups. To the statistics offices there are of course the costs of setting up and administering them.

So then, other than good data, what are the most important things that the news media absolutely require?

First, a schedule is very important. It is important to us for planning purposes to know exactly when data will be released, and to know this well in advance. The earlier the better, but a couple of weeks notice would be very helpful. This allows us to prepare. We also feel that a strong medium term schedule is of use to the financial markets, which face the same issues around preparation that we do.

Secondly, an embargo period. We feel strongly that springing the data on to the media with no time to prepare will lead to many things which are in no one’s long term interests. If we cannot prepare, we will make more errors. The market will trade in error on these errors. Asymmetric information is the end result. We will also, if not allowed time to prepare, fail in some instances to give the story its correct spin in the early versions. Again, this will lead to people trading without the fullest information possible.

Here I would like to say a brief word about the importance of making economists with good familiarity with the data available to the media during the embargo period. We find this very helpful in the places where it has been done. It allows us to quickly get more detail, explanation and accurate historical context.

As to whether lockups are needed, I cannot say. We work successfully within them around the world and can do so as they are introduced in new places. The decision as to whether they are needed must rest with the governing authorities. They do impose a cost and that cost must be taken into account when such decisions are made. What I can say, strongly, is that they are preferable to removing embargos entirely.

This brings me to a short point on recent discussions with INSEE (spell out) in France. INSEE, responding to concerns about level playing fields, has recently considered making radical changes to the way in which it releases data. Having historically released data under embargo to news organisations it mooted an end to embargos entirely, in the apparent belief that it would in so doing remove the possibility of unwanted leaks.

First off, I must say that I fully appreciate the Institute's concerns and again appreciate their very heavy responsibility in these matters. We do share these concerns.

I am however glad to say that, in consultations with other news agencies we have agreed with INSEE to postpone any such changes. It would, in my opinion have been a disaster had the Institute begun to release its data in this way. The end result would have been bigger wins and losses for journalistic organisations but an overall loss for the market. Market participants would have had less confidence in their ability to get access to the data at the same time as others.

We would like to thank the Institute for its consideration in this matter. INSEE is now we understand considering a lockup, which in our opinion would be better than transmission without embargo.

### **The future**

Finally, I'd like to propose that we consider the future and how we should best work together. We believe that ultimately the statistical organizations should move towards a common framework of using a universally usable machine-readable mark-up language.

XBRL stands for eXtensible Business Reporting Language. It is an XML-based mark-up language developed for financial reporting. It provides a standards-based method to prepare, publish (in a variety of formats), reliable extract and automatically exchange financial statements. Reuters has been a backer of XBRL, I must say.

Use of XBRL or other similar languages would cut down on error and simplify the dissemination of data greatly. It would be more efficient and could, potentially, allow stats offices more control over how their data is released.

Reuters stands willing to work with interested parties on this project, if support can be fomented.

With that, I would like to thank you for your time and patience and thank especially the association for its generosity, hospitality and the invitation to meet with you all today.

## 4.2 The national statistics institutes and the requirements of the media

### 4.2.1 The challenge of communicating statistics

Len COOK and Clare COWAN  
*United Kingdom*

#### **The relationships of the national statistics institute with the news media in public communication of statistics, and in public life generally**

The news media play a part in many facets of the public identity of a national statistics institute. Although this varies considerably across countries, an increasing variety of national and international news media influences the work of a national statistics institute, or can be influenced by the national statistics institute. Some news media provide direct links to special communities, while others not only respond to contributions from the national statistics institute, but challenge what is prepared and how it is produced. Not only the internet, but globalisation, mergers and an increasing intrusiveness mark how the media has developed over the past decade, although some countries have news media with more intrusive elements than others. The United Kingdom has long had a particularly intrusive and demanding news media.

Florence Nightingale described statistics as *"the most important science in the whole world because upon it depends the practical application of every other science"*. Her capacity to use statistics to explain and compare public concerns was far beyond what official statisticians would be likely to seek to do now. In 1989, Lionel Jospin, the Prime Minister of France said of professional statisticians, *"The right to information has become one of the fundamental rights of the twentieth century citizen. In a society where information and the media play a considerable part, your [professional statisticians] action helps safeguard a fundamental human liberty. The working methods you use are complex, the data you deal with difficult to evaluate. An effort to explain [to the public] is necessary. This effort is required by democracy. All citizens must be in a position where they can understand and assess the policies followed by governments."* What Florence Nightingale did not face in her great achievements, but was perhaps foreseen by Lionel Jospin a century later in our time is:

- The existence of a real time omnipresent media, prepared to bring research to the world's attention as it evolves, as a mechanical process without time for reflection, wisdom or even replication

- The access by all to evolving ideas and experiences, through the internet and other knowledge management tools
- The politics of interest groups, who can form rapidly, and whose agenda for action may span nations, politics and cultures, with or without legal authority
- The rapid appropriation and assignment of property rights to knowledge, regardless of contribution, through global markets and rapid leverage
- A growing constitutional and legal appreciation of cultural differences in scientific, social and political concepts that affect the values behind our judgements as scientists
- A huge interest in the quantification of phenomena of all sorts

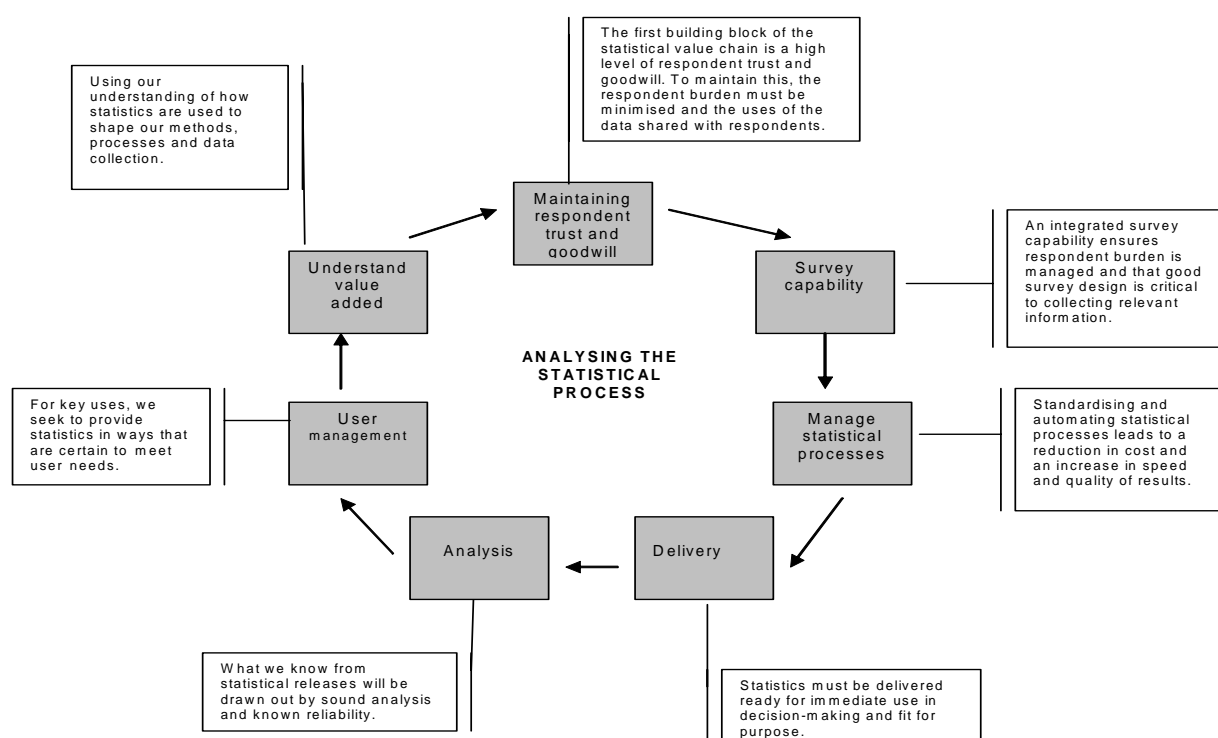
The work of official statisticians is increasingly under a continuous spotlight. Statistical offices tell us about every group in society but statisticians need to be aware that interest groups can respond as fast as statistics are released and provide competing interpretation of results. Where the statistical office is not satisfying interest groups then they will produce competing analyses, alternative sources and new comparisons.

It is also a time of opportunity. The internet is making it possible for official statisticians to consider themselves operating their own form of public broadcasting, enabling them to communicate direct to the community, without the involvement of any third party. For example, the Office for National Statistics (ONS) website in the United Kingdom now gets some 700 000 hits per month, of which about one quarter are school pupils. The website is modelled on that of the BBC itself, with a simple look and feel, although for the more technical user, we have yet to meet expectations as fully. The internet can provide more channels for managing relations with the media. The web can make regular pointers to items of interest a low cost way of bringing releases to the attention of interested journalists. The internet also brings new risks. The immediacy of access means that when errors have occurred as a result of process failure, the impact may be rapid and widespread.

### **The news media and the statistics value chain**

We can use the statistics value chain to identify the diverse nature of communications involved in official statistics, and what we aim to influence. The identity of a statistical office reflects not only the visibility of the individual components of the statistics value chain, but also the very special links between the components of the chain, which are also important to the special contribution of a

national statistics institute. Each link in the value chain involves quite distinct communities, and the news media has a different part in each.



## Maintaining respondent trust and goodwill

A statistics office needs to target its communications with respondents in order to encourage and foster their trust and goodwill. There are a number of ways that internal and external communications can be targeted in order to achieve this. For example a statistics office can work to encourage and motivate field interview teams to appreciate how important their work is in producing reliable statistics, and in demonstrating how important the statistics are. An office can target external communications to respondents by including material on how statistics are valued, including media comment where appropriate. And it can work to ensure there is maximum public commitment to a population census, before information gathering begins.

Respondents will also be influenced by debate and comment on statistics in the media. Media interest in big surveys raises respondents' awareness of how statistics are used, both at a national and, increasingly in the United Kingdom, at a regional level. The office's handling of critical incidents influences respondents' views of its integrity and trustworthiness, and will also impact on

general discussion of attitudes to privacy and the growth, both in government and in commercial organisations, in information matching.

### **Survey capability**

Work on integration of survey taking and developments in survey design should be highlighted by the statistics office to survey respondents. Demonstration of effective use of respondents' contributions and efficient survey design can help generate trust in all statistical processes. This competitive edge in survey taking and design should also be highlighted in communications to major survey funders and users. This is another way in which public trust can be gained.

Leading edge developments in survey taking and design can be used as a way of engaging with specialist technical and professional media who have an interest in processes and technology. These sorts of developments may also be a way of engaging education media interest.

### **Manage statistical processes**

Work to standardise and automate statistical processes should improve a statistics office's reputation and enhance relations with all sectors. This will be achieved through limiting the potential for errors and improving timeliness of results. Standardisation of methods can also help inform those users of statistics who want to understand the underlying methodologies.

### **Delivery**

Timely and user-friendly delivery of 'fit for purpose' statistics for use by the media and others can have an enormous impact on a statistics office's external relations. The goal of the office should be to provide authentic measures that are available to all at once. Engagement with the media should focus on providing scheduled pre-announced access to statistics and allowing access to expert statisticians at the time of release.

### **Analysis**

A statistics office can demonstrate that it is professional and knowledgeable in all its undertakings by focussing its analysis on questions of high interest and provision of relevant comparison in both internal and external communications.

### **User management**

Provision of statistics in ways that are certain to meet users' needs is necessary to maintain the goodwill of users and the overall standing of the office. This requires the statistics office to engage regularly with users in order to understand their requirements and to provide them with information

on how the statistics can be used. The limits of statistical measurement should be clearly identified to users.

### **Understand added value**

The reporting activity by a statistics office should be its key interaction with media and others, and where reporting is of high quality, this improves levels of general confidence in the statistical system used to produce the statistics. In this scenario, if the processes are not the subject of discussion, they are a non-story.

### **The link between survey taking and the resulting statistics**

Public trust in national statistics institutes and in official statistics determines our national capacity to collect information successfully. The level of trust determines the range of surveys that can be undertaken, the quality and cost of work, and the resulting capacity to integrate data. Building up trust requires close working with communities and organisations. Where trust is high, the return to the citizen in completing surveys is clear overall, and each transaction with each citizen or business does not in itself need to have a specific reward. Trust will also be supported through users and commentators acknowledging that statistical offices operate independently, and have no role other than impartially producing statistics, with the necessary power to ensure confidentiality protection. This reassures users and respondents that the statistics office is not directed by any need to provide any services or products other than official statistics.

The promotion of a common brand across surveys and published statistics can help reinforce trust in each.

### **Visibility of official statistics**

Confidence in a national statistics institute's 'flagship' statistics, such as the Consumers Price Index, the population census and Gross Domestic Product, can have an impact on the confidence the public has in all official statistics. If these key statistics are managed well, then there are consequential benefits for confidence in other statistics. Similarly any critical incident relating to these key statistics that is not handled well can have a damaging impact on the reputation of all official statistics.

### **Confidence in the system as a whole comes from the spread of performance**

The performance of the statistics institute across all parts of the statistics value chain has an impact on confidence in the system as a whole. For example confidence in the timeliness of publishing

statistics to particular reference periods can lead to confidence in the overall system, whereas the least timely statistics may set a view of performance levels for all official statistics. Confidence can be developed through communicating clear messages about what are official statistics, and how they are formulated, i.e. they are based on real observations and that statistics is the science of grouping those observations. It is important to be clear on what statistics are not official statistics, which can be difficult when reporting on performance targets.

### **Showing benefits of integration of processes to major stakeholders**

The value chain provides a way of identifying the benefits of integration of processes to present to major stakeholders. This helps in emphasising the coherence of statistics, and the benefits of investment in official statistics. Responses to critical incidents can be used to articulate to the media the importance of sufficient relevant investment in official statistics.

### **Added value from spill over benefits, such as the downstream later benefits of a periodic large census publicity budget**

Large periodic population censuses may be the only high budget promotion activity for a national statistics office, so it needs to be used to capture a spill over benefit in confidence in overall survey taking. Spill over benefits after a periodic large census publicity budget include higher response rates in all surveys and greater awareness of official statistics. Publicity for the population census needs to make positive links between the census and the national statistics office.

### **Protect integrity through limiting external influence**

Processes that involve public scrutiny engender trust in how all processes are carried out. For example advisory boards may have role to play here in demonstrating openness and transparency, for example the RPI Advisory Committee in the United Kingdom. Whilst the media may write about the perception that sensitive statistical decisions are associated with some form of political influence; such assertions should be corrected. This can be achieved through transparency and consistency of processes.

### **Contemporary challenges to confidence that reflect in attitudes of the news media**

There are a number of contemporary challenges that we can identify that have an impact on the attitude of the media:

- 1) Societies have become more diverse. This means that official statistics, particularly where they are used as a means of assessing the government's performance, must be trusted by all these groups and be accessible to them. The absence of good statistical information means



that ideology, anecdote and experience will be extrapolated to paint a different picture than that which might be filled in robustly by good statistical information. Therefore, through the public statistical system being accepted as a preferred supplier, government reduces the area where debate focuses on the quality of the statistics, rather than the issues themselves

- 2) Policy processes seldom recognise that statistics can be revised. For example, official statistics have a direct influence on funding reallocation in population-based funding formulae. Where they are revised, there is a continued tension between the original allocation, and that which might now be the most relevant given current estimates
- 3) Increasing linkage of official statistics to ministerially selected measures of government performance through performance targets has three effects:
  - Firstly, political comment on targets creates a sense of political oversight of measures
  - Secondly, targets create thresholds and measurement bounds that are far too precise for statistical processes to measure in a robust manner
  - Thirdly, performance targets create an interest in statistical processes. In the United Kingdom, the most significant is the indexation of gilts to the RPI and the obligation to redeem gilts (some £ 50 billion [1 000 million]) if the Governor of the central bank judges gilt holders will be disadvantaged.
- 4) Higher visibility of threshold targets which assumes a degree of precision that official statistics cannot achieve
- 5) Measures of quality may reduce confidence in the policies on which statistics are based
- 6) Communities wish to own statistics about themselves
- 7) Increased analytical detail makes comparison with other information more demanding
- 8) Greater demand for coherence across statistical measures, e.g. in economic statistics
- 9) Needs have changed radically, but statistics evolve more slowly
- 10) A continually greater range of comparisons is sought

## **Specific elements of the United Kingdom's experience**

Communicating with the press has long been a very involved area for ONS in the United Kingdom. This has evolved even during my five years in post and I would like to use examples of what has happened during the last five years. These examples cover a mix of successful and unsuccessful experiences. Even when we were not hugely successful we have found we could learn from everything, good and bad and see how we could incorporate this into future media planning. Some of the experiences have contributed to the later section of the paper on incident management.

The statistical system of the United Kingdom has no overall legislative basis. For both business surveys and the population census, there is strong legislation enabling information to be collected and then protected from use for anything other than statistical purposes. Common law underpins household survey activity. In the United Kingdom, much accountability comes from a strong parliament, with well institutionalised traditions that enable opposition to the government of the day through regular challenge of ministers and public officials. The press are highly active, with some pockets of extraordinary ability.

The United Kingdom media are voracious users of official statistics, and coverage of statistics every day is extensive. The United Kingdom media also holds public institutions in the United Kingdom to account, and the Office for National Statistics is no exception to this. We publish an extensive range of statistics, some using systems which are now being redeveloped. The devolved nature of large parts of the statistical system means that policy and operational departments publish a large share of statistics that report on government performance. Until the introduction of the National Statistics Code of Practice, standards were not consistent in the degree of ministerial involvement in the timing of the release of these statistics. There remains strong concern about early access and ministerial involvement.

## **Learning from each other**

In considering this topic, we have to recognise, what do we want and need users and suppliers of raw data to understand about statistics, what is the role of the media in achieving this and how easily does this fit with the press' own agenda of filling news pages? And when we talk about the press, who or what do we mean? Can they be treated as one entity? It is important to recognise that they are not all one entity. There are several different types of media with whom we deal, they all serve different news agendas and should be treated differently. I have outlined below the main groupings of journalists with whom ONS interacts and how we try to respond to them.

### News agency reporters

These journalists are predominantly interested in ensuring that their users access raw market data through their systems before anyone else can supply the information: the city analysts will add comment and interpretation to the data to them, so speed and neutrality of delivery are key to fulfilling the news agency's requirements. How can we make this as easy for them as possible? Apart from the necessary technology, we ensure that the relevant statisticians are on hand to answer questions and explain the background. This helps foster good relations and these journalists know that they can contact the statisticians at any point for more information. It tends to be a relationship based on trust.

### National newspapers economic journalists

These journalists have a requirement to fill their pages every day. They need to demonstrate an understanding of their subject whilst searching for a 'news' angle. They can explore minutiae and then make that the story although it may be unrepresentative of the general trend. We have to ensure that press offices are equipped with all relevant background information so that any irrelevant coverage is limited from the outset.

### Economic commentators

Economic commentators take a much more long-term look at the market and earn their plaudits by being able to read statistics correctly. They do not sensationalise short-term blips, if anything they are more sympathetic to them as they know how difficult statistical collection is. They are interested in the process of data collection in as much as it has an impact on the quality and direction of statistical innovation. I have spent considerable time with these journalists and had some stimulating discussions with them.

### Regional press

The regional press tend not to be interested in statistical processes but seek out any facts unique to their area. Their coverage can generate much publicity for a statistical office which helps the reputation of the office 'on the doorstep' and therefore improves the response rate for field force interviewers. ONS has arranged a few regional tours where members of the press office have gone out to all parts of the country to meet regional journalists to demonstrate what statistics we hold. This has proved to be enormously successful. Labour market statistics are also released on a regional basis and always receive extensive coverage in the regional press.

### Broadcast journalists

Broadcast journalists need statistical information for background material for news items, considering what the statistics say about trends in the economy or society. Broadcast journalists have to present often complex information in an easily accessible format. They will often require in-depth information at very short notice and our experience has been that they are keen to make links and develop relationships. I have visited the BBC and met journalists, editors and producers at all levels to explain the policies surrounding the release of statistics.

### Political reporters

When statistics are used in the political arena, the statistics themselves, their credibility, means of production and manner of release can become a political story. The independence of ONS is challenged on occasion and our experience has been that transparency of method has been the most important defence to this.

### News reporters

They tend to be interested in only really big events like the Census or the Royal Wedding, or where the statistics have important implications for the lifestyle of the residents of the country. In a similar way to the regional press, if there is an interesting story to tell, for example the composition of households in which children are now brought, the statistical processes become irrelevant and it's the newsworthiness of the finding that is everything.

In as much as we want users to trust the comprehensiveness of our statistics, to what extent can a relationship of trust be developed between the providers of statistics and the press? The media is a very important gateway to our users but in valuing their potential to ensure we reach our users, we also need to be aware that the media has its own agenda of filling news pages.

Any consideration of the relationship with the press has to consider the following issues:

- what is newsworthy and what makes a good story?
- what will they consider "interesting" to their readers?
- how much are they inclined to trust officialdom?
- what is their agenda?

And against all of this we have to remember, we produce the statistics, we choose the time and manner of release (often many months in advance), we have the advance knowledge and we know the channels which will be disseminating them. So why is it that sometimes the coverage of the statistic seems unrepresentative of its intrinsic news value?

This is a conundrum all statistical offices face. When we do our job well, we are news neutral. The statistical processes themselves should not be newsworthy. Monthly economic indicators do not appear by accident; it takes a well-managed operation to ensure that the systems and processes are in place to produce comprehensive, cohesive, accurate and verified statistics to strict timetable. So far so good. But there is never going to be, and we should not expect it, coverage in the press congratulating us for surmounting the inherent challenges in producing statistics. While some members of the press may well have an appreciation of the complexities of statistical production and be aware that producing a retail sales statistic for example can be a real achievement. However the release of this statistic is never going to be news unless the statistics in itself is considered to be in some way newsworthy.

Another tension in the United Kingdom is that some of the media are openly in favour of particular political parties. As statistics are used to assess government performance, then for nearly twenty years, the newspapers associated with the opposition of the day have been consistently more critical of official statistics. Some elements of the media have their own agenda of which ONS needs to be aware.

Mention should also be made of the National Statistics Code of Practice. This sets out guiding principles for methodological, statistical and publication decisions. Users and commentators understand this now. The Code is recognised and accepted and is used extensively as a reference point. It took the first eighteen months of my job to get it published and in retrospect; I would make it an overriding priority were I to take up post again

At ONS, we are currently working to take attention away from any perceived tensions over the reliability of the statistic itself but instead to ensure that all processes are transparent and consistent so that users and commentators can have confidence in them. I have outlined a few examples below.

### **Some specific United Kingdom case studies**

#### Network Rail, Royal Wedding

In 2002, ONS had to make a classification decision regarding the treatment of Network Rail in the United Kingdom national accounts. As is standard practice, ONS followed the relevant international

guidelines and accounting protocols and judged that Network Rail should not be scored in the government sector. As far as we were concerned, that should have been the end of the story. It was not. The decision was called into question and ONS was accused of acceding to the Treasury's desire to keep the recorded amount of public borrowing low. The damage that this did to the perception of our independence was enormous. The reality was that ONS found itself in the position of having to explain another Government department's policy. Statisticians should never find themselves having to do this.

Compare this to the recent position I found myself in relation to the Royal Wedding. As Registrar General for England and Wales, I had the ultimate responsibility of deciding if any of the eleven objections to the Royal Wedding were valid. It is impossible to exaggerate the media interest in this in the United Kingdom. Arrangements for the Royal Wedding had been subject to intense media scrutiny and the press appeared desperate to have a final obstacle placed in the path of the event. However, where this differed from the Network Rail case is that the legal argument was carried out by the Lord Chancellor and in the event I “ruled” that the objections were invalid and that the Royal Wedding could go ahead. This was the end of the story.

For me, there were two lessons to be learnt from this.

- Wherever you are seen to be involved in the day to day decision making process, any final decision is going to be viewed with more suspicion
- Secondly, the use of language. In classification decisions I “judge” whereas in the case of the Royal Wedding I “ruled”. It's a question of semantics but it makes a huge difference.

### 2001 Census

ONS conducted its most recent census in April 2001 and started to release the results in September 2002. As you will be all too aware, the Census is an enormous body of work which can be draining for everyone involved. Equally, this is at a time of declining civic involvement but increased policy use of the findings. A few local authorities challenged the results in their area. ONS made the mistake of defending the Census very bullishly (and in fairness, overall it was considered to have been the best for decades). However the reality is that if you are a local authority who faces a cut in your funding, you are not going to be interested or placated by the praise for the macro elements of the Census. ONS then found the news coverage of the Census being dominated by a handful of local authorities (and there are over 400 in England and Wales) complaining that the Census was wrong and should be re-done whilst elsewhere in the newspapers, journalists used the

rich detail of demographic details voraciously and unquestioningly. In the event, ONS conducted extensive population studies in some of the contested areas, produced outstanding work and has now rebuilt and even improved relations with the local authorities concerned. In retrospect, ONS should have been more realistic when outlining the context of the headline figure.

### GDP revisions incident

In September 2003, ONS revised the estimate for Q2 GDP growth from 0.3 to 0.6 percent, for valid reasons, the primary one of which was out of our control. This revision triggered extensive media coverage, with many economic journalists saying that we had “doubled” our estimate of economic growth. The timing of the release was also a couple of weeks before ONS's appearance in front of a parliamentary select committee so this also added to its high profile nature.

Our initial means of handling this was shaped by the press coverage and we were continually on the back foot about it. The United Kingdom Statistics Commission also announced that it would conduct a review of the figures, which to many observers appeared as confirmation of our perceived incompetence. After a couple of weeks, the tide changed slightly with the *Financial Times* publishing a survey which showed that we produce the first estimate of GDP faster relatively than most other developed economies and that our margin of revision is very small relatively. The select committee appearance also went smoothly and it provided me with an opportunity to set out the facts as to why the revision occurred. However it was an object lesson in how not to release a figure.

There was a lot of information we could have had ready to put into the public domain immediately the statistics were released which could have prevented much of the coverage and possibly the review as well. The Statistics Commission's review actually praised ONS and reiterated why revisions are a necessary part of statistical production, but its very existence still means that some journalists can write about the Commission finding it necessary to review our procedures, without making any reference to the fact that we came out of the review well. I also published an article in January 2004 in my name covering why revisions happen. This article was and remains well received but with the benefit of hindsight and better preparation, it would have made more sense to have published it at the same time as the Q2 GDP growth estimate was revised.

### Select Committee hearings

Once a year, the most senior officials at ONS appear before the Treasury parliamentary select committee to answer questions on ONS's Annual Report. In reality, this means any part of the running of ONS is open to public scrutiny.

I made the mistake of ‘rising to the bait’ in a select committee hearing early on in my time at ONS. One of the Committee members asked me what I got in return for all of the mistakes we had made? I answered “A lot of abuse, in fact I must be the most abused civil servant in the country”. I regretted these words as soon as I said them and they have come back to haunt me in every interview since. They have served as a continual reminder to me that throwaway lines do not work in newsprint and are stored for posterity. Any language which could be used by the press must be chosen carefully and used in context. However, I now answer the inevitable question about it with an acknowledgement that police, parole officers, nurses and teachers get much more abuse (which I truly believe) and that I am fortunate to have my job as I find it so stimulating and challenging. In summary, we realised that the best method of ensuring neutral press coverage at select committees is to appear as staid and thorough as possible.

### 2001 Census helpline failure

The 2001 Census was conducted whilst the country was affected by an outbreak of ‘foot and mouth’, a cattle-borne disease whose existence raised several logistical challenges for those involved in the Census. This resulted in a flood of calls to the Census helpline which caused it to fail. This could have been disastrous PR for the Census but we turned it to our advantage by talking about the incredible willingness of the British public to engage in their civic responsibilities. I am sure that presenting it in this manner helped increase overall levels of response to the 2001 Census.

### **How ONS practices and thinking have developed with these experiences**

ONS now follows a number of processes to avert and manage incidents such as those outlined above in the case studies.

The key policy is that at ONS we operate with openness and transparency. This manifests itself in a number of practices with regard to the media:

- we write to the Statistics Commission, which publishes all of its correspondence, when we take any decision affecting the manner of release of statistics
- all of our business processes are in the public domain



- we have arranged seminars to inform users of current statistical methodology, for example the publication by ONS of ‘revisions triangles’ (enabling the user to see how an estimate has changed and evolved over time) was publicised through a revisions forum at the Bank of England with an audience of analysts, Bank staff, policy makers and journalists.

#### Other practices to support good relationships with the press

In ONS we have set up a number of working practices to support good relationships with the press:

- closer liaison between the press office and relevant business area when writing the press release and background notes, to ensure that potentially sensitive and therefore newsworthy issues are considered by media professionals
- closer collaboration between the press office and relevant business area to ensure timely delivery of material for the media
- making senior staff available to handle media calls immediately when ONS is aware that releases could generate press coverage
- media training for everyone who speaks to the press through a media accreditation programme
- strict adherence to the media handling guidelines for all staff
- giving considerable thought to statistical releases before publication, ensuring that the statistics are presented in context, particularly where there are unexpected changes in trends or there is a large change in an estimate when it is updated to include new data
- planning select committee evidence to ensure news value is low and on ONS's terms.

In addition I have worked to develop good relationships with senior economic commentators in the media, meeting them to discuss economic and statistical issues.

#### Policy for correcting inaccuracies in the media

ONS has developed a systematic policy towards correcting inaccuracies in the media. My own feeling is that in a statistical office as large as the United Kingdom's and one that operates within the political and media environment that we do, it is essential that a correction to any inaccuracy and any perception of inaccuracy is in the public domain as speedily as possible. ONS writes to the newspaper concerned any time that an article contains an inaccuracy. Newspapers do not always

publish these letters. However we always publish them on the National Statistics website. This ensures that not only are the correct facts in the public domain but that key commentators know that the 'letters to the press' section of the website includes much useful information that outlines ONS policy. It is clear that although newspapers may not choose to print the letters sometimes, journalists find the content of them a useful reference point and select committees clearly use the information as part of their research. One of the elements that I am always keen to highlight is the background to any issue. Users must have confidence that we are 'ahead of the curve'. If there is a mistake, we find it, we put it right and we make no secret of the chain of events.

Over time, journalists have come to appreciate and recognise our modus operandi. There is recognition and acceptance of the fact that we follow the National Statistics Code of Practice.

### Appeal process

In the United Kingdom, if the press has got something wrong and refuses to correct it, then the next option is to use the Press Complaints Commission (PCC) as an arbitration body. ONS has done this twice during my tenure. In both instances the fact that we had gone to this body convinced the newspapers in question that we were serious and their response was to offer to run a correction. Their Code states that *'A significant inaccuracy, misleading statement or distortion once recognised must be corrected, promptly and with due prominence, and - where appropriate - an apology published'*. The existence of the Code has not stopped the printing of inaccuracies but the threat of its deployment has ensured that letters have been published. However, as with everything, it is the fact that we have been able to demonstrate our processes and systems that has been central our ability to gather evidence to submit a complaint to the PCC.

### **Management of critical issues**

Managing incidents is critical to the way in which the media form attitudes to the statistical office. Incidents can range from regular updates to published statistics, unscheduled changes to statistics or more serious incidents. The management of these, and the reporting of this by the media, can generate serious long term damage to public trust in the office, and the attitudes of stakeholders. This issue deserves special attention in any discussion of the media and official statistics.

When incidents arise in a statistical office there may well be little time to prepare a response which could affect the confidence in the institution for several years, and damage trust in other activities if poorly handled. Sometimes, not all is known about the problem. With market sensitive statistics, some problems such as mistaken early release or improper early access can necessitate actions

which will come to the attention of regulatory authorities. With thought, difficult situations can be used to highlight positive aspects of the statistical system. In the United Kingdom statistical system, the management of incidents is an essential capability.

In managing any problem, what is always at stake is continuing, unqualified confidence both in major statistics, and in the hard judgements that we are trusted to make about politically sensitive statistics. Matters of trustworthiness of any statistical judgement can affect trust in the official statistical system; therefore although most issues arise from problems with individual statistics, they must always all be resolved in a way that recognises that our ways of working on all statistics will be assessed. The principles behind how we operate, and solve problems, should be obvious in both large and small incidents that bring our practices to the attention of the public. The action we take after knowing of a mistake is often more critical than making the mistake itself, and it is never too late to fix something wrong.

Situations that become critical should be actively managed – often the best remedy in handling a critical issue can be in managing down the potential emergence of an issue, even where the initial cost seems too high. If recovery of a problem is managed well and in a fully transparent manner, then positive attitudes to the means of fixing a problem may offset the odium from making the mistake. Speed of response is also important - rapid identification of problems and assessment of solutions will often enable a wider range of responses, and strengthen retrospective confidence in handling. It is often through acting independently and competently that we manage the tensions between independence and being a senior civil servant.

### **Three key non-negotiable principles**

There are three non-negotiable principles of official statistics, which underpin and sustain trust in official statistics and the national statistics institute. These are:

- to protect the confidentiality of personal records
- to use objective methods in producing statistics and
- to maintain impartiality in the release of statistics.

These guiding principles underpin the working practices of official statisticians and should be used to help determine the course of action when dealing with difficult critical issues. We must show our unqualified commitment to the three principles by being willing to answer immediately criticism

when they are challenged. Most often, it is the full disclosure of methods, impacts on statistics, and consequential methodological and process changes that usually resolves the concerns of critics.

### **Advice for managing incidents**

- identify the problem fast, ensure that you know all aspects rapidly. Where problems of understanding arise, immediately get some of the best people involved to assess risk, and identify resolution, if the problem is technical or operational
- ensure that those who can fix an issue become aware of it rapidly. Raise the possibility of problems to highest necessary level for their resolution, at the time a problem seems likely, and do not wait until tests confirm certainty of problem
- issue management will involve at least one who must understand all aspects of an incident, from large and small, so that they can certify the validity of arguments as developed
- except in the rare case where personal neglect is a strong part of failure, do not plan on any penalty on individuals for incompetence or failure, because the prime interest is always in knowing the true situation. The National Statistician always takes external responsibility for all forms of failure.

### **Finding a solution**

- assess the possible solutions
- use past experience as a guide
- use existing practices and principles as a guide for response
- always investigate and close down as far as possible any suggestion that creates doubt about whether standards have been maintained
- act with a view to the issue becoming public
- think about the impact in six months time and beyond of the immediate solution adopted
- burn scrub to save the forest if needed, in other words, for example, it is always best to admit an error with the consequent criticism, than wait until it might be found out by a very angry user

- ensure that it is judgement that is what is criticised, rather than our management competence, through actively deciding on responses to situations, rather than waiting for something else to trigger our attention
- where we cannot answer what caused a problem, we need to limit the possible causes through independent review of relevant processes

#### Publication and release of statistics

- never willingly publish incorrect information
- stick to the pre-announced release schedule, and standard processes in ‘at risk’ times such as elections
- never release information to a department or Ministers where the transaction cannot become publicly known, even if the information is confidential

#### Access to Micro-data

- never use details obtained in a statistical enquiry for any use that is not either (a) official statistics or (b) research using anonymised records

#### Involvement of Ministers

- do not consult Ministers on matters reserved for the authority of the National Statistician
- all work done for Ministers (PQs, work reports, proposals and requests for decision) must all be of the highest standard, with a board member taking personal responsibility for the quality of all material sent to FST and other Ministers
- a well deserved respect for professional competence makes it much less likely for pressures to exist that challenge the political professional boundary of our work

#### Public response

- seek to be the first to identify a mistake in any National Statistics
- close down as far as possible any suggestion that creates doubt about whether standards have been maintained

- use other bodies to log responses as appropriate, such as the Financial Services Authority, or the Statistics Commission
- ensure that the whole office is aware of how we will respond to failings in areas of non-negotiable principles
- keep responsibility within ONS. Any one else blamed can become a loose cannon in defending themselves at your expense, and contradict and undermine assurances needed to repair goodwill

### **Unusual cases implying a different response**

There can be rare occasions when a different response is required because of other significant factors that expand the case beyond one that can be dealt with within the bounds of usual statistical practices and procedures. These additional factors can include the following:

- regard to the duty of care we have as citizens to the immediate protection of children and others
- where it is for the courts to test whether a particular course of action is appropriate (but note that on issues of the principle in confidentiality, the only authorities that can override ONS are Parliament or the courts)
- the need to know the scale of an inadvertent revision to a critical market sensitive statistics, before we signal the revision
- we may well rely on the judgement of others in the expected application of a code principle, and other legal obligations

### **Case studies**

Experience leads to some sound principles in disaster recovery, and ‘case law’ developed through solving difficult problems should be recorded and built on. Building up the folklore of the office around these cases is a critical way of ensuring that the fundamental principles behind official statistics can be shared, reinforced and sustained across more complex situations in the future.

### **Conclusion**

The new media play a critical part that involves all aspects of the operation of a statistical service, some involving mainstream media and some quite specialist areas. The environment we work in is

fast moving, sometimes intimidating, and always intrusive. Not only our work, but how we produce it is increasingly under scrutiny.

A number of common themes have emerged when the press coverage has been better than anticipated, as follows:

- the neutrality of the press coverage increases in direct relation to the thought and energy invested into the release beforehand
- the ability of the statistics office to ensure that all relevant staff are briefed in advance and that points of exposure are dealt with in advance ensures that the press find it harder to expose differences or weaknesses. It also ensures that press office can rebut criticisms speedily. It is better that journalists get a timely quote or background information from ONS, rather than contacting external organisations or individuals whose objective will be to ensure publicity for themselves and know that the chances of gaining this increase if they appear more contentious
- the availability of senior staff to speak to journalists; the measured tone of any subsequent reporting will reflect the authority of the explanations.

We need to hold fast to core principles and at the same time understand and be part of the milieu within which the public learns of what is going on. At this we need to be always quite excellent, either through our own new broadcasting face on the work, or through supporting the media with high quality, well involved interest, and a capacity to comment that reflects our role and place.

## 4.2.2 21st Century statistics please – From counting pigs to measuring knowledge

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### 4.2.2.1 Requirements of the media

Statistics are used by all media, but their requirements vary widely, depending on their markets and audiences. This brief summary attempts to identify current and future requirements of business media, symbolised by the Boersen, Denmark's business daily. The newspaper has a circulation of 69 000 (up 70 % since 1995), 240 000 readers predominantly in the private sector, co-operates with the TV2, Denmark's second public television channel, and has a public and password-protected online service.

Three of the journalists have degrees (Masters) in Economics, another two economists' work in the Greens Institute of Market Research, an integral part of the newspaper that conducts business surveys, which provide data for a leading indicator for the Danish economy. The Danish market for business news is extremely competitive, and the requirements must of course be seen in this context.

### 4.2.2.2 21st Century statistics

Counting pigs is still important, certainly in a major food producing country like Denmark, where pigs have been and still are a growth industry. So is careful statistical monitoring of the physical output of all manufacturing and service industries, including imports and exports of all goods and services. Imports of Chinese textiles make news headlines and are major political and commercial issues in both the United States and Europe at this time. Counting people and all their paraphernalia is of universal interest.

The relevance and quality of these tangible data are rarely disputed, and they will continue to be in demand. But they are essentially, and inevitably, 19th, at best 20th Century statistics, mirroring the structures and political needs of these centuries.

What is required are 21st Century Statistics, if they are to have any relevance to the media and thus the political and public debate and they will be far more challenging, and hopefully professionally more stimulating, than counting pigs and other tangibles.



Obviously the requirements of the 21st Century differ from last century in many respects, but I will focus on what I consider to be the two basic imperatives. Defining and measuring intangibles, with knowledge and quality as common denominators, and providing globally comparative statistics of a much higher cognitive value – and sooner – than today.

Such data are crucial to the quality of the debate and decision-making, and by implication, economic performance in all nations in the 21st Century. Most certainly in the member states of the European Union, all of whom want to turn themselves into knowledge economies and not only to survive, but to harness and exploit globalisation as platforms of future employment, growth and wealth.

But while economists regularly discuss the shortcomings of the macro-economic data, there has been surprisingly little public and political debate about the lack of an internationally agreed, useful definition of knowledge and the dearth of qualitative data on the state of the knowledge economy. I believe it is only a matter of time before this debate will materialise.

The Danish government defines four growth drivers in a knowledge economy. Research and development, university education, innovation and IT and telecommunications. But national and international statistical experts need to co-operate closely and come forward with new operational definitions of not just knowledge, but also of information and innovation. As in the practically oriented definition of the Danish government, knowledge is often defined broadly, using quantifiable data such as the number of patents, the number of graduates from universities, human and financial resources allocated to research and development in the public and private sectors. But more qualitative indicators are needed if these data are to be accurate and thus useful in measuring competitiveness and growth. And provide better tools for policymakers allocating scarce resources.

#### **4.2.2.3 The Lisbon Agenda**

Jobs and growth are not only the top priority of the new European Commission, but the main preoccupation of the governments of the European Union, especially in Germany, Italy, and France, where both are sorely lacking. The ambition of the Lisbon Agenda (2000) is that the European Union shall not only match, but outperform the United States as a knowledge-based economy in 2010, with the retention of the fundamentals of the welfare state to boot. At the halfway mark the probability of this happening is not high, but this does not diminish the need for high quality statistics. In fact, quite the opposite for anyone hoping for a catch-up.

Economic growth rates are traditional gauges of economic performance. As the United States is the benchmark of the Lisbon Agenda, a shared definition of growth is not only a must, but is taken for granted by the media and in the political debate. Academic economists know that this assumption is wrong. At a conference organised by the European Commission in April 2005 a speaker (Hildebrand, Swiss National Bank) estimated that 0.5 to 1.0 % of the growth differential between the United States and the European Union in favour of the United States is explained by statistical methodology, such as military expenditure being categorised as investment in the United States and – more logically – as current expenditure in the European Union. Purchases of software have also been categorised differently. Ideally, there should be single global standard, but in its absence the media require two sets of calculations for each, i.e. a United States and and European Union figure.

Quality improvements of new capital goods must also be accounted for. If not, the contribution of the investment goods sector is underestimated. Similarly, capital's contribution to GDP growth is underestimated, if productive capital stocks are not based on quality-adjusted investment flows. A paper in the April 2005 issue of Economic Policy by Plutarchos Sakellaris and Focco Vijselaar concludes that quality-adjusting Euroland GDP data makes the slowdown in the 1990s marginally more pronounced and gives Europe's weaker technological performance more responsibility for the relatively lower growth in the European Union.

Since the middle of the nineties productivity statistics have been highlighted in the United States as key economic performance indicators, which of course they are. In the wake of the demise of the internet bubble, (high) productivity figures was the highly public justification of a loosening of monetary policy of historical proportions by Alan Greenspan and the Federal Reserve. It was assumed that higher productivity would keep inflation under control, retrospectively with good reason.

Understandably, U.S.- media coverage of productivity has been very extensive, while until recently, coverage by media in Europe has been much weaker and has tended to be defensive versus the stronger United States performance. To an important degree, this has been a reflection of a relative lack of interest in productivity by European central bankers, economists and politicians, with the notable exception of the United Kingdom, where the DTI has been a front runner, also publishing an annual update on the Lisbon Agenda.

There are strong signs of convergence in the United States and broader European Union interest in productivity, nourished by the lacklustre performance of the major European economies, again except the United Kingdom. In European business, both manufacturing and services, "Lean",

cutting out all the fat, is now the buzz-word. Better statistics on productivity, both in the private and in the public sector in the European Union, are therefore required, especially on the sources of changes in productivity.

The widespread use of ICT is usually cited as an important explanation of higher productivity (output per hour) in the United States compared to the European Union, with performance in the Nordic countries and the United States closer to the United States and southern member states pushing the average down. As the EU countries with the strongest use of ICT also have the lowest unemployment figures a further breakdown of globally comparable ICT statistics would be very useful. Perhaps with a special focus on software where the challenge of quality-adjustment may be daunting.

Productivity in the public sector is an emerging political challenge attracting increasing media attention as privatisation has more or less run its course in many countries and focus shifts to the tasks that remain in the public domain. Demographics dictate a strong increase in demand for public services, especially healthcare, but high tax rates and another demographical factor – fewer entrants in the labour force, single out higher productivity as the only feasible solution for the public sector.

#### **4.2.2.4 Proposals for immediate action**

The proposals put forward above all need further analysis and a considerable investment of time and effort. But something can be done immediately to ensure better communication of existing data. The Eurostat website is excellent, and the specialist or at least the very proficient user will be able to construct more or less what I propose. New thematic sub-sites for the Lisbon Agenda, for the Stability and Growth Pact, for the European Union and globalisation, and for the European Union and the knowledge economy. There will be some overlap, but such new sub-sites would attract not only attention, but many media users.

# Theme 4 - Dissemination to the news media - Some comments

Péter PUKLI

*President, Hungarian Central Statistical Office*

The media are becoming one of the most important users of statistics and at the same time the most effective intermediators of statistics. In order to satisfy a modern society's growing demand for information media rely on statistics, nowadays every single statistical press release gets its way to the media. Growing information consumption placed NSIs' work under continuous spotlight. As a consequence of the technological development, NSIs received powerful dissemination tools, like the Internet, and subsequently, data-storehouses. Since the early 1990s most of the NSIs have emphasized the importance of the relations with the press. In order to further strengthening of cooperation NSIs have worked out media strategies. Thanks to the mutual efforts, relations evolved in good direction and information packages have been developed for the media on „hot topics” of the public life.

Statisticians made efforts to formulate clear messages about official statistics. Both the structure and the language of press releases became „user-friendly”, the methodology applied grew available in a comprehensible way. The functioning of the NSIs beginning with data collection and ending by dissemination is getting transparent, too. Once the statistical service is made visible, components of the statistical value chain emphasise the coherence of statistics. Meanwhile, each link of the value chain (survey-taking, data-processing, delivery, analysis etc.) presumes different approach from the side of the media. Moreover, users can easily obtain scores of information on institutions via Internet, which ensures equal opportunity.

Generally, the NSIs' media concepts are in line with end-users' preferences. The assumption is that the statistical literacy do spread step by step, reporters' as mediators' sights reach beyond pure figures. While inside the NSIs there is a strive to attain high level of the data quality, efforts are also made to insure clear and easily understandable interpretation of statistics for the general public. In order to achieve this goal, NSIs place statistical data in social context when conveying figures to average users.

Each media segment needs special treatment. The demands of target groups vary depending on their places in the mediating process. If one hypothetically could assign the principles governing

statistics to the target groups, timeliness would be the main expectation of the news agency reporters; accuracy the utmost demand of economic journalists with national newspapers; relevance would be on the first place for economic commentators. While regional press would look for local data, broadcast journalists would seek an expert's voice, which explains the latest figures. For political reporters of first importance would be the implications of the figures in a broader context and news reporters would be interested in the extraordinary, salient facts. Providing all necessary additional information for each of target groups mentioned sets a constant and considerable amount of non-professional work onto the NSIs.

Critical issues, which do inevitably occur, need special management. Preparation to these events is the best way to handle uncomfortable situations. The aim is to lessen the potential damages to NSI, to decrease the harm probably affecting the institution's goodwill. Therefore, when critical situation emerges, the speed in identifying the problem and in reacting is indispensable. In order to properly inform the media the knowledge of all aspects of the problem is advisable, that is to say experts who understand every components of the incident should be involved. The need of protecting the NSI and its employees is obvious, so responses given have to be consistent and accurate. The responsibility in face of the public lies on the Chief Statistician.

Among the most important values that make official statistics differ from any other data sources are professional and political independence. This independence lies on the transparency of NSIs' production process. Moreover, NSIs should avoid any kind of involvement in politically sensitive issues. While performing their task to give a clear picture on social and economical processes, NSIs should avoid any kind of political influences. This role also means balancing between being civil servants and being professional statisticians. This independence coupled with high level of quality represents NSIs' most effective PR tool.

In 21th Century NSIs should develop more qualitative indicators for special segments of end-users, for example research and development, innovation and ITC sectors or university education. In order to comply with the new challenges of a knowledge-based society, innovation in NSIs concerning statistical products, data-processing and dissemination tools are indispensable.

## Theme 4.2 - The national statistical institutes and the requirements of the news media - Discussion

The following key themes appeared in the discussion:

### **Presentation of statistical data**

The national statistical institutes need to find a position between the extremes of just presenting statistical data in a ‘neutral way’ focusing on methodological information but refraining from deeper explanations of the reasons for the observed developments, or presenting explanations that are more easily digested by the media with background information on the economic or social context. In particular the issue concerns ‘hot topics’ that find a large echo in the media.

### **Fundamental relationship with the press**

The relationship with the press differs greatly in the Member States. In some of them there is a kind of partnership between the statistical institute and the media with an underlying feeling that each side does its work as well as possible. In other countries the relationship is more aggressive and the statistical institutes take rather defensive lines. Each national institute certainly has to determine its own policy towards the media according to specific national conditions.

The importance of close contacts with ‘key journalists’ has been emphasised by the conference. Such contacts help to develop a better feeling of what is important and to find out what kind of presentations are best suited for the media.

### **Treatment of errors**

In the approaches taken in case of erroneous data or other errors there has been a shift towards a clearly ‘proactive’ attitude. More and more national institutes take the position of not just correcting errors but preparing as early as possible an explanation of the nature of the error and, if possible, the reasons why the error occurred. Such an approach has found more understanding with journalists and the public at large than just corrective actions. However, the speed of correcting errors should not suffer under such a proactive approach.

## **The instrument of embargo**

An embargo is very appreciated by the media. It provides time for preparing articles and can thus be beneficial for the quality of information distributed by the media and the risks of errors can be reduced. However, the instrument can be difficult to use. There are experiences of non-observations of embargos. Some national institutes have taken the approach of ‘locking-up’ journalists for the critical time and thus avoiding external contacts. There can be different embargo conditions for different types of information or different groups of users. In some countries, embargos are not possible for legal reasons.

## Round table - To which extent are the NSI's ready to meet the future challenges of dissemination?

The following key themes appeared during the round table discussion:

The familiarity with Statistics Finland was measured bi-annually via questionnaires. According to these questionnaires, 81 % of Finnish people knew Statistics Finland. Furthermore 86 % of the Finnish people found the data reported reliable, only 8 % found them unreliable. **Ms Jeskanen-Sundström** underlined the importance of an open communication policy, establishing easy and smooth access between journalists and the statistical experts. In Finland, due to the efforts of the FNSI, users are in general well informed. This was achieved inter alia through the implementation of a comprehensive training programme. The nature of contacts to the press has changed during the last years. Experts in statistics become information consultants to the press. Finally, given national Finnish regulations (ethical code and statistical code), Statistics Finland would have no problems to meet the requirements of the Code of Practice.

**Mr Radermacher** found that no change in the German “Law on Statistics for Federal Purposes” was necessary in view of the implementation of the Code of Practices. As concerns more in particular the independence of dissemination, in case of conflict of interests (hypothetical political pressure to delay the release of particular statistics), the German NSI would be in a position to refer SDS standard that Germany had subscribed to. Mr Radermacher considered trust between the NSI and the user as a key to a successful dissemination policy. He proposed that such a policy could be approached via trust-building matrix of measures; composed of the categories of ‘Communication’, ‘Behaviour’, ‘Profile’ on the one hand, and ‘Products’ as well as ‘Statistical Services’ on the other.

According to **Ms Bohatá**, Eurostat’s mission appeared less broad than those of the NSIs. Limitations to Eurostat’s mandate were clearly set by the need for a legal Community competence in order to generate Community statistics. She referred to the macro-economic bias of Community statistics. Yet the concepts behind those macro-economic statistics were by no means straightforward and simply. Another feature was the politicisation of Community Statistics, as shown by the Structural Funds and Monetary Statistics. As concerns the relationship between Eurostat and the NSIs, no radical changes were needed, as the framework conditions had not changes (e.g. subsidiarity). The main challenge would lie in finding more efficient ways of



co-operation between European and national statistical authorities within the framework of the European Statistical System.

**Ms Krizman** described communication and relationship with the press in Slovenia. In Slovenia, media relations were considered a top management responsibility. This was seen as especially important as media played a key role in disseminating data to users. Good media relations would lead to win-win situations. In order for this to happen, the following conditions would have to be met: professional relationship between journalists and the statistical institution based on trust, transparency, high quality of statistical articles written by journalists and awareness by the public about the potential usefulness of statistics. Ms Krizman also referred to the psychological elements of successful media relations.

**Mr Van Der Veen** explained how the CBS would minimise the occurrence of disasters and its policy in case an error was discovered. In the latter case the CBS applied a pro active and transparent communication policy, directly going to the press. He mentioned the example of a downward adjustment of the Consumer Price Index, where this strategy had been applied thoroughly and successfully. An audit strategy was used to minimise the occurrence of errors. They were reported and corrected via a system of management reports. Finally, Mr Van Der Veen stressed that quality in statistics would be a matter of behaviour and culture not only of laws and procedures.

# Closing Speech

Jan PLOVSING  
*Director General, Danmarks Statistik*

First of all, I have a commercial-announcement to make, on behalf of Len Cook; He told me that if any of you are interested in buying the complete. “Len Cook Media-Fighter Kit”, it is on sale on the ONS web-site for a bargain price.

As we look back at the discussions of the last two days, I think we all realize that “the challenge of communicating statistics” is certainly one of the major challenges, facing the National Statistical Institutions in the 21st Century.

One lesson to be learned is that confidence in official statistics by the general public, the politicians, the media etc. cannot be taken for granted. Trustworthiness and credibility are essential prerequisites for carrying out our duties, but they are, in turn, closely related to our own ability to communicate statistics. One of the important lessons to be learned is that clear and easily understandable statistics are a precondition for public trust in official statistics.

During our conference, we have been listening to well-argued and thought-provoking criticism put forward by several users. We have to admit that much of this criticism is well-founded. Consequently, we must take note of these critical points and try to find solutions, which may be incorporated into action plans for improved communication in the years to come.

On the other hand, there is also much progress reported from all over the statistical community, positive experiences and new ideas, which should reach a wider audience. This DGINS Conference certainly has served as a forum for exchanging new ideas to master the challenge of communicating statistics.

If I may draw a personal conclusion from this conference, I think it has been amply proven that the challenge of communicating statistics goes far and beyond the simple dissemination of statistical results. Dissemination in the traditional way of thinking may be looked upon as a process carried out after the production of the statistics; a function added as an afterthought, so to speak.

This way of thinking, in my opinion, falls short of the demands of a modern society. In order to be effective, the principles of communication have to be integrated in the total statistical production process. It is not a thing to be considered after the production process, but from the real outset. Only then can we face the challenges of the 21st Century.

In Denmark we don't use lock-ups for releasing statistics, but we use them for statisticians! So after this two-day lock-up in a warehouse, you are all now released at the same time! But remember, you are still under embargo. That is to say: It is compulsory for you to enjoy your freedom and the nice weather, we have provided for you. And not think of statistics until Monday morning, when you are again "locked-up" in your offices.

The 91st DGINS is now coming to an end, and I would like to thank all the participants for their active participation in the conference. I would, especially, like to thank the speakers, the discussants and the persons chairing the sessions, the interpreters without whom we could not work efficiently and the excellent cooperation with Eurostat for this conference.

# Closing

Marie BOHATÁ  
*Deputy Director General, Eurostat*

Dear Mr Plovsing, dear colleagues,

As we are now getting near the end of this conference, I would like – on behalf of the Commission, but I am sure that I speak for all participants – to extend my sincere gratitude to Statistics Denmark for hosting the DGINS Conference and the SPC meeting.

The organisation of these events has simply been excellent – not just the Conference itself – but also the comprehensive and very interesting social programme for accompanying persons and the wonderful dinner party last night. I would like to thank you, Mr Plovsing, and also your team, who have all been extremely helpful and service minded. This has clearly been a lot of work, perfectly executed.

As regards the Conference itself, I am sure that we all leave with many new ideas. The representatives of different users groups have given us much food for thought and demonstrated that “The challenge of communicating statistics” is just as multi-faceted as the works of Gerhard Richter as we saw yesterday at the Louisiana Museum! I would like to thank all contributors.

Also, I think it has been really very interesting to learn more about the Danish Statistical System, and one can only leave this Conference with the impression that your office is a place to look for best practices and efficient management. You even arranged for Copenhagen Football Club to win the Scandinavian cup whilst we were here!

# List of participants

## Commission

### Eurostat

G. Hanreich  
M. Bohatá  
G. Decand  
G. Wächter  
S. Andersen  
S. Blair  
I. Schön  
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A. Versonnen (INS)  
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### Česká Republika

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### Danmark

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J.-L. Lhéritier (INSEE)

**Iceland**

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E. Hilmarsson

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P.-J. Crowley (CSO)

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C. Cingolani

V. Buratta

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D. Deinate (Statistics Latvia)

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C. Brunhart

**Lietuva**

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**Luxembourg**

S. Allegrezza (Statec)

M. Kafai (Statec)

**Magyarország**

P. Pukli (Statistical Office)

K. Posta Kiss (Statistical Office)

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