ISSN 1018-5739

02
2008

ΣSIGMA

THE BULLETIN OF EUROPEAN STATISTICS

Eurostat Conference

Modern Statistics for Modern Society

December 2007

eurostat
EUROPEAN COMMISSION

Editorial

We are all witnesses to the dramatic changes that are taking place within our societies today. Assisted by the media and the arrival of new technologies, more and more people are discovering their interest in global issues.

However, these days few people have time to read long analyses and complicated forecasts, be it in economic, political or social spheres. So what better way to obtain this information than by using statistical data? After all, figures are easily understandable by everyone, short and to the point and completely objective. Or are they?

What if the data come from sources other than 'official'? National statistical institutes have long lost their privilege of being the sole providers of statistical figures and have to compete in the information market with other organisations. The case of Sweden, where the central statistical bureau has to share their data-gathering responsibilities with over 20 government authorities, may serve as an indication of things to come.

At the moment at least, the 'market position' of official statisticians is relatively strong; we still are, at least in the perception of most people, the only 'real thing' in the business. But let us not delude ourselves. Every day we are being challenged in the field of our own expertise, by professionals and non-professionals alike.

The questions of how to successfully face these demands and modernise the way we work in order to 'stay competitive' in the future were the starting point of our December debate. In separate workshops, we focused on the shape of information markets, cooperation between research and statistical agencies, the relationship between producers of official statistics and their users and innovations in statistical systems.

I am happy that the conclusions of our conference can be brought to you in the new issue of *Sigma*. Inside, you will find short summaries of the topics discussed in the conference work groups and interviews with some of the speakers.

We are in a lucky position. Our products and services are increasingly needed, be it at a European or local level, by politicians as much as the media and, increasingly, by members of the general public. Reliable statistics have become an integral part of a democratic society ever more hungry for impartial and reliable statistical data.

It is up to us to use this opportunity successfully. I am fully convinced that our December conference 'Modern Statistics for Modern Society' has greatly contributed both to identifying the main future challenges in the field of our work and to finding possible solutions to tackle them with confidence.

Marie Bohatá
Deputy Director-General, Eurostat

Editorial



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THE BULLETIN OF EUROPEAN STATISTICS
Produced by Eurostat
Editor–in–chief: Philippe Bautier
Editorial team: Lukasz Augustyniak, Annika Östergren Pofantis, Johan Wullt.
Published by: Office for Official Publications of the European Communities, Luxembourg, 2008
ISSN 1018-5739

Graphic design by Fotolito 38, Italy

Printed in Belgium
Printed on white chlorine-free paper
Sigma is available free of charge from:
Eurostat, Communication Unit,
Bech A4/112, L-2920 Luxembourg.
Fax: (352) 4301 35349.
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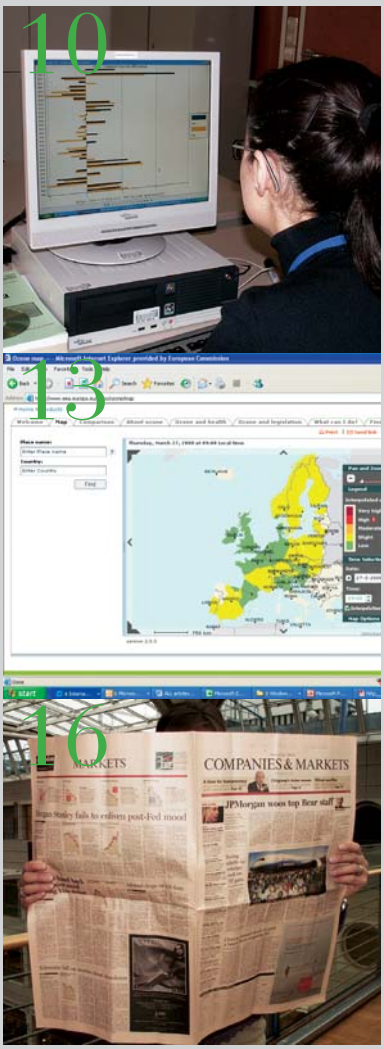
All issues of *Sigma* can be consulted online at Eurostat's website:
http://ec.europa.eu/eurostat

We would like to thank all those who have contributed to this edition of *Sigma*: Christine Ardillac, Tim Allen, Reno Camilleri, Stella Dawson, Michel Glaude, Antonio Golini, Peter Hackl, Denise Lievesley and Jacqueline McGlade.



Shaping statistics for the 21st Century – opening remarks by European Commissioner, Joaquín Almunia

"Statistics are crucial to understand the society around us. In today's world of rapid change, statistics help capture the transformations taking place, grasp their implications and develop an effective response. But in turn, we have to ensure our statistical tools are up to date, relevant and sufficient to meet the demands of the world we live in today." This was the argument put forward by Joaquín Almunia, the European Commissioner for Economic and Monetary Affairs, in his welcome speech to the conference. He went on to describe how our changing societies and economies would have serious implications for the future statistical system.

Mr Almunia pointed to the growing role played by statistics in the political system, where figures increasingly underpin our understanding of political issues, and statistics are often used as tools in policy evaluation. Given their growing role as a key component of the political process, the accuracy and reliability of statistics would increasingly come under scrutiny.

The growing influence of civil society in public decision making is another strong incentive to improve the quality of statistics. Mr Almunia stated that meeting the rising demand for statistical information with clear, accessible data would further encourage the engagement of users such as non-governmental organisations, stakeholder and lobby groups in the political process.

He also stressed the fact that globalisation, which is making the regions of the world more inter-dependent by the day, was broadening the scope for cross-border policy coordination and raising the demand for international comparisons in statistics. While commending the progress made in terms of statistical comparability and cooperation *within* Europe, he argued it was now time to widen this work to cover new countries and new issues.

New tools to manage modern challenges

Mr Almunia called for new statistical indicators that would measure, predict and manage the new challenges of the 21st century. Although the value of GDP for measuring economic performance is universally recognised, GDP is unsuitable for measuring individual welfare, environmental damage and social inequality. Despite very welcome progress to develop new indicators that would complement GDP, he said that there was still a long way to go until universally accepted indicators to measure wellbeing have been established.

Joaquín Almunia, European Commissioner for Economic and Monetary Affairs called for new tools to manage the challenges of the 21st century.

Mr Almunia concluded his speech with a call for better communication of statistics. Producing relevant and accurate numerical data is all very well. But if statistics are to fulfil their role as a public good and a tool of democracy, they must be clearly explained and set in context so that they are accessible and easy to use for the general public.

By Johan Wullt, Eurostat Communication Unit

Luxembourg Prime Minister Juncker: The difference between statistics and knowledge

In his introductory speech, the Luxembourg Prime Minister Jean-Claude Juncker focused on the difference between information and knowledge and asked whether the wealth of statistical information which is nowadays available has really improved policymaking and led to a better general understanding of the impact and consequences of policies.

'It is not enough for the statistical community to provide information, it should also ensure that the public can convert it into knowledge', said Luxembourg Prime Minister Jean-Claude Juncker at the Eurostat conference.

Jean-Claude Juncker used the euro area as an example of how a statistical description can differ from the public's perception. Statistics show that the euro area has had a strong development since the launch of the single currency with 15 million jobs created, low and stable inflation, decreasing budget deficits and stronger public finances.

Mr Juncker then quoted a Eurobarometer which showed that citizens of Europe are not convinced of the success. Some 81 % of Europeans associate the euro with higher prices. Less than half of the citizens in the euro area believe that, overall, the introduction of the euro has been advantageous. The proportion of respondents who believe that, overall, the introduction of the euro has been disadvantageous was highest in Italy and Greece — two countries which have clearly benefited from the currency union.

A possible explanation, according to Mr Juncker, is that citizens are ill-informed and do not fully realise that price increases are offset by improvements in quality. On the other hand, the representative basket of goods and services underlying the consumer price index is possibly disconnected from the rapidly changing taste and consumption patterns of the real consumer.

Converting information to knowledge

From a statistical viewpoint, the causes of the potential misconception should be investigated and the statistical concepts critically examined. Mr Juncker thought that it was not enough for the statistical community to provide information, it should also ensure that the public has the means to use the information and convert it into knowledge.

Regarding the political implication, he said that politicians are often quick to claim the credit for positive statistics and attribute good results to the policies they have implemented. They are also quick to blame negative statistics on the statisticians. He warned that acting in this way threatens to undermine the credibility of the European statistical system and in the long run the smooth functioning of the democratic process. Therefore Mr Juncker advised politicians and policymakers to support initiatives that enhance statistical governance and the integrity of the statistical system.

By Johan Wullt, Eurostat Communication Unit

'We are faced with the equivalent of a nuclear arms race'

Stella Dawson is the Global Treasury Editor at Reuters news agency in London. At the Eurostat conference, Ms Dawson spoke about the importance of algorithmic trading to the financial markets. *Sigma* met her to find out what algorithmic trading was, how it influenced today's financial markets and what could be expected in the near future.

'Super-quick computer programs based on algorithms have become the information brokers of yesterday. Computers do at warp speed what traders used to do by hand', said Stella Dawson, Global Treasury Editor at Reuters in London.

Ms Dawson began by introducing the concept of 'algorithmic trading' which was steadily gaining in importance among Reuters' clients.

'In many cases today, super-quick computer programmes based on algorithms have become the information brokers of yesterday. Computers do at warp speed what traders used to do by hand', said Ms Dawson.

'These programs can recognise price differences within certain parameters in milliseconds and, as a result, instantly enter new trade orders. In this type of transaction, it is actually the algorithm that decides on the most important aspects of the order, such as the timing, price or even the final quantity of the order. In electronic financial markets, hundreds of millions of dollars worth of contracts are generated at a rate much faster than the human eye could see or a finger press a button!'

Algorithmic trading counts for 25–30 % of the daily turnover in the world financial markets today.

Ms Dawson explained that algorithmic trading has been growing at a very fast pace.

'The use of computers in stock markets goes back to the 1970s', she said. 'In the 1980s, computers became increasingly important for Wall Street, as they allowed quicker and more effective execution of orders to trade in large amounts of stocks.'

The use of algorithms for entering trading orders at electronic financial markets is a logical step in this evolution.

'In 2005, algorithmic trading accounted for about 5 % of daily turnover in the world financial markets, today it accounts for 25–30 % of this turnover and is still growing, according to Reuters in-house estimates. In the meantime, algorithms are almost mandatory for someone who is trading in the US markets', she added.

In the competitive world of financial trading, more and more sophisticated algorithms are being applied to economic data releases. This increases the speed with which transactions take place in financial markets.

'We are faced with the equivalent of a nuclear arms race, where the computer scientist who can create the slightest technological advantage can make the difference between substantial profit and loss for their firms', said Ms Dawson.

Measured by the millisecond

Upon receipt of new statistical figures from an institution such as Eurostat, Reuters delivers a high-speed feed of these data to subscribers and tags them with special markers to enable them to recognise the most important 'data points'. They are fed into the subscribers' computers and can instantly generate buy and sell orders and make lightning-quick trades.

It means that information providers such as Reuters need to pose an increasing array of demands upon government agencies and institutions releasing statistical data, as their clients want the information at lightening speed.

'Whereas Reuters used to measure its delivery of economic news and data to clients in seconds, in December 2007 we started to measure ourselves by the millisecond. Together with our technology experts, we are now trying to find ways of speeding up how quickly we transmit news handed out by statistical data providers, enter it into our computers and deliver it to our customers.'

Format change needs to be alerted

'To give you an example, as one of the projects we are currently investigating deals with automated programs to read your releases and send out news alerts, we will need to be forewarned each time you change a format of your statistical data release', said Ms Dawson.

'The wrong positioning of one letter, one word, let alone a column, will mean the wrong or no alert being sent. This in turn will cause the wrong trade and traders losing millions of dollars, or at worst, risk financial markets being thrown into chaos.'

So important is the focus on speed, said Ms Dawson, that often even the location of the transmitting computers may play a role in the transaction. Computers located nearest to a trading venue save milliseconds on the timing of a trade and get a better price.

'Atomic clocks will one day soon allow sub-second release from our computers into the market place', Ms Dawson added.

Equally, concluded Ms Dawson, statistical data providers may also face a number of challenges in the near future, if they want to defend their reputation and position on the market. With journalists processing and reporting on economic statistics at a more rapid pace, innovations such as real time feeds of statistical data directly into the recipients' computers may become a reality before we know it.

By Lukasz Augustyniak, Eurostat Communication Unit

Workshop on Innovations in Statistical Systems

Opening the session on Innovations in Statistical Systems, Marie Bohatá, Deputy Director-General of Eurostat, spoke of the new challenges faced by statisticians in delivering timely and relevant statistical information on the one hand and reducing response burden and compilation cost on the other. Given the growing sophistication of the information market, official statistics could become marginalised unless their producers adequately responded to the ongoing economic and societal changes taking place within contemporary society.

Marie Bohatá, Deputy Director-General, Eurostat chaired the workshop on Innovations in Statistical Systems.

Mrs Bohatá saw the need for a comprehensive modernisation of the official statistical service as the only viable option to maintain the role of the leading provider of information underpinning decision-making processes at the European, national and regional levels. She suggested that the application of quality enhancement initiatives, such as improved consistency, and re-use of existing data as well as the combination of various data sources, should be considered inevitable if statisticians wanted to better serve the needs of users.

The Netherlands: need for a flexible approach

Following the introduction, Gosse Van Der Veen, the Director of the Central Dutch Bureau of Statistics, presented the modernisation procedures taking place at the Dutch national statistical institute (NSI). He said that the long tradition of strictly centralised official statistics in the Netherlands led to the need for a more flexible approach, which was behind the current modernisation programme.

Mr Van Der Veen explained that the programme aimed both at an improvement of the statistical methodology and production process and at achieving more flexibility in order to answer the new demands of users and to cope with budget cuts. To reduce the response burden, better use of administrative data and of the registers had been achieved.

Among the other main challenges that the Central Dutch Bureau had to deal with were, according to the speaker, an increasing competition from third parties also using registers and work in new areas such as globalisation, social cohesion and health.

The modernisation of the Dutch NSI should take four years and be completed by 2010. By 2012, Statistics Netherlands hopes to be able to operate on a new overall budget to be reduced by 10 %.

The Czech NSI: top management involvement a must for efficient change

Jan Fischer, the President of the Czech Statistical Office, spoke of the re-engineering of the statistical information system (SIS) as part of the fully-fledged integration of his organisation into the European statistical system. The growing number of requests for new and more comprehensive statistical information, such as detailed regional breakdowns, and calls for higher-quality standards were the aspects that had led to the modernisation of the SIS.

According to the speaker, the improvements carried out by the Czech Statistical Office greatly enhanced horizontal communication and strengthened teamwork within the organisation. They also reinforced cooperation with the owners of administrative data.

Concluding, Mr Fischer highlighted the crucial role of top management in the modernisation processes and stressed the importance of working within multidisciplinary teams. He also praised the involvement of young colleagues in the design of the new system.

Luxembourg: decreasing budget can limit innovation

The significance of a careful approach to any modernisation effort before its implementation was discussed by Serge Allegrezza, the Director-General of the Luxembourgish statistical office Statec. The final objective of any reorganisation effort should be the intention to make statistical products more accessible and understandable to the users.

For the speaker, the NSIs faced a dilemma in that they were expected to match the growing demand from the users of their data often operating on a stable or even decreasing budget. This set severe limits on any innovation process, although often scarcity of resources could prove to be a trigger for positive changes.

Need for priority and target setting

The closing debate revolved around the issues of usefulness of well-established but often outdated statistical systems for the acceding countries; relevance of the modernisation efforts taking place in the Czech Republic and in the Netherlands for the ESS as a whole, as well as the need for priority and target setting.

Many speakers agreed that the trends of the statistical innovation processes lay in their integration and overall standardisation. Learning from the experiences of other NSIs would ensure the efficiency and consolidation of different innovation efforts while safeguarding national specificities.

By Lukasz Augustyniak, Eurostat Communication Unit

'Improving cooperation between researchers and statisticians'

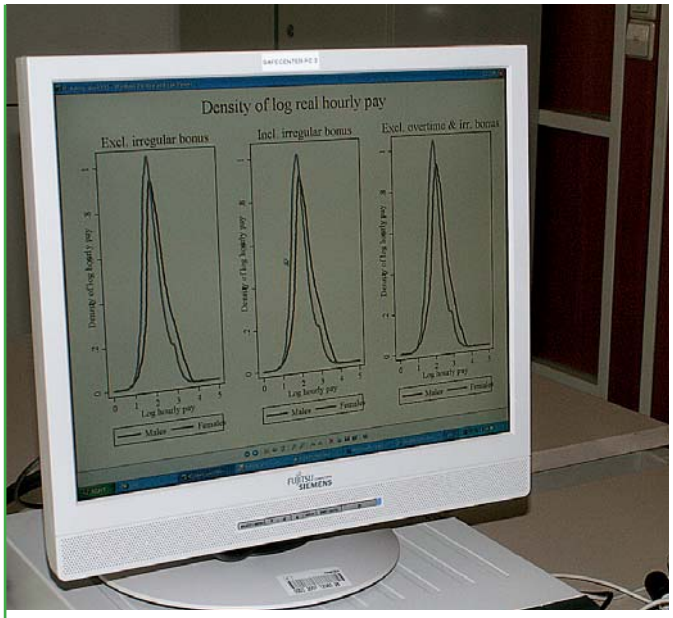
Accurate and timely data are crucial for researchers wanting to analyse our present society. But collecting the data is a time-consuming and expensive task. Therefore academics strive for a close cooperation with national statistical institutes in possession of interesting data.

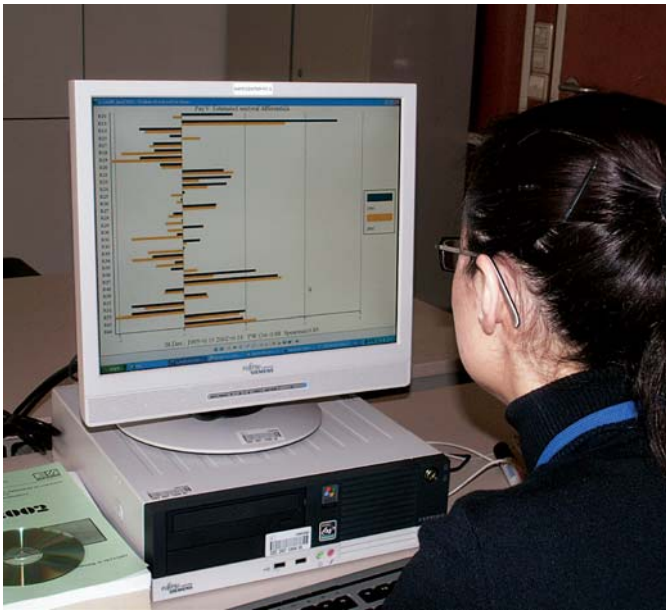
'If we want insight into our society, we need to give researchers access to relevant data', said Professor Denise Lievesley, President of the International Statistical Institute in The Hague at the Eurostat conference.

During the workshop on Research and Statistics, Professor Denise Lievesley, the President of the International Statistical Institute in The Hague, an association for statisticians from all fields of the subject, shared her long experience in the field of cooperation between researchers and statistical authorities and offered valuable advice to improve this relationship.

It is obvious that the research community needs the national statistical institutes (NSIs) to obtain access to data. But does it work the other way around. Are they interdependent? Well, according to Professor Lievesley, NSIs have at least three good reasons to cooperate with researchers. Firstly, academics can provide additional experience and time — two valuable resources for data analysis, which are often scarce at an NSI. Secondly, it can be easier for an independent researcher rather than a public official to draw and publish a range of conclusions some of which might be politically inconvenient. Furthermore, in the long run, statisticians could establish a network of researchers and experts to find consultants who can advise on all aspects of data collection and analysis and can act as external advocates for data. In this way, they can offer a direct link to the end users.

'Just extracting data is not enough. Information is not knowledge. You need someone to interpret the data if you want to analyse policies. Or, in other words, if we want insight into our society, we need to give researchers access to relevant data', says Denise Lievesley.





Eurostat has a 'Safe Centre' where researchers can study micro-data. Pictured are two researchers from the European Central Bank studying mirco-data in the Labour Force Survey. Forty out of 44 European statistical offices give researchers access to micro-data.

Micro-data increasingly easy to access

But what do the researchers actually want? With modern information technology, one might assume that they already have instant access to most data collected or managed by Eurostat or any other European national statistical institute.

However, the situation is not that simple. One problem is providing access to micro-data, which are essential for a large amount of research. Micro-data contain information on individual respondents or on economic entities and therefore permit a level and depth of analysis that cannot be undertaken with aggregated data. Due to the protection of confidentiality, micro-data have generally been more strictly guarded than aggregated data and are only partially accessible to academics.

Researchers' access to these data is improving. At least according to a study presented by Risto Lehtonen during the same workshop. It found that 40 out of 44 European statistical offices gave researchers access to micro-data if the researchers had certified their identity and the purpose of the usage with a written contract or a similar arrangement. The micro-data were in most cases distributed electronically and could in some cases even be downloaded directly from an Internet site.

'This is positive. This paper shows that access to micro-data has improved over recent years. But it focuses on whether any data are available and does not address to what extent the data were available and if there were any restrictions. The aim is of course to provide as much data as possible in the most flexible way but at the same time protect confidentiality', says Denise Lievesley.

Administrative data — cheap and reliable but very sensitive

Even if micro-data in general are becoming easier to access, changes in the sources of data are tending to pull in the opposite direction. NSIs are increasingly using administrative data i.e. micro-data originally collected by authorities or public administrations. These data are cheap, can be very reliable and can reduce response burden, but they also raise new questions. Not only do these data contain sensitive information about individuals, but the individuals may also be unaware of the use and it would be difficult to contact them for consent.

'Administrative data are used more and more often in statistical systems, but are less accessible for researchers than data from censuses or surveys. Statistical institutes and academic communities need to work together to address the obstacles so that data can be fully exploited for the benefit of society whilst ensuring that public trust is maintained', says Ms Lievesley.

She suggests that offering randomised sub-sets of data, in a similar manner to the handling of the data from censuses, would address the sensitivities and therefore facilitate data access for external researchers.

In order to facilitate the administration of requests from researchers and to make decision-making transparent, it is important to have a policy for secondary user services, i.e. a policy governing relations with the research community. The policy should contain straightforward answers to questions like: Who are the data collected for? Who can have access to

the data and under what conditions? How can we store data to preserve it for future generations of researchers?

But despite a clear policy, answering complicated requests from researchers could be a time-consuming activity for any NSI. In this case, a data broker — an intermediary who understands both the needs of the user and the obligations a user has towards the data providers — could be useful. The data broker functions as an intelligent filter answering queries and controlling the data usage, thus liberating resources for the statistical institute.

'To strengthen the links between statistical institutes and research communities, we have to work together through the framework programme and underscore best practices. Good examples deserving recognition are found in the UK and Norway where the statistical institutes have a long tradition of working with an information broker, the academic data archive. It has resulted in friction free and tailored access to data', concludes Ms Lievesley.

By Johan Wullt, Eurostat Communication Unit

Workshop on Research and Statistics

Research as an integral part of official statistics as well as cooperation between statistical authorities and research institutions were the two main themes debated at this workshop.

The session contained presentations dealing with the state of statistical research in the European Union, research activities in social sciences and humanities, the socio-political relevance of statistics and the ways of strengthening links between official statistical agencies and research communities.

The discussions that followed shed light on the impact of various research projects on the practices of official statistics, the relationship between the statistics producers and policymakers and the level of international collaboration in the field.

As in parallel workshops, the speakers debated the current challenges to official statistics such as globalisation and ever more complex interactions of economy and social environment. The need for more comprehensive data in a number of fields was stressed and the benefits of international cooperation between different data-producing bodies acknowledged.

The issues of data confidentiality, the balance between confidentiality and range of accessible data and the concerns of data providers were also discussed.

Peter Hackl, Director General, Statistics Austria, was the chairman of the workshop on Research and Statistics.

Pressures on the environment forces statistics to change

Jacqueline McGlade is Executive Director of the European Environment Agency (EEA). At the conference, she painted a picture of how the demand for environment statistics will evolve in the future. In her vision, increased timeliness, spatial resolution, seasonal data and integration between social, economic and environmental statistics are the areas which will need to develop rapidly in order to satisfy policymakers and the public.

Jacqueline McGlade Executive Director of the European Environment Agency underlined that neither one number per country, nor one number per year is a viable approach.

As the issue of climate change rockets up the political agenda, Ms McGlade believes that there will be growing pressure to provide more up-to-date information on, for example, the progress in reducing greenhouse gas emissions. Under current procedures, the European Union will not know until 2014 whether or not it has met the obligation under the Kyoto protocol for the period 2008–12.

'We are likely to see a plethora of unofficial estimates carried out by various institutions across Europe. Eurostat and the EEA could, of course, remain aloof from all this back-of-the-envelope stuff, but in my view we would be failing in our task of providing the European policymakers — and the public — with the best possible basis for assessing progress', she said.

'We have to face the fact that the unofficial estimates will be addressing a real need, and see what we can do to meet that need ourselves. A now-estimate can be a lot more useful to policymakers in that it allows them to adjust policies, rather than being told two years down the line that they got it wrong. Not that the final judgment isn't needed either', she added.

She also warned that if the official statistical institutes do not provide the data, a private market would be created instead and she questioned whether figures provided in this way could really be trusted.

One number per country not enough

Ms McGlade also brought up the issue of spatial resolution at the conference and the fact that one number per country is no longer enough. The demands for more spatial socioeconomic statistics range from population to GDP expenditure, energy use and road transport journeys. Today, policymakers want to know not just what is happening regarding environmental pressures and impacts, but also where these are happening in order to better target policy measures.

'When you talk about the environment you need to know where you should act', Ms McGlade said, before mentioning the use of 'geostatistics' as a good way forward.

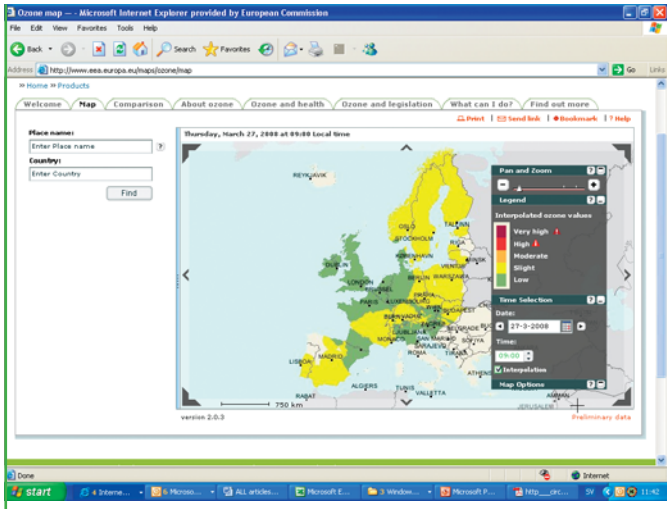
One number per year not viable approach

In much the same way as 'one number per country' is not enough, Ms McGlade underlined that 'one number per year' is neither a viable approach to issues such as energy use, water use and climate change.

'To state the obvious example: the average flow of water in a river doesn't say very much about its capacity to support life if it is dry during the summer months. Moreover, some pressures, such as irrigation and tourism, are highly seasonal and need to be properly documented if they are to provide real support to policy', said Ms McGlade.

Integration needed

Increased integration of statistics is also a field in which development needs to speed up. In order to identify what is happening to the state of the environment, policymakers need to understand the driving forces and pressures that impact on the natural environment and the role of poli-



The EEA's ozone website provides close to real time spatial data.

DPSIR

DPSIR is a causal framework for describing the interactions between society and the environment. It has been adopted by the European Environment Agency. The components of the model are:

- driving forces of environmental change (e.g. industrial production);
- pressures on the environment (e.g. discharges of waste water);
- state of the environment (e.g. water quality in rivers and lakes);
- impacts on population, economy and ecosystems (e.g. water unsuitable for drinking);
- response of society (e.g. watershed protection).

As a first step, data and information on all the different elements in the DPSIR chain are collected. Then possible connections between these different aspects are explored. Through the use of the DPSIR modelling framework, it is possible to evaluate the effectiveness of responses put into place.

cies — in either contributing or mitigating the pressures and impacts. Therefore, official statistics need to range across the social, economic and environmental domains with increasing demands for integration. Using the DPSIR framework, which describes this interaction between society and the environment, is a good way of addressing integration.

'In this area, we need statistics on waste generation and disposal, use of natural resources such as water and land and environmental taxes, subsidies and expenditures. In addition, we need socioeconomic data for the main sectors, which affect the environment and people's health, such as land use, energy consumption and tourism', Ms McGlade said.

Alternative ways of funding

Ms McGlade concluded the presentation by launching a discussion on the way official statistics can be funded.

'I do not believe that statistical offices will be able to compete with commercial forces if they only have to rely on public funding. We need to allow public bodies to accumulate funds and reinvest in themselves', she said.

By Annika Östergren Pofantis, Eurostat Communication Unit

Workshop on Official Statistics and Statistical Support of Public Policies

Michel Glaude, Director of Social Statistics and Information Society, Eurostat, chaired the workshop on Official Statistics and Statistical Support of Public Policies

The workshop on Official Statistics and Statistical Support of Public Policies dealt with issues such as an exact definition of the term 'official statistics', the question of 'monopolising' the production of statistics by the national statistical institutes (NSIs) and the growing challenges faced by statistical institutions in today's information society.

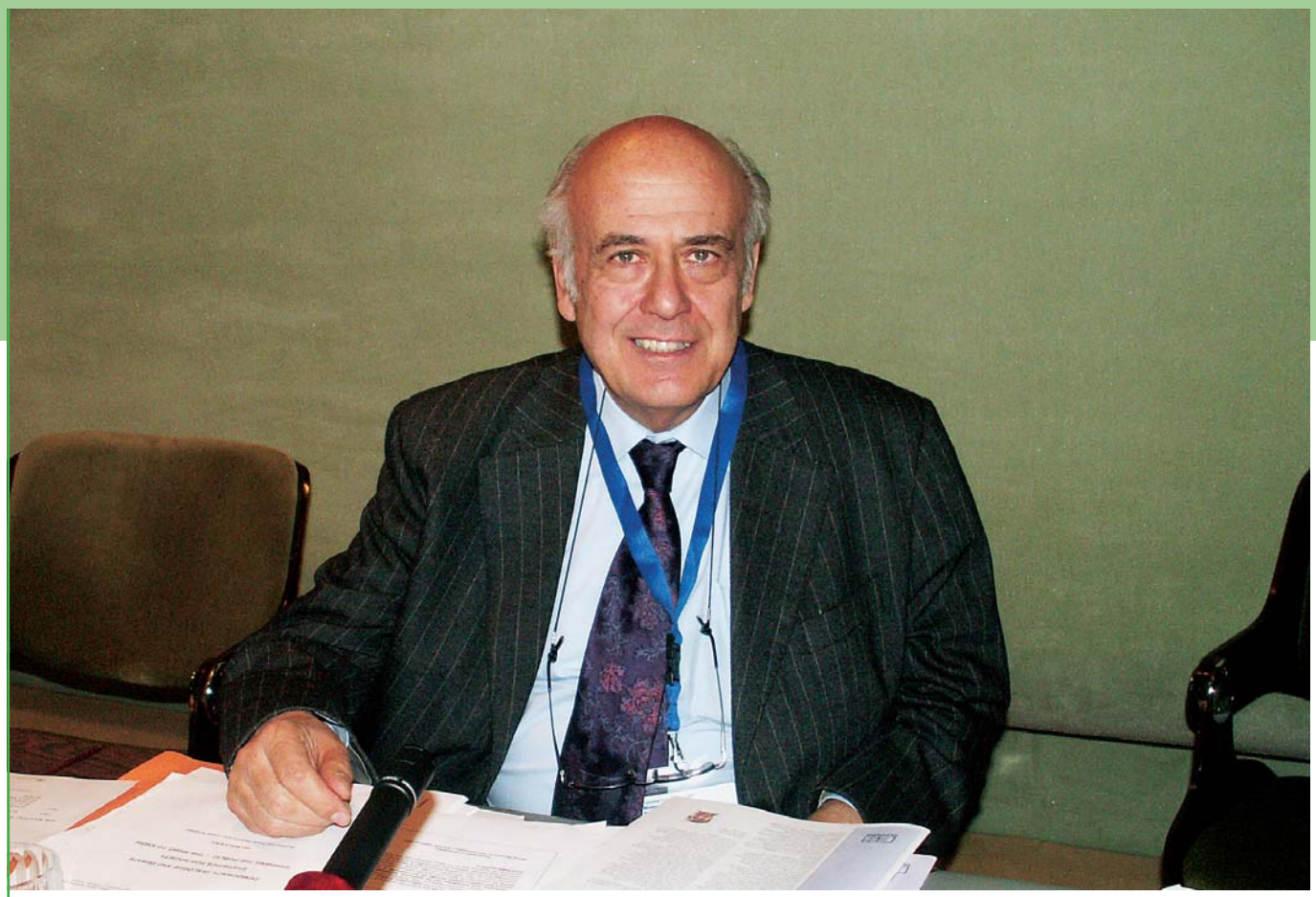
The proposed regulation on European statistics defined them as 'relevant statistics necessary for the performance of activities of the European Community'. This suggests that the NSIs do not have a monopoly on the production of official figures. Here, an example of Sweden was quoted, where the NSI shares the responsibility of statistics with a number of governmental authorities but still performs a lot of this activity on commission.

The issue of adaptability of statistical production in a time of new needs and changes in society was broadly debated. Among the key points were the increased need for prioritisation and the ability to anticipate new trends/fields of interest and a better cooperation in different statistical domains so as to deliver a more 'global' picture behind the figures. The question of how the NSIs should adapt to increased competitiveness on the part of other data producers by using new data collection techniques and data estimation was also debated.

The final part of the workshop sought answers to questions such as: are too many statistical figures being produced today, thus confusing the non-expert users? How much could an improved compliance with the European code of practice and a better dialogue with data users (mainly at a national level) boost the public's confidence in statistical figures?

'Data are an empty bag, anyone can fill it with their own interpretation'

Antonio Golini is a Professor at the Department of Demographic Sciences of Sapienza University in Rome. During the Eurostat conference, he talked about the complicated relationship between the mass media and the producers of statistics.



'Statisticians should bear in mind that the clearer the way they present their figures, the more impact they will have on the public', said Antonio Golini, Professor at the Department of Demographic Sciences, Sapienza University, Rome.

Professor Golini started by placing the discussion against the background of an information society. In today's western democracies, the popular mass media play a privileged role as the principal communication channel within society. Informing the public about statistical issues can thus be seen as a part of the broader mission of the media, in the fields of economy, politics and culture.

'In the era of computers, the Internet, satellite and mobile communications, it is understandable that people want to have more information in all of these fields', said Professor Golini.

'It is therefore important for me to have a closer look at the relationship between statisticians and the mass media, as statistical data are becoming increasingly popular with journalists. If you compare today's newspapers and magazines with those from 10 or even 5 years ago, the quantitative difference is amazing! Things that used to be considered too boring or technical back then, can be found on the front pages of today's publications.'

Simple, everyday language needed

In order for the statistical message to effectively reach the audience, a number of issues need to be considered. According to Professor Golini, a thorough focus on the language and the amount of information going to press is necessary.

'Things that used to be considered to be too boring or technical 5 or 10 years ago, can be found on the front pages of today's publications', said Mr Golini.

'The big problem is the fact that the language of the statistical message is often too scientific and therefore too difficult to comprehend for non-specialised audiences,' said Professor Golini.

'A newspaper reader or a television viewer is used to a relatively simple, everyday language. If the data are presented in a complicated way, they will not be understood by the very target audience they mean to reach.'

A similar problem can be observed in the case of the amount of statistical information or the form of its presentation for the press.

'All these many graphs, tables or indicators, accompanied by a lengthy textual analysis, are pointless here,' said Professor Golini.

'The statisticians should bear in mind that the clearer the way they present their figures, the more impact they will have on the public.'

According to the professor, another issue should be considered in this context too: data given away in the form of large amounts of text risk being distorted or falsely interpreted by journalists who are not experts in this field.

'My message is clear,' said Professor Golini. 'In future, the producers of statistics will need to develop better skills in preparing their information for the mass media, both in terms of the language and of the style of their presentation, in order to avoid accidental distortions caused by misreporting.'

Equally, in the interest of the public, Professor Golini expects journalists to do their bit as well.

'I think that reporters should also be expected to fully understand statistical data they are reporting on and persistently work with an aim of creating a readership that is more educated in the field of statistics.'

'In my opinion,' said Professor Golini, 'statistical data are a bit like an empty bag that anyone can fill with their own interpretation. It should be in the interest of the statisticians as well as the wider public that this interpretation is correct.'

Colourful without being inaccurate

Another issue of interest to Professor Golini is the timing of statistical production and its publication. How to preserve figures produced in the time of diminished media interest from becoming 'old news' and, adversely, what to do when the demand from the media for statistical information increases? And how to then best provide them with data that are 'attractive, timely, significant, easy to read and understand, and impartial?'

'It is no secret that journalists will always go for the most "sensational" number, because experience shows us how "out of the ordinary" events attract a better audience. Thus,

sometimes, a distortion of the data may not be accidental, but a means of creating headlines. This stresses the fact that statisticians should both try to obtain "more space" for their figures in the mass media but also push for total accuracy.'

At the end of our meeting, Professor Golini reinforced his view that the information society presents both an opportunity and a challenge for statisticians. It is his view that the relationship with the media had significantly improved over the past couple of years and, with a bit of effort on both parts, would continue to do so.

'One can imagine many strategies for improving this relationship,' Professor Golini said, 'for instance, the expansion of institutional, national and international bodies for statistical quality control for both public and private producers of statistics. Or a more generous availability of human and financial resources at the national statistics institutes so that they can properly respond to users' expectations and demands.'

'The needs of the mass media and respect for a correct reading of facts do not have to be mutually exclusive: statistical data can be emphasised, coloured or made more pleasant and attractive to absorb without being inaccurate,' Professor Golini concluded.

By Lukasz Augustyniak, Eurostat Communication Unit

Workshop on Communication between Official Statistics and Authorities and Users

Reno Camilleri, Chairman of the CEIES (*) Subcommittee on Dissemination Policy, Malta Statistics Authority, chaired the workshop on Communication between Official Statistics and Authorities and Users.

The workshop included presentations dealing with issues such as the evolution of official statistics, making statistics more relevant to the media and finding ways of making official figures more accessible to the general public.

The changing face of official statistics in the past 200 years was at first analysed from the point of view of their importance for governmental policymaking. However, a growing interest in statistical information on the part of the public marks a turn in the way statistical data should be produced and presented to their users. Workshop participants suggested that, in view of this shift, new, private users should be treated on equal terms with governmental and administrative bodies.

Speakers used examples of statistical institutions successfully transforming their approach to the dissemination of statistical figures to reflect the abovementioned changes. In this context, the importance of 'raising the levels of statistical literacy' among the new recipients of data was debated. Examples of good practice were quoted.

The complicated relationship between the producers of statistics and the media was also widely discussed. The participants debated the issue of how to maintain the integrity and reliability of statistical figures while trying to fulfil very specific demands by journalists. The fact that the media were always on the lookout for an attractive, simplified or sensationalistic form of data presentation was seen as posing a serious future challenge for statisticians.

(*) CEIES – The European Advisory Committee on Statistical Information in the Economic and Social Spheres.

Modern Statistics for Modern Society — reactions…

Thomas Brinkmann,

European Commission EuropeAid Cooperation Office

I have recently started working in EuropeAid with the Medstat project, so I came to learn more about statistics, understand the challenges in this area and meet some of the people from Eurostat and the Medstat countries, with whom I work.

Pascal Chelala,

Managing Director at TNS Opinion

Making a decision without statistics is like driving a car without lights. Having quality data is vital to an opinion poll institute, whose surveys need to be based on reliable and representative samples. This conference is very important because the significance of statistics today needs to be recognised. It also provides an opportunity to talk about the future and allows the particular requirements of opinion poll institutes to be expressed.

Teimuraz Gogishvili,

Department of Statistics under the Ministry of Development, Georgia

I have taken the opportunity of taking part in the conference as well as meeting our counterparts in Eurostat and elsewhere. There have been many occasions to meet informally and to discuss in detail the future of EU–Georgia cooperation. I attended the workshop on Communication with Users and heard many interesting speeches and reports.

Steven Keuning,

Director-General of Statistics at the European Central Bank

It is very useful to organise such a conference. The participation of high-level policymakers is very important. We can better understand their needs and they can better understand our difficulties in producing top-quality statistics. Very often, policymakers take statistics for granted. This conference is also an occasion to think more strategically on how to produce high-quality statistics with the limited resources available. Finally, it is an opportunity to learn from each other, to meet other people and exchange bilateral experiences.

Gunilla Lundholm,

Director General's Office, Statistics Sweden

I found the workshop on Official Statistics and Statistical Support of Public Policies especially interesting since I work both with quality in statistics and communication of statistics. The efforts and discussions in this area have certainly developed since the early 1990s, although a lot remains to be done.

Eric Marlier,

Manager responsible for international relations at the International Network for Studies in Technology, Environment, Alternatives, Development

CEPS is a Luxembourg-based institute which produces and analyses socioeconomic data in a national, interregional and international context. The aim of this conference is to discuss with other producers and researchers the data we use on a daily basis, to exchange ideas and to endeavour to make statistics more responsive to the requirements of socioeconomic analysis.

Modern Statistics for Modern Society 6-7 December 2007

Programme

Plenary session

- Joaquín Almunia, European Commissioner for Economic and Monetary Affairs: *Shaping statistics for the 21st Century*
- Jean-Claude Juncker, Prime Minister of Luxembourg: *Introductory remarks*
- Yves Mersch, Governor of the Central Bank of Luxembourg, *Society forming changes and their impacts on information needs*
- Sylvester Young, Director, Bureau of Statistics, ILO, *Employment statistics as social statistics: some recent challenges*
- Stella Dawson, Global Treasury Editor, Reuters, *Changes in the information market*

Workshop on Innovations in Statistical Systems

Chair: Marie Bohatá, Deputy Director General, Eurostat

Discussant: Serge Allegrezza, Director General, Statec, Luxembourg

Speakers:

- Gosse van der Veen, Director General, Central Bureau of Statistics, Netherlands *Building a new statistical system: the architecture*
- Jan Fischer, President, Czech Statistical Office: *A statistical system for future generations*

Workshop on Research and Statistics

Chair: Peter Hackl, Director General, Statistics Austria

Discussant: Tim Holt, Professor, University of Southampton, UK

Speakers:

- Pierre Valette, Head of Unit, European Commission, DG Research: *Needs for research in Social Sciences and Economics and support to statistical developments*
- Pedro Díaz Muñoz, Director of Statistical Methods and Tools: *Dissemination, Eurostat Research in official statistics in the EU. A balance.*
- Risto Lehtonen, Professor, University of Helsinki, Finland: *Cooperation between statistical authorities and research bodies*
- Mario Hirsch, Director, Pierre Werner Institute, Luxembourg: *NGO as a facilitator of cooperation*

- Denise Lievesley, President of the ISI Executive Committee: *Strengthening the links between official statistical agencies and the research communities*

Workshop on Official Statistics and Statistical Support of Public Policies

Chair: Michel Glaude, Director of Social Statistics and Information Society, Eurostat

Discussant: Jean Pierre Puig, Inspector, INSEE, France

Speakers:

- Mats Wadman, Deputy Director General, Statistics Sweden: *The National Statistical Institute as a competitive actor on the information market and as a coordinator and facilitator of cooperation within official statistics - the case of Sweden*
- Jacqueline McGlade, Executive Director, European Environmental Agency: *What kind of official statistics are needed to support environmental public policies?*
- Lars Backer (Statistics Sweden) for the Nordic Forum for Geostatistics and the European Gridclub: *The "Nordic Forum for GeoStatistics" and the next step towards an infrastructure of spatial data for sustainable development in Europe*
- Antonio Baigorri, Head of Unit, Eurostat and Martina Hahn, Head of Section, Eurostat: *Communication with users on quality of official statistics*
- Inna Steinbuka, Director of Economic and Regional Statistics, Eurostat: *Improving public trust and understanding of the HICP*

Workshop on Communication between Official Statistical Authorities and Users

(Session organised by the CEIES - The European Advisory Committee on Statistical Information in the Economic and Social Spheres)

Chair: Reno Camilleri, Chairman of the CEIES Subcommittee on Dissemination Policy, Malta Statistics Authority

Discussant: Margit Epler, Vice President of CEIES, Federal Chamber of Labour, Austria

Speakers:

- Ian Maclean, CEIES Bureau Member, Business and Trade Statistics Ltd., United Kingdom: *Democracy, dialogue and debate*
- Caroline Willeke, Head of Division, European Central Bank: *Making statistics relevant to the general public*
- Antonio Golini, CEIES Bureau Member, Professor at University of Rome "La Sapienza", Italy: *Making statistics relevant to the media*

- Karl Froeschl, E-Commerce Competence Center, Associate Professor of the University of Vienna, Dept. of Scientific Computing, Austria: *Official statistics - availability and accessibility*

Reports from parallel sessions given by workshop chairmen

Round Table on Future Markets for Statistics

Chair: Hervé Carré, Director General, Eurostat

Panel:

- Stella Dawson, Global Treasury Editor, Reuters, United Kingdom
- Steven Keuning, Director General Statistics, European Central Bank
- Øystein Olsen, Director General, Statistics Norway
- Shuichi Watanabe, Deputy Director, Statistical Institute for Asia and the Pacific

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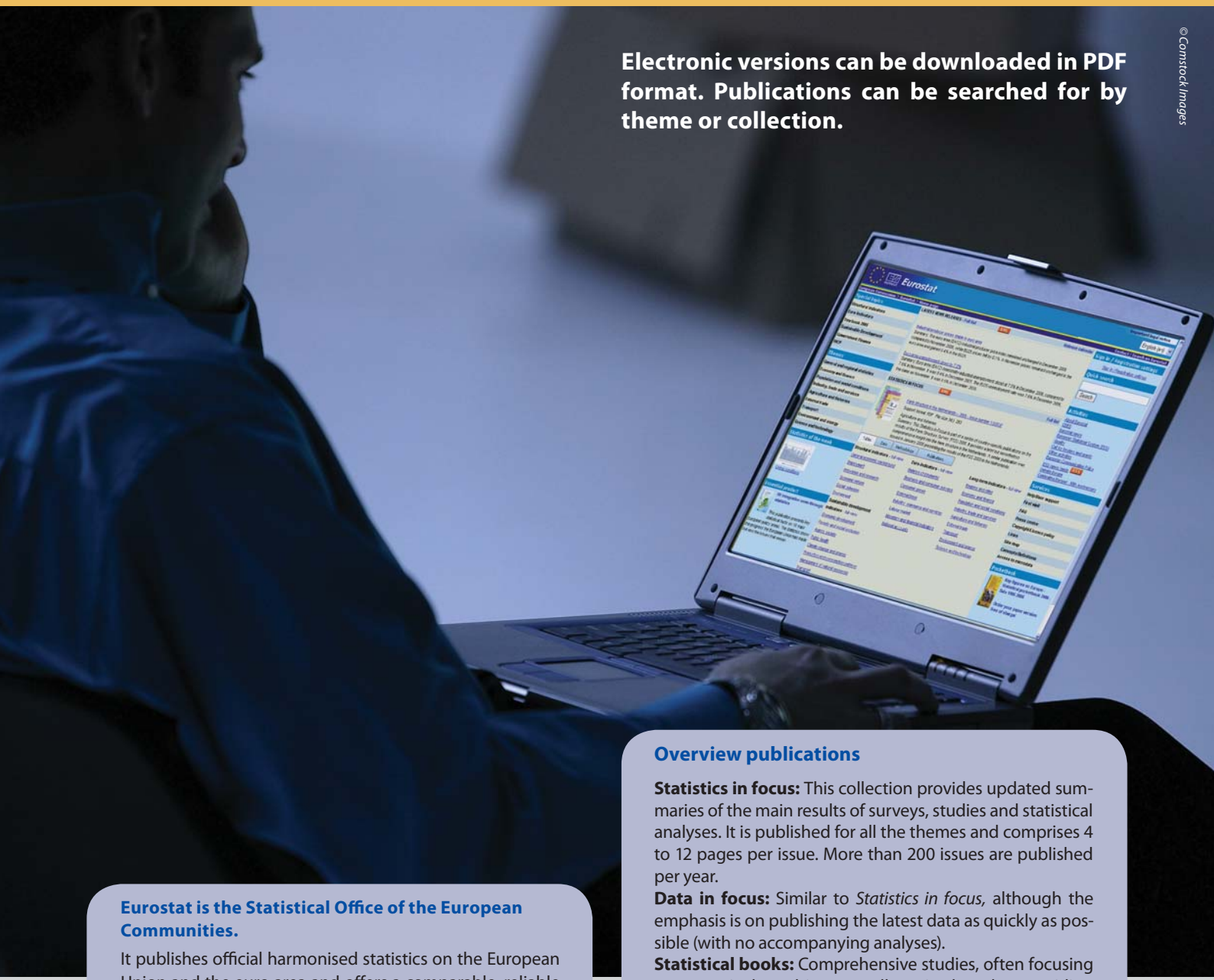

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Overview publications

Statistics in focus: This collection provides updated summaries of the main results of surveys, studies and statistical analyses. It is published for all the themes and comprises 4 to 12 pages per issue. More than 200 issues are published per year.

Data in focus: Similar to *Statistics in focus,* although the emphasis is on publishing the latest data as quickly as possible (with no accompanying analyses).

Statistical books: Comprehensive studies, often focusing on a particular subject; usually quite lengthy, providing analyses, tables and graphs from one or more statistical themes.

Pocketbooks: These are pocket-sized publications providing the main indicators for the European Union, the euro area, the Member States and their partners.

Methodologies and working papers: Intended for those who want to consult methodologies, nomenclatures, or specific studies on a particular data set.

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KS-BU-08-002-EN-C