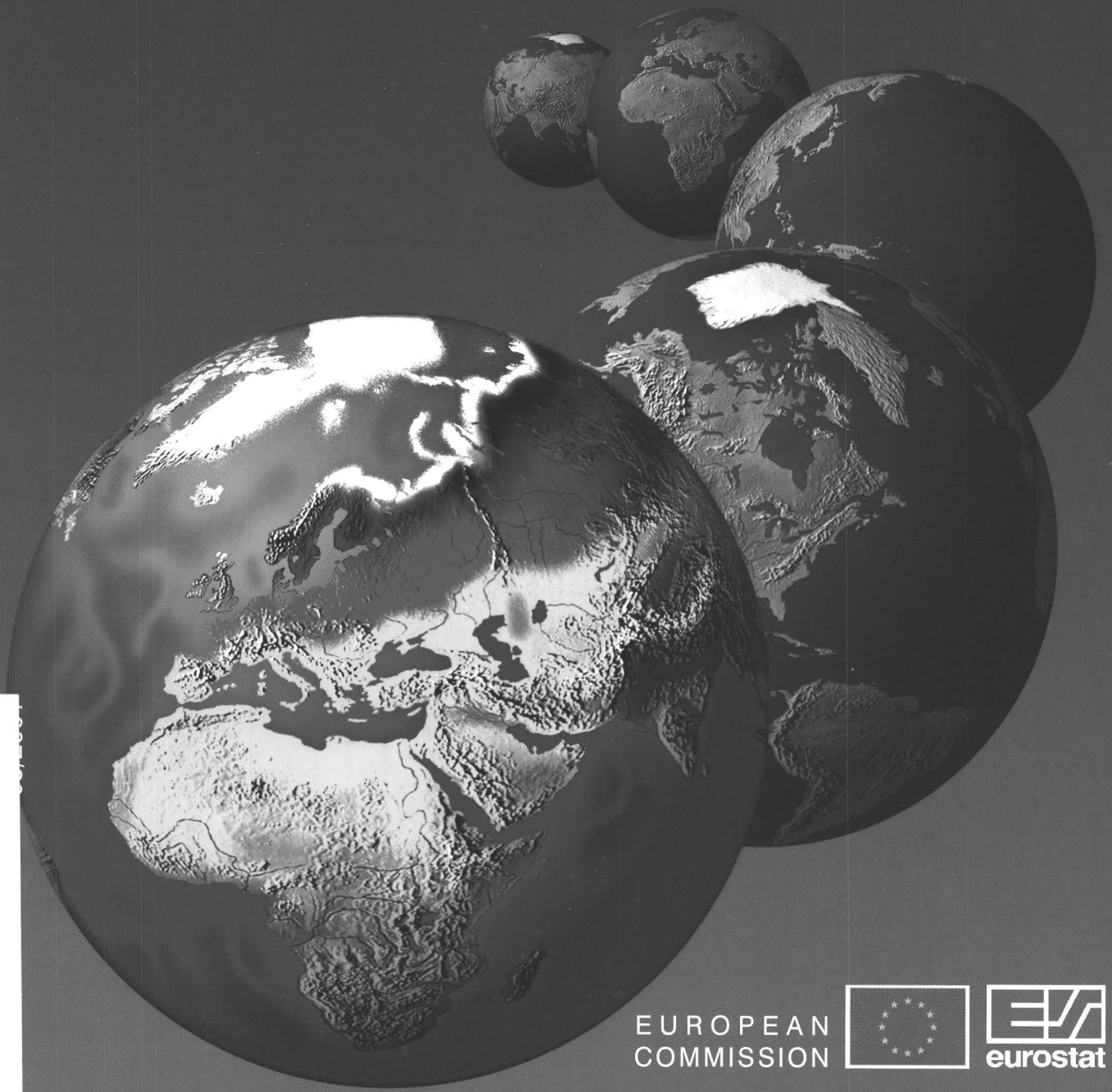
SIGMA

The bulletin of European statistics

Turning the world sustainable



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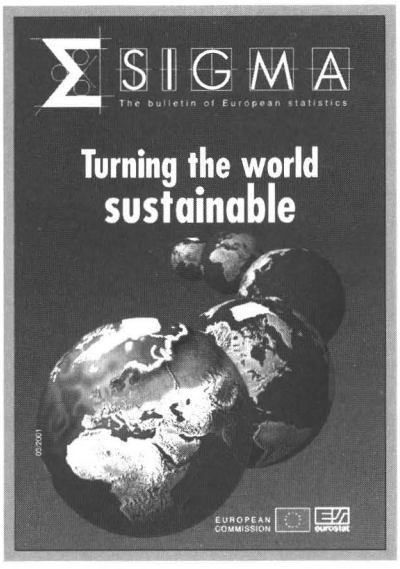

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In *this issue* of *Sigma*...

Now that sustainable development has been firmly rooted on the policy agenda, there was not much hesitation about giving it the spotlight in this Sigma. Not unlike the sweeping impact of the New Economy, covered in another recent issue, sustainable development – with its three economic, environmental and social pillars – stretches across the board. And this goes for statistics too – with the call from policy-makers for a set of sustainable development indicators ...

In the following pages, we aim to:

- present a roadmap of the current state-of-play
- emphasise the three-dimensional nature of sustainable development
- give an insight into Eurostat's response
- provide some idea of how Member States are tackling the issue, *and*
- offer some pointers as to the future statistical house of sustainable development.

Yves Franchet, Eurostat's Director-General, opens the issue, unrolling the sustainable development map and charting the way ahead for statistics and the ESS. **Marc Vanheukelen** of the European Commission's DG Environment sums up the EU Sustainable Development Strategy and how statistics can help.

We then turn to **Eurostat's statisticians** to brief us on how they have been rising to the challenges emanating from the EU Sustainable Development Strategy. They address primarily the priority areas set out at the Gothenburg European Council: public health, climate change, social exclusion, transport, natural resources and finally, an ageing society.

Bedrich Moldan of the United Nations Commission on Sustainable Development – the UN's architect of sustainable development indicators at the international level – gives us a universal stance with Johannesburg, the Rio+10 review, on the horizon.

To get some grasp on how Member States are tackling the issue, **John Custance**, of the UK's Department for Environment, Food & Rural Affairs, gives us the UK's translation of sustainable development as 'quality of life'.

On the three dimensions of sustainable development, **Domingo Jiménez-Beltrán** of the European Environment Agency discusses the environmental aspect; **Mark Hayden** of the Commission's DG Economy and Financial Affairs adds the economic ingredients; and **Karen Dunnell** of the UK's ONS raises the social pillar high.

... A handful of views that should go some way towards answering many readers' questions about what sustainable development is about and its significance for statistics.

Also in *this issue*...

For the last in our series of profiles of EU and EFTA statistical offices, **Hallgrímur Snorrason** explains how Statistics Iceland is a statistical office like any other.

Focussing on changes in the ESS, we report on the new President at INE Portugal, **Paulo Gomes,** and the new Director-General at Statistics Finland, **Heli Jeskanen-Sundström.**

Klaus Reeh and **Marco De March** of Eurostat talk about improving EMU's statistical indicators by way of the EMU Action Plan and introduce Eurostat's new euro indicators site.

Wrapping up the issue, on its tenth anniversary, we take stock of the Committee on Monetary, Financial and Balance of Payments Statistics (CMFB), which has become a significant coordinating body. And finally, we report on a recent partnership agreement signed between Eurostat and the Commission's DG Employment.

Fons Theis
Assistant chief editor

We would like to **thank** all those who have contributed to this edition:

John Allen, Eduardo Barredo-Capelot, Teresa Bento, Manuela Caetano, Giuseppe Caló, Tony Carritt, John Custance, Karen Dunnell, Marco De March, Marleen De Smedt, Mark Hayden, Paulo Gomes, Christian Heidorn, Lothar Jensen, Heli Jeskanen-Sundström, Domingo Jiménez-Beltrán, Dietmar Koch, Petra Lehmann, Graham Lock, Bart Meganck, Bedrich Moldan, Rosemary Montgomery, Brian Newson, Inger Öhman, Maari Paasilinna, José Pessanha, Klaus Reeh, Mario Ronconi, Hallgrímur Snorrason, Anton Steurer, Geoffrey Thomas, Marc Vanheukeulen and, of course, all our 'correspondents' in Member States.

Chère lectrice, cher lecteur

Nous sommes au regret de vous annoncer que, faute de ressources de traduction, Sigma ne paraîtra à l'avenir qu'en anglais. Nous espérons que cela ne vous causera pas d'inconvénient majeur et que vous resterez un lecteur fidèle de Sigma.

De notre côté, nous ne cesserons de prodiguer tous les efforts pour maintenir Sigma à un niveau élevé de qualité, afin de vous informer régulièrement sur les derniers développements dans le domaine de la statistique.

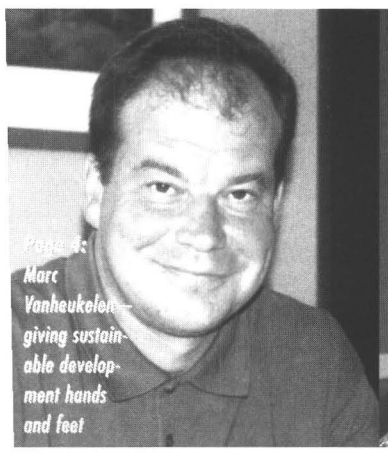
Au cas où vous souhaiteriez cependant résilier votre abonnement, nous vous prions de bien vouloir informer Mme Sylviane Scabbio (Fax: +352 4301 32 594 - e-mail: sylviane.scabbio@cec.eu.int)

Verehrte-r Leser-in,

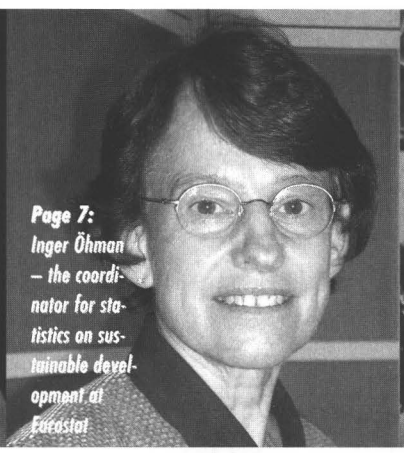
Wir bedauern, Ihnen mitteilen zu müssen, dass Sigma aufgrund fehlender Ressourcen für die Übersetzung nur noch in englischer Sprache erscheinen wird. Wir hoffen, dies verursacht keine Unannehmlichkeiten und würden uns freuen, wenn Sie uns auch in Zukunft treu bleiben.

Wir werden unsererseits weiterhin alles dafür tun, Sigma auf einem hohen Qualitätsniveau zu halten und Sie regelmäßig umfassend über die jüngsten Entwicklungen in der Statistik zu informieren.

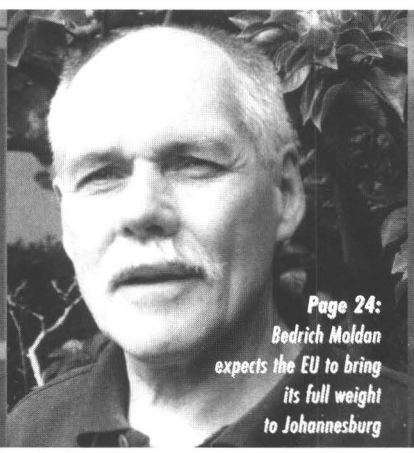
Sollten Sie Ihr Abonnement dennoch kündigen wollen, so informieren Sie bitte Sylviane Scabbio (Fax: +352 4301 32 594, E-Mail: sylviane.scabbio@cec.eu.int)



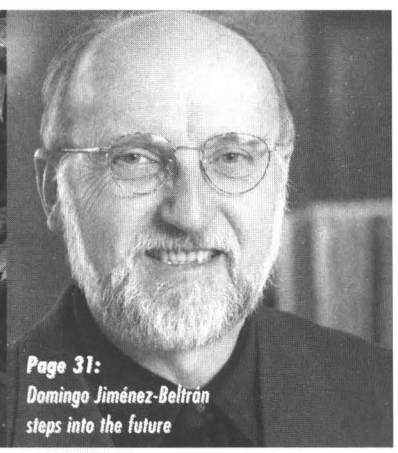
Page 4: Marc Vanheukelen – giving sustainable development hands and feet



Page 7: Inger Öhman – the coordinator for statistics on sustainable development at Eurostat



Page 24: Bedrich Moldan expects the EU to bring its full weight to Johannesburg



Page 31: Domingo Jiménez-Beltrán steps into the future

Unrolling today's sustainable development map

European cities are quite popular in 'Eurospeak' to describe, in a word, European policy decisions made at European Councils that would otherwise require long-winded explanations. Faithful to this tradition, one European Council last year adopted an EU Strategy that linked the Swedish town Gothenburg irrevocably with sustainable development and defined a new destination for European policy-makers and citizens alike.

A high quality information service, which of course embraces statistics, has a major role to play in supporting this plan and in plotting the coordinates on the map to help us to steer our course to the desired shores of sustainability.

UN and Rio give the starting signal

First introduced by the Brundtland Commission in 1987 in the UN-report *Our Common Future,* sustainable development was described as:

> *"satisfying present needs without compromising the ability of future generations to meet their own needs".*

This message was quickly taken on board and established a new itinerary addressing poverty, health, economic growth and equity in an integrated way, together with assuring a clean and non-depleted environment. The *Rio Declaration* and *Agenda 21,* adopted in 1992 at the United Nations Conference on Environmental Development (UNCED) outlined the first comprehensive action plan for the global transition to sustainable development.

For statisticians, the Rio Declaration was the starting signal to work on indicators for sustainable development. Several EU Member States volunteered to participate by testing indicators in their own sustainable development policy context. Eurostat tested the set of indicators developed by the UN Commission for Sustainable Development on the data available at Eurostat and published a first series in 1997, followed in 2001 by a second version (*see article on page 24 and panel on page 16*). In addition, the Rio Declaration also set out actions to extend the national accounts with satellite environmental accounts – which are now up and running in most EU Member States.

From Amsterdam to Gothenburg

Europe blew wind in the sails of the Rio message with a number of significant decisions on sustainable development being taken at the European level in the past few years:

- The Amsterdam Treaty made sustainability an EU goal.

- The 1998 Cardiff European Council stimulated the integration of environmental issues into all major policy areas and led to new thinking on decoupling economic growth and environmental pressures.
- The Stockholm European Council signalled the need for marrying the Lisbon Strategy on innovation, economic growth and social inclusion with the sustainable development strategy.
- Finally, the Gothenburg European Council agreed an EU Strategy for Sustainable Development and added the third environmental dimension to the Lisbon Strategy.

Statistics plots the coordinates

The Sustainability Strategy will be monitored on the basis of a number of headline indicators in the annual Commission Synthesis Report to the Council. The so-called Structural Indicators are therefore to be completed with indicators for the four priority areas identified, namely climate change, transport, public health and natural resources.

For the European Statistical System, immediate actions are needed as a result of these decisions, although it is not completely unprepared. Since the 1990s, Eurostat has worked on indicators for sustainable development in the framework of international actions. This is very useful experience to build on, when new indicators need to be compiled or refined. These include, for example, indicators on greenhouse gas emissions, the energy intensity of the economy, the volume of transport in relation to GDP and the modal split of transport, urban air quality and municipal waste – indicators that, in fact, have to be included in the next synthesis report.

With a view to improving the relevance of the indicator set, new indicators will have to be added or will replace the present ones as soon as better data are available. But this will not happen at the wave of a wand. Several years of work lie ahead before they can be included.

This 'to do list' is long: fuel consumption for transport, consumption of toxic chemicals, disability adjusted life expectancy, rate of selected infectious diseases, biodiversity, resource productivity, recycling rates, generation of hazardous waste ... And this is just a handful of those indicators that we would regard as 'more ideal' than those we are currently able to provide.

A common ESS approach

Adapting the statistical system to the EU sustainable development strategy will be a long-term process. This need for adjustment is not totally new, but will rather clarify and further those modifications already initiated. Being policy-driven, indicators need to be identified by policy-makers with statisticians adapting social and economic statistics to reflect environmental and sustainability concerns.

The structural indicators set picks individual 'headline' indicators of high policy implication. Given that several of the social and environmental indicators suffer from data gaps, low accuracy and lack of timeliness, they urgently need to be brought to an adequate standard. In addition, the indicators need to be positioned within statistical frameworks. For example, which tiers of information are crucial for more in-depth analysis or how should such data be collected in a cost-effective way? Clearly, our preference should go for using existing surveys and existing legislation.

Some important input can come from the ongoing process to develop indicators for integrating environmental concerns into other policies, such as agriculture, transport, energy, economic and financial policies. In particular, the agriculture and transport indicators are well advanced in coherent analytical frameworks. However, further work on indicators on sustainable agriculture and sustainable enterprise policy will also be helpful.

Another important issue is the question of extending national accounts to serve as a tool for sustainable development analysis. How far can the present system be extended with "satellites" for the social, environmental and resource use dimensions? Will research help to find agreements on aggregated indices to cover the complexity of sustainability in the same way that GDP does for the economy?

The conclusions from Gothenburg also invite Member States to draw up their own national sustainable development strategies. This means that, at national level, strategies will need to be monitored through indicators, which will back up the indicator initiatives by Member States. Actions by the European Statistical System should thus build on the experiences – gained at both the Member State and the Community levels – to achieve a convergence of approaches, when desired.

There is a rich variety of ongoing experiences on sustainable development indicators that, hopefully, should not hamper identifying convergence at the international level. In this sense, cooperation between Eurostat, the UN and the OECD is of great significance.

Globalisation is being talked about everywhere. Nothing is more global than our concern about a future worth living because we all know that neither environmental, economic, nor even social problems are restricted by national borders. It is therefore a pleasing thought that we are not alone on our path towards 'sustainable development'. Eurostat's statisticians have started thinking about how they can contribute and they are ready to raise the anchor and hoist the sails. The tail wind so far is good.

In the following pages, the sustainable development map has been unrolled for readers to understand the mechanics and navigate the waters ahead.

Yves Franchet
Eurostat Director-General

What makes the EU Sustainable Development Strategy so special? What comes next? And what are the Commission's expectations in terms of statistics? – What better person to answer than the man who helped to shape the Strategy and who heads a unit called 'Sustainable Development'? **MARC VANHEUKELEN** of the Commission's Directorate-General Environment answered *Sigma*'s questions.

Practice what you preach!

Far from being a new concept, the EU deemed greater emphasis of sustainable development necessary. How does the current EU Strategy on Sustainable Development compare to previous actions?

It is the first time at European level that we have given sustainable development hands and feet. We have made the concept operational by focussing on a number of key areas requiring special attention and action: climate change, public health, transport and use of natural resources.

Under each of those areas we have formulated clear actions that need to be undertaken. So, we have given an operational content that should allow policy makers to start putting in place measures that have an effect on the ground.

In addition, sustainability issues will now be on the agenda every year at the highest political level in the Union. Never before have environmental sustainability matters been on a par with economic and social policy in the history of the EU – clearly a major step forward.

An issue for all of us

The Sustainable Development Strategy is a European approach reflecting the EU's distinctive view. However, sustainable development clearly has a global dimension ...

It is absolutely true that sustainable development is very much a global concept. UN circles pioneered the term, and the most well-known definition of sustainable development as a "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" stems from the Brundtland report, a UN report.

The Earth Summit II, a Rio+10 review, taking place in Johannesburg in September 2002, will be a major occasion to discuss sustainable development at world-level, and Europe should use this opportunity to set out its own views. As an input to this meeting, the Commission is preparing a communication on global sustainable development, which will be on the agenda of the Barcelona summit in March.

Without neglecting the global dimension of sustainable development, we started by focussing on Europe for two good reasons:

- We wanted to make sure that sustainable development is relevant to European citizens and not something that people merely associate with the less developed world. Indeed, we wanted it to become an issue for every single European citizen.
- In addition, we believe that there is a lot of truth in the saying, 'practice what you preach'. We wanted to show the rest of the world that we take it seriously. And if we start by putting our house in order, the chances are that our impact on the discussions at world-level will be greater. Put more provocatively, it would certainly be easier to talk about sustainable development in general than start doing something concretely.

Think twice

The global and long-term character of sustainable development requires Candidate Countries to be included. What is being done in this respect?

Given the long-term character of the Strategy, the Candidate Countries are clearly part and parcel of the picture. They have a number of specific concerns, but at the same time many of the problems that we have identified for Western Europe, such as climate change or threats to public health, also apply to them.

On the other hand, Candidate Countries still have more bio-diversity and they should do everything to avoid the errors that we have made – be it with regard to the conservation of bio-diversity and landscape or in the area of transport.

The message of sustainable development for those countries must be: 'Please look at what we have done and draw lessons from our mis-

takes.' It takes an inordinate amount of time to put things right – changes in spatial planning, land use, production technologies or infrastructure take years if not decades.

A clear implication of the Sustainable Development Strategy, in my view, is that we should step up the reform of the Common Agricultural Policy (CAP) so that, by the time it is implemented in the Candidate Countries, there is a stronger role for measures to improve rural development and more support to agri-environmental measures.

Similarly, with regard to transport, the Commission communication suggests that future structural funding as well as the trans-European networks should put less emphasis on road networks and redirect public money into alternative modes of transport.

Defining demands clearly

Such policy initiatives usually create a need for statistical information. What are your expectations in statistics after the process set in motion in Gothenburg?

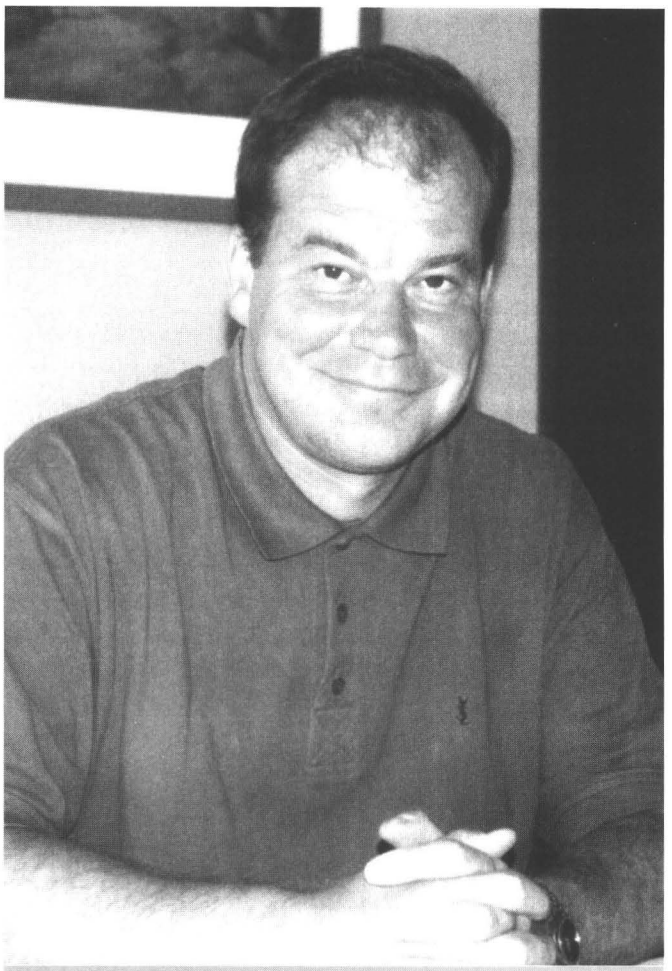
We are facing a dual problem here. First of all, a number of concepts in the area of sustainable development have not yet been rendered precise enough to be measurable. In many areas, we need above all to refine the concepts. Take, for example, natural resources. People would like to see an indicator of the resource intensity of the economy. But how do we measure that? We hope to have an operational concept that is sufficiently representative of what we have in mind by 2003.

A similar case is a bio-diversity indicator. The Sustainable Development Strategy states that there is a clear decline in bio-diversity in Europe. I believe this is a generally agreed, fair statement. The precise measurement of bio-diversity, however, is still very much an issue to be worked on.

On the other hand, there are a number of issues where we have a very clear idea of what we want to measure but where we have no data, or at least not for all countries. For example, concerning the production and generation of hazardous waste, either the country coverage is incomplete or the data are far too old.

Exposure to persistent toxic chemicals that are bio-cumulative is a big sustainable development issue. However, we have already great difficulties in measuring the consumption of toxic chemicals in Europe with production data being available but trade data being scarce. We may have good data on the sales of toxic chemicals but we have no clue about the exposure. So, in a number of areas we are only just starting to collect essential statistical data.

We also need to have a better idea of the externalities caused by certain eco-



Marc Vanheukelen, a Belgian, was an economics lecturer at the European Institute of Public Administration in Maastricht (NL) before joining the European Commission Directorate-General Economic and Financial Affairs in 1985. After spending a year in Canada to study the workings of the Canadian monetary union, he worked in DG Budget. In 1996, he joined the cabinet of Commissioner Wulf-Mathies where he contributed to the reform of the structural funds in the context of Agenda 2000.

Since June 1999, he has been heading the economic analysis unit – recently renamed 'sustainable development unit' – within DG Environment. Apart from following up the implementation of the EU sustainable development strategy, its main task is to look into all methodological questions for the formulation of policy proposals. This includes primarily questions of scientific input and economic analysis.

As head of a task force comprising representatives from the DGs Environment, Economic and Social Affairs and Employment, instructed to prepare the Commission communication on sustainable development for the Gothenburg summit, he played a major role in its drafting.

nomic activities so that they can be incorporated into the price of the goods that those economic activities deliver. But this will have to go clearly beyond pure statistics and will be subject to expert studies and detailed analyses.

However, statistics are the bedrock on which those analyses will have to be based. They are an indispensable ingredient in the Sustainable Development Strategy menu before further analysis, for example, on the environmental implications and the cost-effectiveness of different options of a certain policy proposal, can be carried out.

Opening up a new perspective

What do you expect from statistics in the long-term?

Ideally, we should go for an aggregate measure of sustainable development, for example, a GDP corrected for environmental degradation or social problems. However, this is an ideal and our conceptual richness and statistical apparatus do not yet allow us to have such a single aggregate estimate of say, 'quality of life'.

But obviously it is important that, next to the fairly well-known economic and social indicators, we establish a battery of environmental indicators that, together with GDP and other indicators, are laid on the table to give Prime Ministers a more balanced picture when they come to discussing the state of the Union.

It is therefore essential that sustainable development indicators and, in particular, environmental indicators, focus on the most pressing problems and that they are easy to understand. Politicians can then, at a glance, understand what is going on in the same way as they understand GDP, exchange rates, employment and unemployment.

On the agenda

What are your current activities now the EU Sustainable Development Strategy is adopted? What are the actions emanating from it?

As a result of the Gothenburg summit, a number of things need to be prepared for the next European Council in Barcelona. The first thing is to put forward a limited set of sustainable development indicators – limited because they will be part of the broader Lisbon process. And again, as for the structural indicators, Eurostat played an important role in this.

A novelty, we will also have to make a contribution on sustainable development for the synthesis report. As a succinct political report, it will be rather short and we will therefore have a very limited number of pages to pass messages on sustainable development to the highest political level. This is also the reason why we will most likely focus in the preparation of Barcelona on climate change and sustainable transport, as well as perhaps the depletion of fish stocks, in the light of the Common Fisheries Policy reform which is due in 2002.

Another task is to elaborate a proposal by the Commission to give flesh to the idea of a sustainability impact assessment. We have found in our analyses on sustainable development that one of the main sources of non-sustainability is sectoral policy inconsistency – a case of one hand not knowing what the other is doing. If you look at the interdependence between, for example, environmental, transport, fiscal, R&D and regional policies, it is amazing how they can reinforce or weaken one another.

The sustainability impact assessment is a mechanism that should help to reduce these inconsistencies. All major policy proposals, before they are adopted by the Commission, require a systematic assessment of their economic, social and environmental implications. And we hope that other institutions share the same spirit and systematically have in mind the triple dimension when they take up the Commission proposal.

Beyond lofty principles

The Strategy stresses the integration of environmental issues into other policies as a major element. How is this put into practice?

This process started at the Cardiff integration process in 1998. A number of sectoral councils should reflect and then devise an action plan on how to take into account environmental concerns better in their sectoral policy-making. The Swedish presidency has produced a report for the Gothenburg summit, in which it provides a state-of-play of the various sectoral councils.

Following this report, the process has been given a new lease of life by the Gothenburg summit. The various councils will have to report regularly on their progress – information that will form part of the input for the annual discussions at the highest political level on sustainable development.

Indicators already exist for transport and environment (TERM project, *see page 34*) and major projects are underway in the field of agriculture and environment where the EEA plays an active role with Eurostat as the main statistics provider of the European Commission also having an important input. In my opinion, these integration indicators will have to be developed for other sectors as well as, for example, energy, industry, fisheries etc.

I can only repeat and stress the importance of statistical indicators for the assessment of integration, but in particular, for the Sustainable Development Process as a whole. With the Strategy we took a decision to try and achieve a better quality of life for us and future generations. So, let's go beyond lofty principles, and jump the next hurdles. ■

Approaching sustainable development STATISTICALLY

Not only has the European Union recognised sustainable development as a major objective to assure the future development of European societies and economies and the maintenance of natural resources and environmental assets. Taking it up in the Amsterdam Treaty can also be seen as a strong 'constitutional' commitment.

With the Strategy for Sustainable Development adopted at the Gothenburg Council in June last year, the EU launched a process to transform this commitment into concrete policy action. While recognising the global and long-term character of sustainable development, it committed the EU to an international leadership role in the run-up to the Earth Summit II to be held in Johannesburg this year.

From a variety of possible action fields, four priority areas for sustainable development were identified, namely **climate change, public health, natural resources** and **transport** – thus complementing the social and economic issues (**poverty** and **social exclusion** and an **ageing population**) that were already identified as major issues at earlier occasions.

Appropriate information on the three pillars of sustainability – the social, economic and environmental dimensions – is one of the major challenges to improve our understanding of the interactions between our economies and societies and the environment.

Adequate statistical information – the 'measurement side' of sustainability – is also an important support for reviewing and monitoring the implementation of sustainability policies.

For this reason, *Sigma* invited the Eurostat experts working in these fields to reflect on the question of sustainable development and possibly provide us with some answers on the concrete statistical implications of the Strategy.

Our gallery below shows from-left-to-right, first row: John Allen, Teresa Bento, Graham Lock, Christian Heidorn; second row: Dietmar Koch, Marleen De Smedt, Mario Ronconi; last row: Petra Lehmann, Peter Tavoularidis, Brian Newson, Rosemary Montgomery.

Health for quality of life

by Marleen De Smedt*

The original definition of sustainable development – and the most often used – is that of 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. With respect to programmes and policies, in particular at EU level, I would describe it myself as *the responsibility of a society to steer policies, programmes and actions in such a way that all citizens benefit from gradual economic and social progress, generally targetted towards a better quality of life, not only now but also for future generations.*

Inevitably, there is a link between 'sustainable development' and 'public health'. For most of us, the quality of our life is not only about having sufficient means for comfortable living: sufficient income, good housing and the provisions of facilities such as a good transport infrastructure, basic education for all and child care. Enjoying good health and being able to obtain adequate and efficient health care are important elements for 'quality of life'. Unfortunately, one often only fully appreciates this when directly confronted with a health problem.

A healthy population is crucial for the well-being of our societies. Sick or badly nourished people perform less well. Health is a vital element in satisfactory and productive life, so a healthy society is therefore itself a prerequisite for sustainable development. Sustainable development is also about how a society cares for the health of the most vulnerable of its members: children, the elderly, the disabled, migrants and how it cares for future generations.

Examples of sustainable development dealing with health include the promotion of new employment policies that not only promote the creation of jobs but also healthy working conditions, or research and innovation in the field of biotechnology with full attention to screening new techniques on the possible adverse health effects. It includes directing policies and actions towards reducing smoking and making people aware that unhealthy lifestyles, i.e. pregnant women smoking, can lead to future generations that are less healthy.

Health determinants

At an individual level, our health status is driven by a variety of factors: it not only depends on the genetical package we are born with. Half a century of research has provided consensual evidence that our way of living and, in particular, nutrition, physical activity, smoking and social relations, are major personal determinants of adult health. Finally, health is influenced by factors related to our environ-

ment, to social conditions, such as housing and income, and to the availability and efficiency of services for health care and health prevention and promotion.

Several of the health determinants described above depend on choices at an individual level, such as whether we smoke or not, whether we are eating a balanced diet, or whether we drive at high speed on the motorway. But in many cases health determining factors depend on choices made by others, such as when insufficient food hygiene and safety could cause adverse health effects for a large population.

Consequently, we are responsible for each other's health. And this goes from the responsibility of parents and educational workers to make sure that they pass on healthy habits and attitudes to the next generation, to the responsibility of employers to ensure that workers are not exposed to occupational health hazards and of policy makers to ensure that economical, social and environmental policies contribute to a 'healthier' society, and this at different policy levels: EU, national, local.

Community action

Community policies in the area of public health, as such, only exist since 1993, when the Community obtained competence in the area of public health with the Maastricht Treaty. Since then, the Council and the European Parliament have adopted action programmes tackling eight major areas: cancer, communicable diseases, health monitoring, health promotion, injuries, pollution-related diseases, rare diseases and drug addiction. These individual programmes will end next year and the Council and the European Parliament are currently discussing a new Community health action programme put forward by the Commission.

This new programme aims to develop a coherent approach to health issues across all EU policy areas and it will require better policy coordination to address inter-sectoral issues such as social exclusion and enlargement. The new public health action programme will focus on three main strands of activity: improving health information and knowledge, responding rapidly to health threats and addressing health determinants.

But even before 1993, many Community policies in other domains have had an impact on public health, such as the Council Directives on health and safety at work, the Council Directives on the classification, packaging and labelling of dangerous substances and a vast array of Community legislation in the domain of environmental protection.

Measuring health

For a long time, the only indicators used in this field were in fact indicators on *'mortality'* and the indicator *'life expectancy'* derived from mortality data. During the last decades, more direct indicators have been proposed to 'measure' the health status of a given population.

First of all, there is the indicator of *'self-perceived health'* : data are obtained from asking people directly about how they would rate their own health status (from very good, good, fair, poor, to very poor) or whether they suffer from a chronic health problem, disease (morbidity) and/or disability.

Besides this 'subjective' information, we do have a series of other, more 'objective' indicators on health status, such as *Body Mass Index* (BMI) which gives an indication of the nutritional status with respect to over/under weight. Indicators on ill health are, for example, data on *incidence* (new cases in a given time period, i.e. a year) or *prevalence* (number of cases at a certain moment in time) of certain diseases, health problems or disability, ie. accidental injuries, musculoskeletal problems, tuberculosis, asthma, diabetes, mental disorders, hearing problems, foodborne diseases or cancer. Here, data are collected in most cases by (health) professionals when a diagnosis and/or registration is made.

Of growing importance are the overall indicators on healthy life expectancy, which are synthetic indicators that combine data of mortality and of ill-health (morbidity and/or disability). An example of this group is *'disability-free life expectancy'*. It relates to the number of years an individual of a given age could expect to live without disability.

Beyond symptoms

In the field of public health, indicators should not only address the health status and

Eurostat/UN cooperation

Since 1996, Eurostat has cooperated with the United Nations Department for Economic and Social Affairs (UNDESA), to support the indicator development work within UNCSD.

Eurostat has also contributed to the methodological improvement of the indicator list. For example, in 1999 and 2000 Eurostat, as the lead organisation, prepared the methodological sheets for four new indicators, selected in the context of the newly defined 'Consumption and Production Patterns' theme.

The 63 indicators now compiled by Eurostat and presented last year in the publication *Measuring progress towards a more sustainable Europe* follow the UNCSD Sustainable Development Indicators (SDI) methodology and list.

(See also article on page 24)

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occurrence of symptoms, diseases and/or disability such as those mentioned above. Domains also needing coverage are life style factors such as nutritional habits, smoking prevalence, working conditions, knowledge and awareness of health risks and availability and use of health care facilities.

In order to monitor sustainability and public health, indicators are also necessary in other areas such as demography (the share of children and elderly in the total population, demographic projections), employment (unemployment rate), environment (air quality, air emissions, noise levels, waste discharges etc.), transport, food safety (chemical contamination) and social exclusion.

Quite often, these data are available at national level. After almost a decade, we are now gradually collecting these data at Community-level – a challenging exercise because most of the data are not readily comparable between countries.

However, a number of Community initiatives have contributed significantly to the availability and comparability of health data and health determinants. In the framework of the Community action programme in the field of health monitoring (1997-2001), a series of actions has been launched, such as the establishment of a draft list of European Community Health Indicators (ECHI), the development of inventories of existing data sources and initiatives to improve ex-post harmonisation.

As part of the Community Statistical Programme (1998 - 2002), we have gradually established in Eurostat a consistent and durable system of statistics on public health (through a Leadership Group LEG on health statistics) and on health and safety at work, with the objective of providing the data needed for the ECHI and to steer and monitor Community policies on occupational health and safety.

Finally, particular reference should be made to the introduction of new tools aiming at ex-ante harmonisation at Community level, such as the European Community Household Survey (ECHP), which has provided us with indispensable data on health related to a variety of social conditions (income, housing, education...), the ad-hoc module on Health and Safety at Work, added in 1999 to the Community Labour Force Survey and the establishment of a common methodology for European Statistics on Accidents at Work (ESAW). These tools aim at collecting comparable data as well on health status and/or ill health as on health-related determinants and conditions.

Only by realising the role of health in sustainable development – and the importance of health statistics – will we be able to boast a comprehensive strategy which responds to all our needs and those of future generations. The data now being built up show that this has already been realised – health enjoys a very firm footing in the EU's overall sustainable development strategy. ■

Towards a sustainable use of Chemicals

by Christian Heidorn*

With a production worth 403 billion euro, the EU chemicals industry accounts for 29% of the total world's chemicals production. It is the third largest manufacturing industry in Europe, generating – with 42,1 billion euro – the largest trade surplus of all industrial sectors.

From concerns to action

Increasing concerns about the possible adverse effects of chemicals to our health and the environment have recently been addressed by several European policy initiatives:

The ***6th Environmental Action Programme*** calls for actions (concerning chemicals) to:

- reform controls on chemical risks,
- reduce the risks from the use of pesticides,
- improve our understanding of the link between environmental pollution and human health through better research,
- revise health standards so that they include the most vulnerable groups of society, *and*
- develop a new strategy on air pollution.

The ***Community Strategy for Sustainable Development*** states that the

- 'longer-term effects of the many hazardous chemicals currently in everyday use' are a severe threat to public health; threats to food safety are of increasing concern.

Indeed, the use of chemicals in our society is widespread, particularly in construction and housing, textiles, pesticides and fertilisers and a range of other consumer goods. Consumers are concerned about chemicals as food additives or in cosmetics.

Chemicals are released into the environment from various sources along their life cycle, at production, from the finished products, or as waste. Chemicals don't know borders – certain organic, persistent and bioaccumulative substances spread over the world and enter the human food chain accumulating in our bodies.

The sheer number of chemicals with unknown properties is frightening. There is insufficient knowledge about the impact on human health and the environment of around 100 000 'existing' chemicals placed on the market before Community-wide chemicals

control were put into place in 1981. 30 000 of these are produced in volumes of above one tonne per year and per manufacturer.

The current system of chemicals control has proved to be insufficient to protect our health and the environment, and is currently undergoing a major overhaul.

The *European Council* set a high goal to be met:

By 2020, ensure that chemicals are only produced and used in ways that do not pose significant threats to human health and the environment.

For more safety ...

In June 2001, the Council approved a new 'Strategy for a future Chemicals Policy'. It should have been discussed by the specialised committees in the European Parliament by the time this issue of *Sigma* comes out, to have new draft legislation ready so that resources for management and enforcement are in place by 2004.

The new legislation will shift the burden of proof concerning the safety of chemicals to industry, importers and, in the case of manufactured products containing chemicals, to the so-called downstream users. Substances of concern will have to be authorised before they can be further marketed, and industry will have to prove that the foreseen use is safe. The above-mentioned 30 000 chemicals will have to be registered, in order to know how they are produced and used during service life and where they end up afterwards.

... and sustainability?

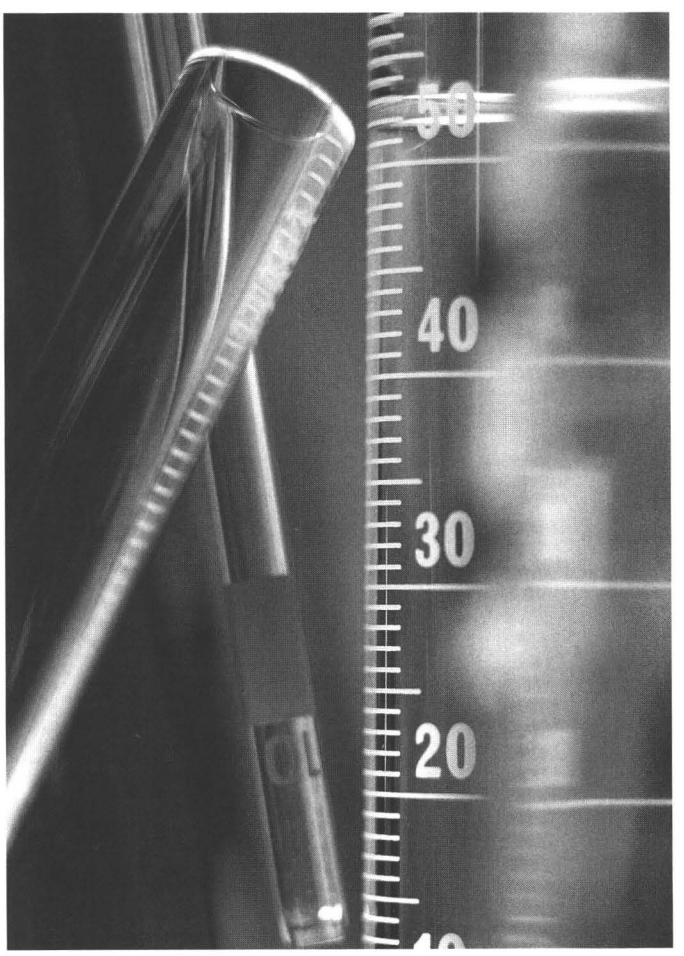
The new strategy supports the overall aim of sustainable development to combine economic and social development, including growth, while simultaneously protecting the environment.

Concerning the *economy*, the strategy will promote innovation. New, safer chemicals, providing the same or better service as currently 'dangerous' ones, will have to be developed. These products are key to the long-term performance and prosperity of the industry. Therefore, new technologies that eliminate or reduce the use of dangerous chemicals will be necessary.

As for the *society*, people will be more confident in the safety of the products they use, the substances they work with and in the food they eat.

And it will finally have positive effects on the *environment:* Substances, which are not toxic and do not accumulate in soil, water, air and living organisms, will help to improve living conditions and hopefully stop the loss of biodiversity.

Sustainable, or *'green' chemistry*, is an evolving and promising area. More major chemical companies now view sustainable chemistry as a challenge and invest in the development of chemical products and processes that reduce or eliminate the generation and use of hazardous substances.



The role of statisticians

The new strategy will be monitored using indicators that will follow trends in the consumption and the use of dangerous chemicals; 'performance' indicators showing how countries and Europe as a whole make progress to protect our children, workers, consumers and our natural resources. The work is at an initial stage and we at Eurostat are currently investigating what experience from national and international programmes on chemicals exists in this specific area, and which data can be used.

New reporting obligations for industry are being defined by DG Environment, and Eurostat will contribute to make sure that statistically relevant information is reported, ie. data not yet available in the European Statistical System (ESS). We have already started to establish closer links with the Commission's implementing institutions and Member States' institutions also outside the ESS.

A three-year project starting in November 2001 will bring experts together and will propose a range of indicators, from which some will serve as indicators for a more sustainable chemistry. Looking a few years down the line, it is hoped that our material flow analyses will show a significant change from high flows of dangerous substances to less dangerous substances throughout our economy. ■

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Concerted action against climate change

by Dietmar Koch, Rosemary Montgomery & Peter Tavoularidis*

General acceptance that human activities contribute to climate change has been slow in coming, but not as slow as agreement on global actions for actually reducing greenhouse gas emissions.

The burning of fossil fuels (coal, lignite, oil, gas) is considered to be the main factor in climate change, accounting for 80% of greenhouse gas emissions. Agriculture contributes 9% (weighted by Global Warming Potentials), while the remainder comes from waste landfill sites and industrial processes. International negotiations under the auspices of the UN Framework Convention on Climate Change (UNFCCC) (*http://www.unfccc.de/*) have attempted to address the issue of reducing greenhouse gas emissions, but with limited success so far.

COP6, the Sixth Conference of Parties to the UNFCCC, was suspended when no agreement was reached on rules and modalities for implementing the 1997 Kyoto Protocol. However, some progress was made towards outlining a package of financial support for capacity building and clean technology transfer to help developing countries contribute to global action on climate change. When the conference resumed in July 2001, the so-called two-year "Buenos Aires Plan of Action" was implemented and procedures and mechanisms relating to compliance under the Kyoto Protocol were adopted. This Plan of Action also addresses the special needs and concerns of countries affected by global warming and by the economic implications of response measures.

The Protocol's 5% emissions-reduction target aims to arrest and then reverse the historical upward trend in greenhouse gas emissions from industrialised countries and to put the world economy on a more environmentally sustainable path. Renewable energy sources, energy efficiency improvement and demand-side management in the fields of energy and transport provide potentials that can contribute to reducing emissions. But, despite these elements, a consensus on 'sustainable' climate change targets is yet to be reached.

The key political issues – including an international emissions trading system, a "clean development mechanism", the rules for counting emissions reductions from carbon "sinks" such as forests, and a compliance regime – could not be resolved in the time available.

The EU, in its note to the sixth UNFCCC conference, encouraged industrialised countries to take real action at home to reduce emissions by securing a primary role for domestic policies and cost-effective measures. These may then be supplemented by applying the three Kyoto mechanisms that will allow industrialised countries a certain degree of flexibility in how they meet their emission targets.

Together with the operational rules for the three mechanisms and the possible inclusion of carbon sinks, a compliance regime is crucial to safeguard-

What is the greenhouse effect?

The greenhouse effect is a natural phenomenon largely responsible for life on earth as we know it. This phenomenon is caused by the layer of atmosphere (gases), which absorbs and re-radiates infra-red radiation from the earth's surface. Human activities, such as combustion of fossil fuels and intensive livestock breeding, are altering the composition of gases in the atmosphere, causing heat which would normally be radiated out to be retained.

As a consequence, an extra warming of the earth's surface and the lower atmosphere is expected, leading to disturbances in the geosphere/biosphere system and notably, an increase in the mean global surface temperature and in the mean sea level, as well as extreme weather patterns. This could have serious implications for populations on the coast and other areas liable to flooding, as well as for agriculture which – more than any other sector of the economy – is dependent on weather conditions.

Although annual rainfall amounts are expected to change little, models predict considerable intra-annual variability, generally with increased winter rainfall, and longer summer dry-spells. There is a growing concern about desertification in European countries, especially in the Mediterranean area. Climatic variability experienced in recent years has already led to water shortages, erosion, landslides and harvest losses. These threats may be aggravated by even relatively small shifts in climate conditions, which would hinder rather than sustain water supplies and agricultural productivity.

ing the environmental integrity and credibility of the Protocol and ensuring that it functions effectively. Parties' obligations need to be enforced and their progress towards achieving them assessed. For many countries, including the EU, putting in place a strong compliance regime is a precondition for ratifying the Protocol.

Flexible Mechanisms

The Kyoto Protocol foresees the creation of three mechanisms[1] that will allow industrialised countries a certain degree of flexibility in how they meet their emission targets, thereby reducing their compliance costs.

Emissions trading (ET) will enable industrialised countries to buy and sell emission credits between themselves. Buyers will be able to add such credits to their emission allowance, or 'assigned amount,' under the Protocol but sellers will have to deduct them from theirs.

Joint implementation (JI) will give industrialised countries and companies the possibility to finance emission-saving projects in other developed countries. In return, they will receive Emission Reduction Units (ERUs) that count towards their emission targets. These will be deducted from the assigned amount of the country, in which the project is located.

The clean development mechanism (CDM) aims to

How Eurostat has responded so far

Eurostat has implemented a number of activities with direct relevance to the link between fuel consumption and climate change:

❶ *Collection of data on Renewable Energy Sources (RES)*

Following concerted action in the nineties by Eurostat and the Commission's services, the methodology has been developed and the regular flow of information established at international level. This allows the monitoring of market penetration of various RES technologies and the attainment of relevant targets. It is noted that the quality of statistics regarding certain minor heating applications in the EU needs to be improved.

❷ *Combined Heat and Power (CHP)*

CHP offers potential for reducing waste heat in the generation of electricity. Eurostat activities in the early nineties have enabled statistics from across the EU to be collected for the first time. The methodology has been recently strengthened. The current phase plans to extend this activity to Candidate Countries as well as to implement a regular collection of this information in the medium term, once enough experience has been gained at national level.

❸ *Energy Efficiency Indicators*

A set of priority indicators assessing various policy issues has been established, in collaboration with Member States, to evaluate energy efficiency and associated emission intensities. Eurostat is currently evaluating the quality and availability of information collected with a view to establishing a system of regular data collection. The International Energy Agency will collect the same information from its non-EU member countries, resulting in comparable information at an international level.

❹ *CO_2 Emissions – reconciling differences*

Energy-related CO_2 emissions may be calculated using Eurostat's energy database – SIRENE – allowing an independent verification of reported national emission inventories. While, in many cases, differences between calculated and nationally reported figures are small, they need further investigation because of the political importance of this issue. Eurostat, in collaboration with Member States, is evaluating the reporting mechanisms to identify possible sources of differences, to correct historical figures and to ensure improved quality and coherence of information in future.

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* Dietmar Koch, in Eurostat's Environment statistics unit since April 2001, is responsible for data on emissions to air and eco-efficiency. He took over this work from Rosemary Montgomery, who is responsible for Eurostat's Environmental Pressure Indicators project and for indicators to assess the integration of environmental concerns into sectoral policy, particularly energy and agriculture. Peter Tavoularidis leads the work on energy effeciency indicators and deals with statistics on emissions of climate gases.

promote sustainable development in developing countries through emission-saving projects on their territory funded by industrialised nations and companies in them.

Carbon 'Sinks'

The Protocol allows industrialised countries, in meeting their greenhouse gas targets, to offset their emissions against carbon 'sinks' – land-use and forestry activities, such as tree-planting, that absorb CO_2. Equally, however, where such activities produce emissions, for instance through deforestation, the Protocol requires these also to be counted towards the targets. Comprehensive rules and modalities for how sinks should be treated (eg. how permanently sinks sequester carbon) remain to be decided. Moreover, the issue is complicated by considerable scientific uncertainties.

Compliance regime

The Protocol foresees several reporting and verification measures to assess the Parties' compliance with their commitments. These include setting up a national inventory system for estimating emissions and sinks, reporting the inventories and other information to help assess compliance, and finally a review procedure, led by a team of experts.

Many of the practical details of how the three mechanisms will work have to be decided at the next meeting. A number of serious concerns that remain unresolved include:

- phasing out tax rules or subsidies that encourage emissions
- proper control of the potentially huge scale of sinks
- preventing countries from overselling their emissions permits
- estimating the prices to be paid on the market for emissions reductions
- governing Clean Development Mechanism projects by a strict set of verification rules
- making incentives as well as sanctions part of the compliance regime, *and*
- removing uncertainties and risks associated with them.

Statistics to help monitor progress

Most EU countries already have rather robust reporting and monitoring provisions in place. This means that they should be ready for the 2005 assessment of whether a party (or the EU as a whole) has made 'demonstrable progress' – based on information provided by countries, annual inventories of emissions and sinks, and on country reviews.

That said, neither the three Kyoto mechanisms nor the compliance regime strictly specify the way to achieve an emissions target. This is why the EU wants the Conference to confirm domestic policies and measures as the main means, but also endorse the three mechanisms proposed as supplementary actions for industrialised countries to meet their obligations.

Both policies and measures, once adopted, and the implementation of the mechanisms (and inclusion of carbon sinks) are associated with costs at national and company levels. With this in mind, the potential for reducing emissions and the related costs have been identified for all economic sectors. However, to avoid excessive costs, policies and measures need to be tailored to target the real 'villains' rather than imposing blanket controls on all.

For this, a more detailed breakdown will be needed, in particular for energy consumption data, energy efficiency data and transport data. Forestry statistics will also need to be re-assessed in the light of the emerging need for data on 'Kyoto' forests. Moreover, any requests for lower emissions from livestock will need to be supported by animal feed balances and information on agricultural practices.

Trading in emissions will lead to the setting-up of a 'stock market' for emissions, providing an incentive for robust verifiable emissions/savings calculations, since only those companies meeting these criteria will be allowed to trade emissions. Countries and companies will, therefore, need to supply more detailed data on

activities producing emissions, eg. fuel consumption, industrial processes, and so on.

Countries should be taking steps even now to ensure that data made available under this or other emission reporting requirements (such as the European Pollution Emissions Register, EPER) are also available to statistical services, as part of our continual efforts to reduce the reporting burden on industry. Despite the inevitable complaints, providing the necessary data will be in a company's economic interest. It will not only help to avoid introducing inappropriate and costly measures, but also prepare them for emissions trading. The challenge will be to get this message across and to draw the maximum advantage from this data collection system.

Because of the time lag between setting up data collection systems and data availability, clearly all these issues will need to be taken up in the very near future if statistics are to fulfill their role as a tool for policy-makers. ■

1. According to the Protocol, companies and other legal entities can participate directly in Joint Implementation (JI) and the Clean Development Mechanism (CDM), in the case of emissions trading it mentions only Parties. Many of the practical details of how the three mechanisms will work – particularly for emissions trading – have yet to be decided. CDM started running in 2000, while ET and JI are to run from 2008 (pilot phases foreseen).

Statistics helping to counteract social threats

by Petra Lehmann*

The Social Chapter in the Amsterdam Treaty has become the new driving force for EU social statistics and, in particular, low income and social exclusion statistics. This has been reinforced by the Lisbon and Nice Councils, putting the social dimension high on the political agenda.

The Gothenburg Council – with the Sustainable Development Strategy – finally added a third environmental dimension to the earlier decisions on social and economic issues and stressed that sustainable development should be determined by the three dimensions.

The EU's strategy is to transform itself into 'the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion'. It stresses the importance of social exclusion and social cohesion statistics for monitoring problems that might arise from the socio-economic changes expected in the next decade.

To solve these multidimensional problems effectively at European level, a set of so-called structural indicators (currently 35) has been set up and an interservice consultation has taken place with view to the list of structural indicators for the 2002 annual synthesis report. The structural indicators cover the areas of employment, innovation, economic reform and social cohesion.

Seven of these structural indicators relate to the area of social cohesion, and three are closely linked to the field of income, poverty and social exclusion, namely

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- distribution of income – share ratio S80/S20[1],
- low income rate before and after social transfers, *and*
- persistence of low income.

Going further

Further Social Cohesion Indicators are currently being discussed by the Social Protection Committee, a high level group on social protection. Its offshoot, the Indicators Subgroup, was created to concentrate on developing these social cohesion indicators. With the overall aim of improving indicators in the field of low income and social exclusion, the group's work programme is divided according to indicator type:

Performance indicators measure characteristics of phenomena, reflecting the outcome of policies and the progress achieved in tackling key social problems effectively. Part of the *performance indicators* are the *structural indicators*, which are of a more general nature, and which can be used in synthesis reports to indicate structural, long-term characteristics. The *structural indicators* should be available for all EU Member States and should contain comparable data.

Last autumn, the Indicators Subgroup had agreed on a set of *social cohesion indicators*, to be further refined:

- Low income rate after transfers with low income threshold set at 60% of median income (with breakdowns by gender, age, most frequent activity status, household type and tenure status)
- Distribution of income – share ratio S80/S20
- Persistence of low income (based on 60% of median income)
- Median low income gap
- Dispersion around the low income threshold
- Low income rate anchored at one point in time
- Low income rate before transfers
- Distribution of income – Gini coefficient[2]
- Persistence of low income (based on 50% of median income)

This list is further developed in the final report submitted in December 2001.

Including Candidate Countries

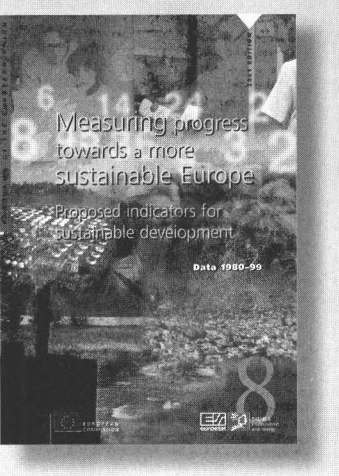
Eurostat has also started to collaborate with the Candidate Countries to include their income and social exclusion statistics in the Commission's annual synthesis report. The first data for the three structural indicators are to be included in the synthesis report for 2003, with information from the Candidate Countries planned to expand and eventually cover all the social cohesion indicators.

A powerful tool

To calculate indicators in Member States, Eurostat uses micro-data from the European Community Household Panel (ECHP). However, after eight years of using the panel, Eurostat, together with the Member States, decided to replace the ECHP in 2003 with a new instrument, EU-SILC (EU Statistics on Income and Living Conditions). One of the main reasons for this change is the need to adapt the content and the timeliness of data production to political needs.

EU-SILC aspires to become the EU reference source for com-

Measuring progress towards a more sustainable Europe



For Eurostat's 2001 indicator report on sustainability issues and themes, 63 indicators were selected and organised, as far as possible, along the same thematic lines and with the same definitions as those proposed by the United Nations Commission on Sustainable Development (UNCSD). To maintain consistency with the UNCSD's core list of sustainability indicators, some limited time-series have been included from the social sphere, eg. on population below poverty line, crime, income inequality. Some specific complements have been added to the UNCSD's core SDI list in order to include important EU issues.

For each of the 63 indicators, a statistical presentation (table and graphs) and a synthetic descriptive analysis is provided.

Eurostat has tested the UN's methodology in order to verify the application of the selected indicators and their availability, in terms of adequate statistical information, at European level. About 50% of the indicators selected by Eurostat (29 indicators) are similar to those in the UN's core list. 20% of Eurostat's final selection (13 modified) are comparable to their UN counterparts in terms of definitions. As a result, more than 66% of the selected indicators (ie. 42 indicators out of 63) are comparable to those in the UNCSD's core list.

The publication covers the EU Member States and, whenever data are available, also the EEA and the first six accession countries. Eurostat is the main data source of the indicators presented, complemented by other international sources.

A separate part of the publication presents the experiences of the five Member States (Austria, Belgium, Finland, France and Germany), which took part in the UN testing phase on indicators.

parative income distribution and for social exclusion statistics, with the two main goals of high quality, especially regarding comparability and timeliness, and flexibility. It will comprise both a cross-sectional dimension – the first priority – and a longitudinal dimension.

The *cross-sectional* information will be collected annually at national level starting from 2003. The collected data will be multidimensional, covering income, labour, demography, housing, education and health at the same time.

The *longitudinal information* will also be updated annually. However, it will only cover the four years up to the survey date, and it will be more restricted in content – only covering income, labour and a reduced set of non-monetary variables of deprivation.

The delivery of high quality, timely and comparable data, as well as the inclusion of data from the Candidate Countries, plays an important part in identifying the problem areas within and across countries in this area of work. It is an essential tool for policy-makers in the expanding European Union, and will prove extremely valuable in improving the strategy for sustainable development in the area of income and social exclusion. ■

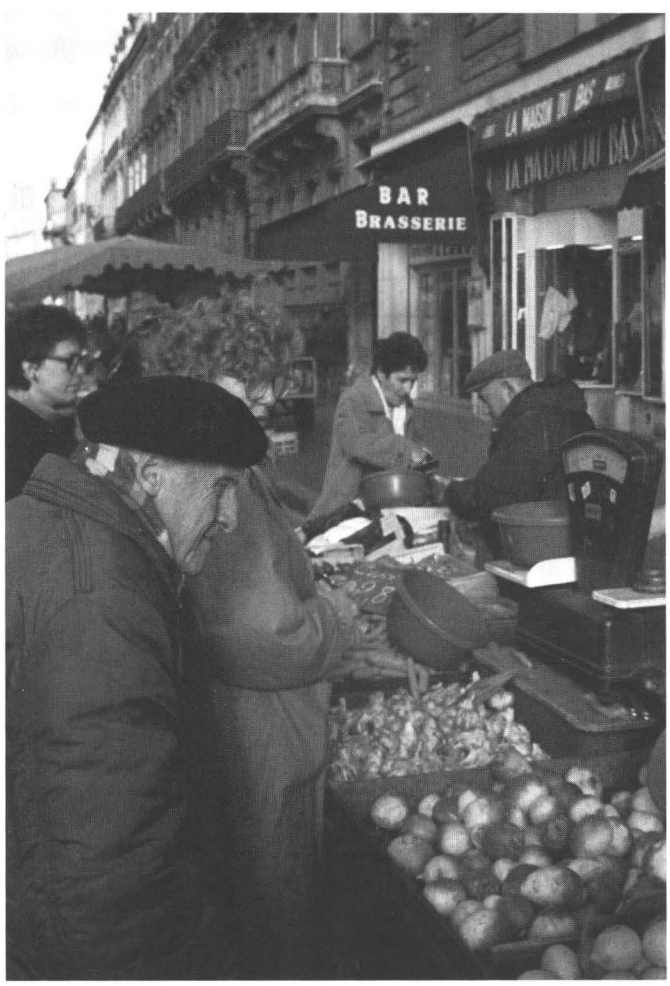
1. The S80/S20 ratio compares the net income available to the richest 20% of the population with the poorest 20%. It is a summary measure of inequality in terms of net income. The population consists of all persons living in private households of a country.
2. The Gini coefficient is a summary measure of inequality in income. The size of the coefficient represents the share of the total income that has to be redistributed to obtain a fully equal income distribution. Thus, the higher the level (maximum =1), the more unequal the distribution.

New challenges raised by an ageing society

by Teresa Bento*

Among the numerous economic and social issues addressed by the Lisbon strategy in March 2000, the demographic evolution of an ageing population was identified as a trend that could hamper sustained development.

This was made crystal clear in the Commission Communication – *A sustainable Europe for a Better World: A European Union Strategy for Sustainable Development* – which said, "While increases in life expectancy are obviously welcome, combined with low birth rates, the resultant ageing of the population threatens a slowdown in the rate of economic growth, as well as the quality and financial stability of pension schemes and public health care."



Dealing with an ageing society is therefore an important element when it comes to sustainable development. In the wake of this increasing awareness, a number of policy actions have followed, going from strength to strength:

- In response to the mandate from the Lisbon European Council, the Commission presented, in October 2000, a study entitled, *The Future Evolution of Social Protection from a Long Term Point of View: Safe and Sustainable Pensions.*
- Recognising the importance of pensions reform for ensuring a high level

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of social cohesion in the European Union, the Stockholm European Council last year agreed to develop cooperation in this area in order to cope with the new challenges raised by an ageing society.

- The Social Protection Committee presented a substantive report on adequate and sustainable pensions to the Gothenburg European Council.

- European Councils in Stockholm and Gothenburg, as well as the European Parliament, proposed the application of the open method of coordination with common objectives, agreed indicators, regular reporting and identification of best practices on the question of pension reforms. An agreement should be reached on these common objectives and new formalised cooperation take place.

Addressing the problem

Three broad objectives are proposed:

Adequacy of pensions: Pension systems should allow individuals to maintain a satisfactory living standard after retirement and should prevent social exclusion.

Financial sustainability: Employment levels need to be increased, notably by removing disincentives to leave the labour market early. Public debt should be reduced so that future interest burdens on public budgets are reduced. Any adjustment in pension systems should strike a fair balance between the active and the retired. And, finally, there should be high prudential standards for private pension schemes to ensure the safety of funds.

Adaptation of pensions to a changing society: Pension schemes should be compatible with the needs of flexibility and security on modern labour markets.

According to the working method, Member States should prepare national strategy reports – a process which should involve all relevant actors – for analysis by the Commission and the Council.

Statistical back-up

These political measures clearly need adequate statistical back-up with Eurostat's active participation. It is involved in various initiatives, for example, the discussion of a list of indicators for monitoring pension reforms.

On statistical frameworks, the European System of Integrated Social Protection Statistics (Esspros) forms one of the statistical backbones in this area. It uses a functional classification, in which functions describe the objectives of the intervention. These are defined in terms of the risk or need from which the beneficiaries are protected, such as 'disability', 'old age', 'survivors' or 'unemployment'.

The system includes all kinds of care – seen both from the perspective of individuals and households. This makes for an independence of institutional structure that has considerable advantages in making overall comparisons between Member States.

Moreover, Esspros is also able to give information on the form of organisation chosen by countries to provide protection. It collects data from social protection schemes – or parts of such institutions – characterised by both a certain autonomy and accounting data availability. These schemes are then classified by type of protection provided (basic, supplementary and so on) and by target group of persons (total population, civil servants etc.).

While Esspros is already a valuable reference source for comparative data on social protection at European level, more projects are underway, eg. on net expenditure, on the clarification of the links between Esspros and ESA95, on beneficiaries or on qualitative information at a detailed level.

With this stocktaking in mind, the statistical system is therefore at the ready. As soon as the discussion about data needs is finalised, we will see how we can live up to policy's expectations. ■

Transport is a subject which illustrates very clearly the essential point of sustainable development. Over many years, the economy has grown and personal incomes have increased, and these upward trends have been matched by similar upward trends in the quantities of goods and the number of people transported.

The negative side-effects of transport are well known: noise, pollution, accidents, the use of land, among others. Unless action is taken, the upward trends in transport means that many of these negative effects would also tend to increase – without limits – a situation which, by any reckoning, is clearly not sustainable.

Getting from A to B with sustainable transport

by Graham Lock & John Allen*

For this reason, Community transport policies have been steadily shifting in emphasis to add "sustainable transport" to the long-standing goals of efficient, open and deregulated transport markets. Indeed, the 2001 White Paper, *European Transport Policy for 2010: time to decide,* makes it clear that sustainable transport is the only way to avoid the dire economic and environmental consequences of present transport trends.

Driving statistics forward

Statistics contribute both to understanding the problem and to solving it. Data have been collected for many years on the quantities of goods and people transported, by different modes of transport – road, rail, inland waterways, sea and air. These data can be used, for example, to calculate the 'modal split' – the proportion of goods or passengers carried by a particular mode of transport.

A wide variety of data have also been published on the negative impacts of transport, for example, on emissions of carbon dioxide and other pollutants, or on land used for the construction of transport infrastructure. In fact, the most relevant statistics have been presented as a set of indicators known as the TERM (Transport and Environment Reporting Mechanism) indicators, developed by Eurostat and other Commission departments together with the European Environment Agency.

The TERM indicators already enable a very advanced analysis of the various options for achieving sustainable transport in the EU, including discussion of questions such as:

- Can transport growth be 'decoupled' from economic growth, or, in other words, can future increases in GDP be achieved with a lower rate of increase in transport?
- Can the overall negative impacts of transport be reduced by using transport modes which are less damaging to the environment, or by technical advances for a particular mode of transport?

Pushing public debate

Eurostat is working on the TERM indicators to see where improved statistics can help to inform further public debate on sustainable transport. It is well known that existing transport statistics contain rather incomplete and inconsistent information on passenger

* John Allen is Head of Eurostat's Transport statistics unit while Graham Lock deals with transport-environment issues in the Environment statistics unit.

transport. Statistics are also needed from the perspective of personal mobility: what journeys do individuals make, why and how do they travel? A harmonised Community survey on personal long-distance mobility started in 2001, but much remains to be done to collect data on the short daily journeys which account for a large part of transport's environmental impact.

Some other changes to existing statistical practices would help to support a cross-sectoral approach to sustainable development. For example, normal energy statistics do not include maritime fuel consumption within transport consumption, but treat it as an export. The logic of this is that ships hold large quantities of fuel and buy where it is cheapest, and so fuel sold in one country cannot be related to the maritime activity of that country. However, a cross-sectoral approach to sustainable transport would require that a way be found to include maritime fuel consumption within transport consumption, so that related environmental pressures – such as carbon dioxide emissions – are correctly allocated to transport.

Reflecting true costs

The sustainable development strategy adopted by the European Council in Gothenburg in June 2001 calls for prices which reflect the true costs to society of different activities. For transport – as for other activities – the estimation of true external costs has, up to now, been an area for research and there are still issues lacking consensus, such as whether full costs or marginal costs should be recovered. If agreement were reached on such issues, then external costs could be calculated by statisticians. Statistics on transport prices have already been identified by Eurostat as a high-priority area for the next five-year statistical programme.

Looking eastwards

Statistics related to sustainable transport will have to provide high quality information for the Candidate Countries, where transport activities have already started to mirror the upward trends in Member States. Candidate Countries already supply good-quality data for key transport indicators through a joint data collection effort between Eurostat, UNECE and the European Conference of Ministers of Transport.

The collection of detailed transport data according to Community standards is supported by the Phare programme. Work started in 1997 with a round of surveys on road freight transport, and is currently being extended to air and sea transport statistics. In fact, by the time membership is achieved, it is possible that some Candidate Countries will have better data for sustainable transport than some existing Member States. ■

Natural resources at the heart of the challenge

by Mario Ronconi*

The sustainability concept can very easily be explained by taking into account the earth's physical assets available for exploitation. Economic theories have been developed on the fundamental assumption that land is one main factor of production; historically, land was the first productive asset capable of creating 'wealth'.

Moreover, development of production processes and, as a result, the present state of our economic system were based on extensive use of natural resources: land, water, forests, natural habitats and ecosystems, soil, etc. Nature has always been considered as a limitless source of cost-free resources. However, resources, as supplied globally by nature, are limited, which clearly poses sustainability concerns.

Decoupling and eco-efficiency

Will we be able to preserve today's natural assets for future generations? Can we provide economic growth while limiting or at least not expanding the demand we make, and the pressures we put, on the earth's physical assets?

These questions can be answered from different perspectives: the situation may be seen from a global world level or from a more narrowly focussed angle, at national or regional level, and the resulting pictures could be different.

What's more, we have to distinguish between non-renewable (metals, minerals and fossil fuels) and renewable resources (timber, fish, partially water, other flora and fauna). Extraction of non-renewable raw materials is a permanent reduction in the Earth's natural stock, while extraction of renewable sources must not exceed the natural growth rate, the natural re-creation capacity, as it is also called.

Whatever the level of analysis will be, it is clear that present patterns of production and consumption still imply that economic growth can be achieved only by utilising addi-

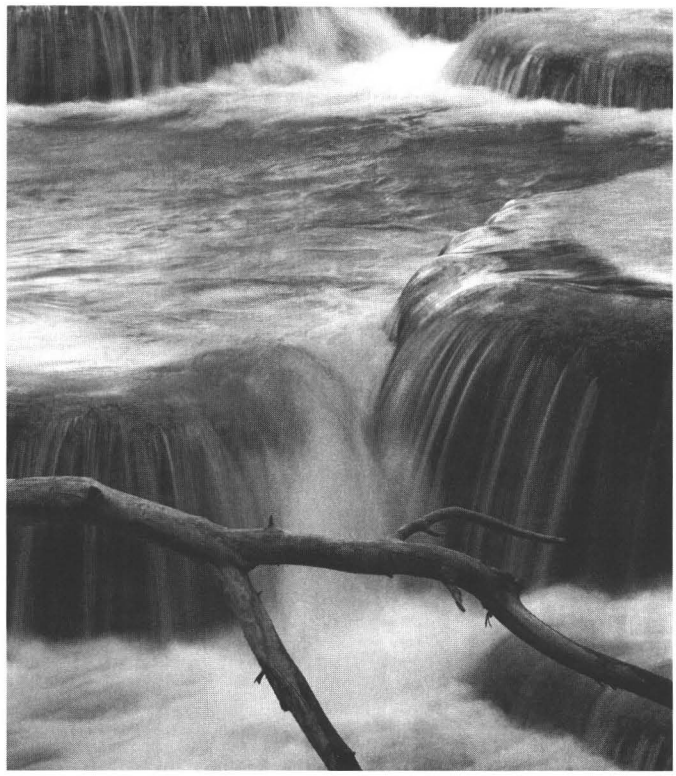
tional natural resources, which, consequently, means extracting more primary materials from Nature.

To change to a new and sustainable path, there are two key elements: the 'total quantity used' and the 'efficiency of use'. The latter implies a reduction in consumption of resources/materials and in the consequent negative impacts on the environment, eg. reducing the harmful emissions and the amount of waste generated by the goods we produce or consume.

In other words, we need to introduce an ecological dimension in measuring the efficiency of production and consumption processes, thus helping to achieve the major goal of "eco-efficiency", as it is currently defined.

'Factor four' and 'factor ten' are names of concepts that express the long-term objective of a four (or ten)-fold reduction in absolute resource use in the industrialised countries and therefore a more equitable sharing of resources across the world. Economic growth has to be de-coupled from the exploitation and consequent deterioration of natural assets.

Up to now, no specific targets, or 'sustainability levels' as one could call it, relating to selected resource flows have been established at EU level. However, quantified objectives can be envisaged in the near future, given that resource consumption is one key priority area, as it is in the context of the new 6th EU Environmental Action Programme, approved in 2001.



Measuring natural resources

The lack of pre-defined targets for resource use has another negative effect, in the sense that it does not provide clear policy orientations and therefore does not give appropriate focus to statistical work on natural resources.

From the statistical standpoint, one major measurement problem relates to the evaluation in monetary terms of natural assets, defined in the literature as "natural capital". For some resources, such as forests or minerals (sub-soil assets), a monetary value can be estimated to some extent. For this purpose, the use of accounting methods is surely helpful and has already brought some valuable results, in particular, concerning the methodological work.

For some other assets, such as natural habitats and biodiversity more generally speaking, or water resources, calculating economic values (both use and exchange values) is more problematic, if not impossible given that there is no 'market' for, let us say, wetlands or a mountain ecosystem.

Physical measurement, on the other hand, applies to any natural resource stock and here there is a great deal of work to do.

To improve the measurement of natural resources, there are two main directions:

- increasing information on physical flows, with quantitative detailed analysis by each relevant resource, ie. water, land, forests, or
- further elaborating a combined aggregated analysis of physical and monetary values to estimate the environmental and economic costs and losses or gains related to resource uses.

Regular reporting needed

Despite the progress in recent years, several information gaps still have to be overcome, for example on water and land use statistics.

For analysing the intensity of water use (abstraction in relation to resources), the spatial dimension (at catchment level) is essential to detect the real water problems affecting a specific area or region in Europe. Water quality, in particular for inland waters, cannot yet be properly and completely assessed.

The environmental impacts of over-use of land still have to be analysed in detail. Land use is a complex multidimensional issue with different impact phenomena. These characteristics imply the integration of several statistical sources: from the productive (agricultural) or infrastructure (transport) uses of land, to urbanisation and the growth of built-up areas, and to soil degradation, etc.

To this end, ensuring regular reporting to analyse the changes in the land use structure is a major challenge. The issue of biodiversity is perhaps the most complex one from a scientific perspective – and its statistical dimension is still very limited. In particular, it is extremely difficult to assess the qualitative degradation of different habitats.

As far as environmental impacts (ie. pollution caused

* Mario Ronconi is the main person responsible for the sustainable indicators publication and takes care of integrating the sustainability issue into structural indicators. He is also responsible for the relations with Directorate-General Environment on this topic.

by resource use) are concerned, air emission statistics are comparatively more advanced in terms of the quantity and quality of the data and the level of detail. Waste statistics, on the other hand, suffer from the application of different definitions and classifications, and also from a reporting mechanism that has not yet been well established. The forthcoming EU Waste Statistics Regulation will hopefully lead to a noticeable improvement in the availability and quality of data on waste.

As a result, despite their existing limitations, available statistics on resources are, nevertheless, sufficient to show an overall trend of increasing pressures on the main environmental media (water, land and air). We need to focus – to 'zoom' in – more on details, but the global picture is already clear.

A global approach to resource use

At present, only first estimates are available for a global indicator on material resource requirements at EU-level. However, some relevant resource components – like the consumption of energy – can provide meaningful indications of the overall trend of resource depletion.

In the medium-to-long term, as a result of ongoing research, a more appropriate global indicator on resource use may be compiled and based on 'material balances'. These comprise input and output flows of various materials consumed in the economic system, as well as changes in stock levels, in physical and monetary terms.

Further steps will make it possible to derive from economy-wide material balance indicators based on several materials flows (input or output or consumption indicators).

Embedded in a policy framework

Contributing meaningfully to a sustainable management of natural resources depends also to a large extent on the development of a specific policy framework.

Internalisation of environmental costs, appropriate use of economic instruments and abolition of non-sustainable subsidies represent powerful policy measures to be implemented in order to achieve considerable progress towards eco-efficiency objectives.

The challenge is to create and/or identify actions and programmes where both the environment and the economy can benefit from a reduction of the pressure on resource use. Targeted research and technological development also provide essential contributions towards improved efficiency in resource management. In addition, an "Integrated Product Policy" should address the entire life cycle of production and consumption, and include the whole 'product chain' from production to distribution, consumption and the final generation of waste.

One can foresee a mix of instruments contributing to this end such as labelling, eco-design, product-related taxes, links to the Community's Environmental Management and Audit Scheme (EMAS).

All these new instruments will also require an adequate information basis and therefore another area of statistical work will need to be developed. ■

Bridging the gap through environmental accounts ...

by Brian Newson*

Conventional national accounts are a good measure of the quantity of goods and services produced and consumed, and the incomes generated as a result. However, they do not always capture – or do not always give enough importance to – environmental implications that occur essentially outside the market.

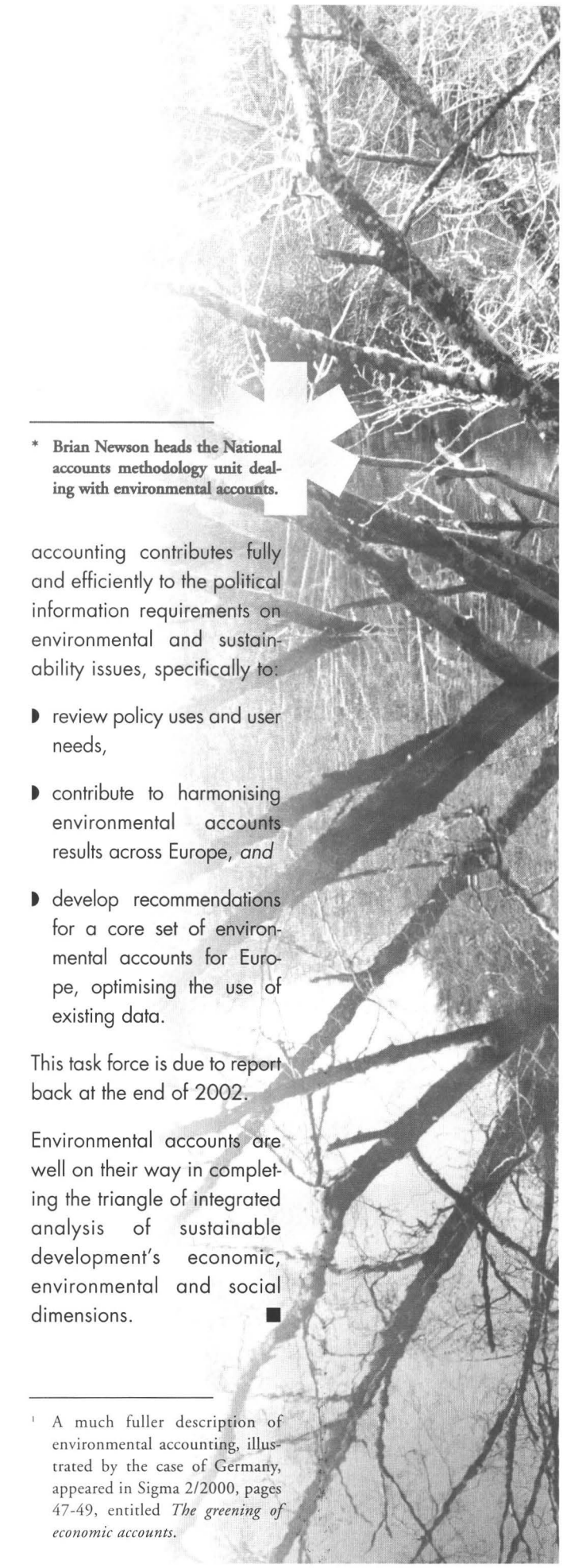
This is where environmental accounts come into play. In the search for something akin to a sustainable developer's toolbox, environment accounts form a bridge between environmental statistics and the economic picture portrayed in national accounts. They try to describe the extent to which the economy depends upon natural resources, and the impact of economic activity upon the environment. Moreover, they offer an analytical tool with which to make comparisons over time and forecast the potential impact of future changes.

Since 1995, Eurostat has been working with the Member States to develop a set of environmental accounts[1] – fully articulated with the conventional national accounts – that measure:

- emissions to air by industries and households,
- natural resource stocks and their use, focusing on subsoil assets and forests both as a source of timber and as a recreational and environmental resource,
- water abstraction, its use and return to nature, *and*
- natural resource management, environmental protection expenditure and environmental taxes.

These issues are clearly at the heart of the interface between the economy and the environment.

At the end of 2000, the EU Statistical Programme Committee created a high-level task force of statisticians to review the European Strategy for the development of Environmental Accounting (ESEA). The task force's primary objective is to ensure that European environmental



* **Brian Newson heads the National accounts methodology unit dealing with environmental accounts.**

accounting contributes fully and efficiently to the political information requirements on environmental and sustainability issues, specifically to:

- review policy uses and user needs,
- contribute to harmonising environmental accounts results across Europe, *and*
- develop recommendations for a core set of environmental accounts for Europe, optimising the use of existing data.

This task force is due to report back at the end of 2002.

Environmental accounts are well on their way in completing the triangle of integrated analysis of sustainable development's economic, environmental and social dimensions. ■

[1] A much fuller description of environmental accounting, illustrated by the case of Germany, appeared in Sigma 2/2000, pages 47-49, entitled *The greening of economic accounts*.

In the recent pages you have met a handful of statistical actors involved in sustainable development. Because this concept clearly goes beyond a single field of action, it goes without saying that many more statisticians are working hard on this every day. The table below provides a rapid who's who of those working on sustainable development at Eurostat:

Directorate F: Agricultural, environmental and energy statistics	
Giuseppe Caló	Director
Inger Öhman,	Head of Unit, Environment statistics: Coordinating activities related to sustainable development within Eurostat
Mario Ronconi	Taking care of the sustainable indicators publication, of integrating the sustainability issue into structural indicators, and responsible for relations with Directorate-General Environment on this topic
Rosemary Montgomery	Responsible for work on indicators for integrating environmental concerns into other policies, such as energy and agriculture and for Eurostat's Environmental Pressure Indicators
Christian Heidorn	In charge of statistics on chemicals and pesticides
Dietmar Koch	Responsible for data on emissions to air and eco-efficiency
Peter Tavoularidis	Head of Unit, Energy statistics: Leading the work on energy efficiency indicators and on indicators for integration of environment into energy policy
Graham Lock	Dealing with transport-environment issues
Directorate B: Economic statistics, economic and monetary convergence	
Bart Meganck	Director
Brian Newson	Head of Unit, National accounts methodology: Dealing with satellite environmental accounts
Anton Steurer	Dealing with environmental accounts
Directorate C: Information and dissemination, transport, technical cooperation with non-member countries (except Phare and Tacis), external and intra-Community trade statistics	
Daniel Byk	Director
John Allen	Head of Unit, Transport
Directorate D: Business statistics	
Pedro Díaz Muñoz	Director
Bernard Langevin	Head of Unit, Structural business statistics
Martina Hahn	Structural indicators team
Aurora Ortega-Sanchez	Structural indicators team (dimension of sustainability in structural indicators)
Directorate E: Social and regional statistics and geographical information system	
Lothar Jensen	Director
Antonio Baigorri	Head of Unit, Living conditions
Anne Clemenceau	Head of Sector, European Community Household Panel
Teresa Bento	Head of Sector, Social protection
Ian Dennis	Head of Section, Poverty and social exclusion
Petra Lehmann	Dealing with social exclusion-related issues
Michail Skaliotis	Head of Unit, Education, health and other social fields
Marleen De Smedt	Head of Sector, Health and safety
Spyros Pilos	Head of Section, Education and training
Aarno Laihonen	Head of Section, Population
Hubert Charlier	Head of Unit, Labour market

Sustainable development is clearly an issue stretching beyond the EU's frontiers and concerning every corner of the globe. This is where the UN comes in, and more particularly, the United Nations Commission on Sustainable Development (UNCSD). *Sigma*'s GLEN CAMPBELL interviewed Professor **BEDRICH MOLDAN**, Chairman of the UNCSD, to find out more.

Indicators for a sustainable world

The United Nations Commission on Sustainable Development (UNCSD) was created following the 1992 Rio Summit to ensure follow-up of the agreements made by the conference. One of its achievements, next to promoting sustainable development in general, has been the creation of a menu of sustainable development indicators for use in countries all over the world. Moreover, it has collaborated with Eurostat in a mutually beneficial partnership for developing sustainable development indicators.

Professor Bedrich Moldan, you were one of the key people involved in the Rio Conference and in putting the UNCSD on its feet; what was the reception like?

In 1992, following the Rio Summit, nobody fancied much the existence of another bureaucratic organisation under UN wings. But despite this initial reluctance, there was a shared feeling that the relatively new, cross-sectoral notion of sustainable development established by the conference required a new body for itself, since other UN bodies are more sectoral in nature.

When it came to laying down the UNCSD's aims, it was not a fight, but rather a search for harmony. People understood what sustainable development was – the balance, at that time, between the economic and environment domains [the social dimension gathered momentum later]. The basic idea was accepted but many found it clouded by fuzziness, calling for more concrete ideas.

The UNCSD then embarked on a worldwide programme of indicators which – after some to-ing and fro-ing, together with some countries' fears that indicators could be linked with green conditionality for foreign aid – finally took off in 1995. *(See panel on page 26).*

Hasn't a certain fuzziness remained around the definition of sustainable development?

I think that by means of indicators, without trying to develop some sort of verbal definition, we are already well on the way to developing the idea of sustainable development. This is the ultimate goal of indicators. As long as the search for harmony is maintained between the dimensions, this is more important than words. Sustainable development is, in my mind, a fuzzy idea supported by quantitative data.

Given the differences between countries worldwide, how did you go about setting up the UN indicator set?

That's a good question. When we started testing the indicators, a real partnership of co-operation emerged between countries. Very often it is easy to think that developing or transition countries can only take and not give anything in return. This is wrong. We learnt a great deal from such countries. For example, recently on the discussion of indicators for 'sustainable transport', developing countries argued that they couldn't use this as they needed to consider any means of transport – however dirty – as a way of supporting other elements of sustainable development.

In addition, while our target is to have a harmonised international indicator system – both from the standpoints of statistics with harmonised definitions, classification and methodologies and policy, consideration of individual national priorities and circumstances is of great significance. This is why we have created a set from which countries select indicators according to their own situation. For example, an important indicator for Finland is the moment ice breaks up, whereas for Morocco, you can bet ice won't be on its list.

But while this flexibility of choice is a way forward, the rigidity of methodology is, however, stressed through our sophisticated 'methodological sheets'. If people choose an indicator, they need to do it well for comparability. If we can compare GDP the world over, this is because everyone is producing the figure according to the same single recipe.

From popularity to priority

Developing countries have a long way to go to catch up with the developed world; our priorities are not necessarily theirs. Is sustainable development a priority for them?

Obviously sustainable development is of global value, and should be a priority for all countries. And compared to a decade ago, the concept is generally alive and kicking. But it is true that in many developing countries, sustainable development is still not well known or is regarded as a batty green movement. Plus there are many issues considered as more appropriate for richer countries. But we need to change these arguments.

For Candidate Countries, it is slightly different. We suffer from a knowledge gap

because of Communist rule. On the one hand, we are part of the developed world, but on the other, we find ourselves in a difficult catching-up process in terms of information and mentally. It is therefore not surprising that sustainable development is much less understood. But this is being countered as far as possible through national efforts and as part of the EU accession process.

Are you saying that the sustainable development idea will triumph in the end?

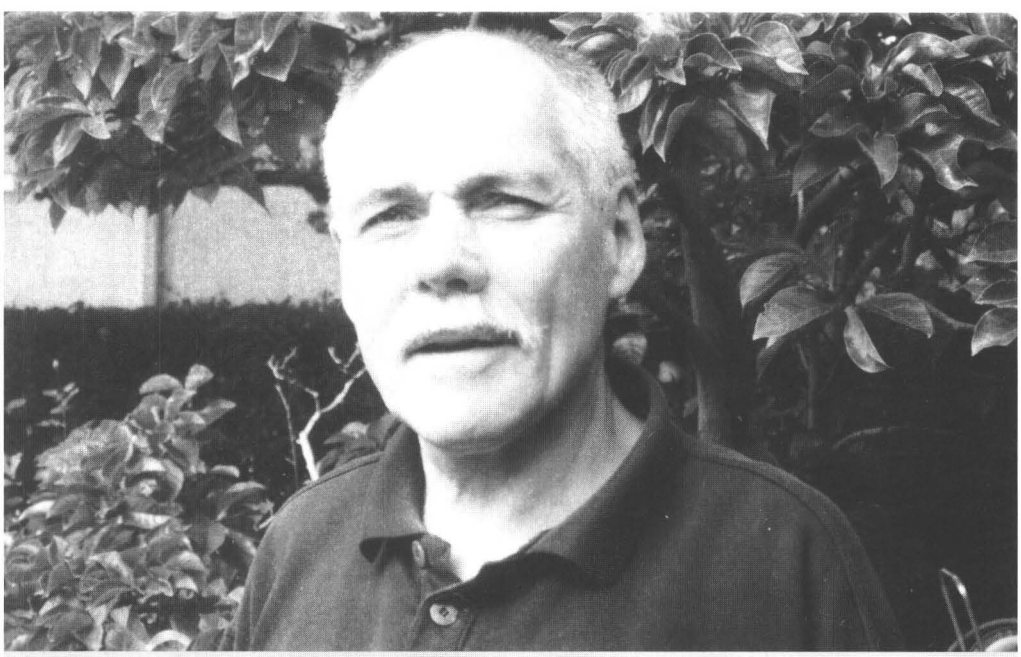
I don't see any insurmountable obstacles to its growth. The issue is now out of exclusively green hands; everyone is talking about it. So we are part of the way already. It is just a matter of time for developing countries to embark on this. And it is for international organisations like the UN, but perhaps particularly the OECD, to play a trend-setting role.

A one-stop-shop for statistics

The UNCSD works with statistical agencies a great deal. What are the weaknesses in statistical information and how would you like to see it improved?

If you look at many data requests made by secretariats, eg. secretariats of various UN conventions, they ask for a demanding set of information, much of which is duplicated because of numerous programmes or conventions. We need to streamline these requests and make statistical offices a sort of one-stop-shop so that all information can be obtained from them – to avoid bouncing from one secretariat to another. Moreover, in poorer countries particularly, the capacity to cope with such exigencies is at times limited – a problem that inevitably leads to data of diminished quality.

But, I believe statisticians can take a lead here and streamline the fragmented flows of information. Although much has already been achieved, this will require even greater efforts in coordination with other agencies and institutions. Doing this will also help us in the production of indicators where the lack of data can be quite an obstacle.



Towards global governance

How do you see the future management of sustainable development?

Now we are approaching Johannesburg, there is much talk about creating a new global environmental organisation under the roof of the UN. However, a clear distinction between environmental governance and sustainable development governance does simply not exist. The question is how to define the different roles and the interface necessary. Although the UN is under reform, I am not sure about the pace, nor about the direction. Regrettably, many very valid ideas are simply washed down or thrown out of the window.

In my view, some form of global governance is necessary. National governments no longer have the same clout compared to other stakeholders such as companies. But, together with scientists and other specialists, there is much scope for creating symbiotic partnerships.

The UNCSD has been somewhat of a pioneer in enabling

Currently Professor of Environmental Sciences at Prague's Charles University and Director of the Charles University environment Centre, **Bedrich Moldan** is Chairman of the UN Commission of Sustainable Development (2000-2001).

A graduate from Charles University, Moldan studied analytical chemistry and became a Candidate of Sciences in 1964. Since then, he has enjoyed a very colourful professional career in scientific and political circles – particularly in the environmental field – both in the Czech Republic and at international level.

This marriage of scientific and political roles makes his CV – and his long list of published works – multifaceted and interesting. Past positions include Member of the Czech Parliament, Environment Minister, senior roles in Czech NGOs (non-governmenatl organsiations), as well as various positions in international organisations and groupings such as the EU accession delegation, the UN, the OECD, the EEA and SCOPE – not forgetting being a lecturer for much of the time!

A fervent believer in an environmentally friendly world, he sees caring for the "environment as part of the whole quest of humanity towards transcendence and the pursuit of human happiness."

The United Nations Commission on Sustainable Development

A major milestone towards sustainable development was laid in 1992 with the United Nations Conference on Environment and Development (UNCED) – better known as the Earth Summit or the Rio Conference – bringing together 178 governments worldwide. The Framework Convention on Climate Change and the Convention on Biological Diversity were signed; the Rio Declaration and the Forest Principles were endorsed; and Agenda 21 was adopted – a 300-page plan for achieving sustainable development in the 21st century.

To ensure effective follow-up of the Earth Summit, the United Nations Commission on Sustainable Development (UNCSD) was created the same year in 1992. It monitors and reports on the implementation of the Earth Summit agreements at local, regional and international levels.

With 53 member countries, the UNCSD is a functioning commission of the UN Economic and Social Council (ECOSOC). It ensures the high visibility of sustainable development issues within the UN system and helps to improve the UN's coordination of environmental and development activities.

UN indicators

The availability and use of information are issues that cut across all chapters of Agenda 21 and its implementation measures. Therefore, in 1995 the UNCSD launched a work programme for indicator development, which had as a key element the methodological definition and testing of an appropriate combination of indicators. These indicators, 134 in total, covered social, economic and environmental issues.

Between 1996 and 1999, 22 countries tested the indicators on a voluntary basis. Five EU countries were involved: Austria, Belgium, France, Finland and Germany. The UK provided a substantial contribution to the testing phase. This process also helped to prioritise and select the indicators to be included in the UN working list, and to make the link to national policy goals. Data availability issues were also highlighted.

The final result of the test phase was the adoption in 2000 of a revised framework and a reduced list of 59 core indicators. The Driving-State-Response Indicator framework, first used for selecting indicators in 1996, was replaced by a more policy-oriented classification according to four relevant sustainability dimensions, 15 themes and 38 sub-themes. While the indicator set is flexible – à la carte – users are strongly advised to follow the very sophisticated, so-called 'methodological sheets' for questions of methodology.

The UNSCD and Eurostat have also collaborated together on the development of their respective sets of indicators. As well as contributing to the UN's set, Eurostat has also used the UN's indicators and methodology to develop its own. *See panel on page16 to read more.*

Johannesburg Conference

The UNCSD also has the task of preparing for the World Summit on Sustainable Development (WSSD) – the 'Rio+10 Conference' – to be held in Johannesburg in 2002. Constituting a 10-year review, the Johannesburg Conference will assess implementation of the 1992 agreements and, in particular, the Agenda 21 action plan. 'Johannesburg' is considered as a major crossroads and as a hub for further development.
The UNCSD's website can be found at:
http://www.un.org/esa/sustdev/

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stakeholders to feel part of the sustainable development project and giving them access to information. It has given the issue shape and fostered fruitful multi-stakeholder dialogue. Moreover, a point which Moldan hastens to add, Paris-based SCOPE (Scientific Committee on Problems of the Environment) doubtless had a positive input on the scientific side in developing the UN indicator set – and offers an example of the sort of symbiosis which he would like to see in any future set-up.

Try everything

Are aggregate indicators such as the UN's Human Development Index a step in the right direction for monitoring progress towards sustainable development?

I think that there are many worthwhile efforts being made on this front, but I don't believe we will ever arrive at one indicator covering all three dimensions. However, this is not to say that we should abandon these sorts of ideas as a rule of thumb. Some of the indicators around today merit consideration even if they omit many important aspects or don't even touch on one of the pillars.

The Human Development Index, based on health, education and the standard of living, has been quite successful as a global yardstick. Others include, for example, the Ecological Footprint – which measures the ecological goods and services we consume – could be developed further too. It is important to try, even if it might seem a grind and give no immediate return. There are certainly good aspects in all of these attempts.

When the EU goes to Johannesburg

How could the EU contribute to Johannesburg's work?

On the statistics front, the EU statistical community could offer a more balanced perspective of a joint approach to defining an indicator set and an internationally agreed indicator system. And this also in terms of creating an attractive yet loud enough voice over negative views towards internationally agreed indicators – especially vented by developing countries.

More in terms of policy, I think it is imperative for the EU to present a unified and coordinated front and to avoid different approaches on specific themes such as climate change. Sustainable development should be the general theme. In addition, it would be good if several agencies presented a comprehensive yet succinct account of the progress made towards sustainability. Good examples exist, *inter alia*, the UK's 'Quality of life' publication that presents the strategic issues and supports them with data. Undoubtedly, there are roles for Eurostat and the European Environment Agency here.

Finally, I would also suggest that such analysis go beyond the EU's borders to include particularly the accession and EFTA countries. Connected with this – with my Czech and accession country hats on – I feel that we could play a greater role. Take us an asset, not as a burden.

So ends the interview with a pertinent remark that epitomises the key to the whole sustainable development project – that of a concerted endeavour between all players. ■

The UK has been among the first countries to develop a national set of sustainable development indicators. To learn more, *Sigma*'s GLEN CAMPBELL met **JOHN CUSTANCE** of the UK's Department for Environment, Food & Rural Affairs who is responsible for developing the UK's sustainable development indicators.

(Sustainable development) = ('Quality of life')

The UK was one of the first countries in the world to develop a concrete set of national sustainable development indicators. Following work in the early nineties, a first set of indicators for the UK was published in 1996. In tandem with the UK's revised strategy launched in 1999, *A better quality of life – a strategy for sustainable development for the UK*, the set was radically improved in *Quality of life counts*.

At the heart of the UK's sustainable development strategy is the idea of "... ensuring a better quality of life for everyone, now and for generations to come." The expression 'quality of life' – used interchangeably with sustainable development – sums up the UK's overall vision. It reflects the three pillars of sustainable development (ie. the social, environmental and economic) with the broad goals of:

- social progress which recognises the needs of everyone,
- effective protection of the environment and prudent use of natural resources, and
- maintenance of high and stable levels of economic growth and employment.

With a BSc and MSc in probability theory and statistics from Sheffield University, **John Custance** joined the UK's statistical service in 1974. He first worked in the Home Office on prison, crime, court and fire statistics. He was then seconded to London's Metropolitan Police where he was responsible for its crime and court statistics. After that, he came to what has now become the Department for Environment, Food & Rural Affairs and worked on land and planning in the late 1980s before moving to environment and sustainable development in the 1990s.

Asked about the common threads in his career, Custance says that apart from a general love of statistics, those relating to social and environmental policies and issues have been his fondest interests. "Working in sustainable development is therefore right up my street", he asserts, adding, with satisfaction, "It is great to be working in this area at this point in time because we have the opportunity to break new ground and make a real difference to the policy agenda and people's lives."

The latest core set of indicators contains about 150 indicators. Within this, there is an important subset of 15 key 'headline' indicators – intended to make up what was coined as 'a quality of life barometer'.

Grassroots upwards

Speaking to John Custance, it is clear that the UK development in indicators has been thanks to a well coordinated and balanced consultation with a broad range of organisations, experts and individuals – including the public. More social aspects of sustainable development were integrated into the revised UK set, such as poverty, social exclusion and crime – such aspects had not featured in the first draft proposals, as Custance openly admitted.

According to him, "developing indicators is a learning process. You start to get people involved and find out what issues are meaningful to them. The process of developing indicators can help fuel the debate about sustainable development. If you talk to people locally, then the social agenda features very strongly. Education, health, crime, and so on, are all issues that people closely associate with their quality of life."

This grassroots approach has also created a very symbiotic partnership in the development of regional and local level indicators. Against the backdrop of increasing UK devolution, regions are developing their own sustainable development frameworks while local authorities are responsible for preparing their own community strategies.

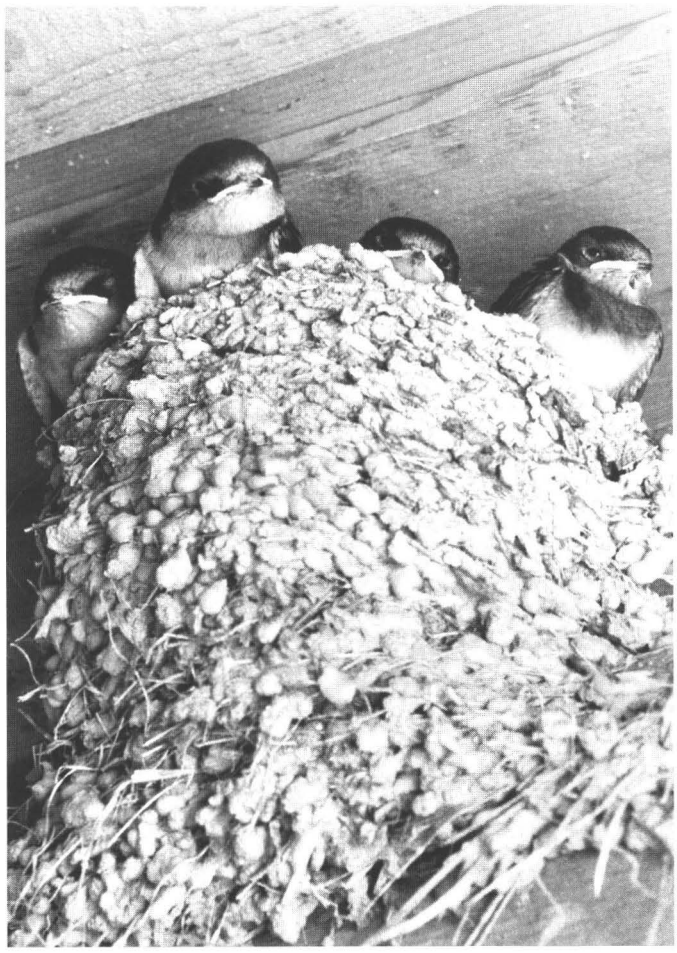
Regions and local authorities are free to create their own indicators according to local priorities and requirements, but are offered the national framework and indicators as a guide. On the development of these indicators, John Custance said "we took the approach not to dictate what others should use. Our wide consultation helped us build the framework and the indicators at the national level, and to offer authorities a more practical menu of indicators for local use."

The idea of creating these indicators alongside national ones was a response to the need to bring a local flavour to the indicators and win greater public acceptance. In addition, it is no coincidence that the expression "quality of life" was chosen as the UK's sustainable development banner. "You cannot expect the public to readily understand what sustainable development means", he explains. "You need a term that is not only meaningful, but one that people can identify with."

A bird indicator spreads public wings

One of the UK's 15 headline indicators – wildlife – focuses on birds. While its mention here is not intended to epitomise the UK's state-of-the-art in creating sustainable development indicators, it serves as a good example of the way the UK has approached the issue particularly in terms of public resonance and understanding.

In search of a way to tell the public about the general state of health of the British countryside, and in cooperation with the RSPB (the UK's Royal Society for the Protection of Birds) and the WWF (World Wildlife Fund), they set out to develop a general wildlife indicator. Birds were selected not only because substantial data were available, but also, since birds are either near or at the top of the food chain, they offer a good indicator of the state of other species and a wide range of habitats. As many birds as possible – almost 140 species – were covered and farmland and woodland birds were identified separately. Populations of both of these groups have declined significantly over the last three decades.



"The indicator struck a chord with many people", says Custance. "Despite much criticism at first and tongue-in-cheek publicity in the press and on television, it has proved a success." The indicator has been adopted and the government has made the commitment to reverse the trend in the next 20 years. "What's more", he explains, "this indicator has public resonance: you don't have to explain what birds are and what a decline in populations might mean. But if you produce something that sounds even vaguely 'statistical', it won't have the same appeal or understanding."

In terms of getting messages across to the public, John Custance is very much in favour of finding novel ways to present data. Colourful and easily digestible measurement tools abound in his mind, such as the number of London's famous red double-decker buses you can fill with waste or the number of miles, 'food miles', food has been transported to arrive on your plate.

Not all plain sailing

When it comes to measuring sustainability, Custance sees the rallying of allies as an important starting line. "If you win people's support, you build up allies. When we launched our consultation exercise, an NGO (non-governmental organisation) – totally unprompted by us – went on television and enthusiastically supported our work. This was a clear sign that people felt some ownership and they were part of the whole process", he says.

But, there are hurdles – and some are quite high. One of the things is getting agreement – "if you put social scientists and environment specialists together in the same room, you will have many different opinions on the best indicators."

Then there is the question of data availability, where he takes the stance that "indicators should be issue-led and not data-led, even if data are sparse or not currently available. Indicators should be linked to objectives and desired outcomes. Once you have identified these objectives, you should try to develop meaningful indicators to measure progress." Some issues are very hard to find data for, such as 'habitat fragmentation' where even a sensible proxy could not be found.

Starting with objectives also helps consultation. "You can speak to people in the street about issues they are concerned about", he says, "but not about data – people do not know if you have information on one thing or another. Sometimes, experts start to narrow the selection of indicators down according to what data

can be produced and this may not necessarily reflect the key underlying issues."

Another niggling problem is the age-old statistician's challenge of trying to establish forecasts or projections with sometimes little data to build on from the past. In some cases, the UK has used future targets to illustrate graphically where they want trends to go.

Commercial application shines

"It is great when someone uses or builds on work you have done", he says. For example, among the companies adopting a sustainable approach, the UK's DIY (Do-It-Yourself) chain, B&Q has been using the 15 issues addressed by the national 'headline' indicators to establish whether their company is working on the right lines. "This is hitting a nerve. Companies are realising that there is a strong commercial value in being able to demonstrate their sustainable development credentials, for example, their sustainably produced products or environment-friendly transport schemes, etc. Among others, the chemical industries have started to take our indicators on board in order to develop their own."

Asking Custance about whether he and his colleagues were trying to sell the indicators to companies, he said they were encouraging their use but were not making an active sales pitch. As an author's aside, in any case, according to recent research by a UK consultancy, the UK is leading the way in sustainability reporting with four companies ranking in the world's top five.

But even if they are not insistent salesmen, they have created a user-friendly sustainable development website (*http://www.sustainable-development.gov.uk/*), which includes indicator packages for businesses and other users. "We have tried to do a bit but you cannot do everything. We do not say this is what you should do, but we try to guide and encourage, pointing out the pitfalls, traps and lessons we have learnt."

Having the clout

Custance explains the circumstances in the UK for the development of the latest set of indicators were right – "perhaps we have been lucky because the indicators have grown with our sustainable development policy simultaneously. This has helped us to fit policy and indicators neatly together. We also had strong political support thanks to the institutional set-up." Before the recent changes to departments and before becoming the Department for Environment, Food & Rural Affairs, they were part of the Department of Environment, Transport and the Regions – a large government department which was headed by the Deputy Prime Minister and covered a wide range of sustainable development issues (eg. transport, housing, local government, as well as the environment).

This is in contrast to some other countries, where sustainable development may be delegated to their ministry of environment or their environmental agency – which do not necessarily have the same power or influences on what the country or the Government, as a whole, is doing.

Custance also pointed out "we are also rather unique in terms of government statisticians. We are very much on the development side and have had the chance to be actively involved in consultations, meeting and working with our users and other people outside government."

Readers may not already know – certainly this author was in the dark – that the UK's statistical system can be best described as a hybrid system. Many Member States have a central statistical office in which they employ all their statisticians and then each government department uses their statistics. Other Member States decentralise statistics so that each department has its own statistical department. But the UK has a mixture of both systems.

Linkages with other policies

One of the key ingredients of the indicator set was to make sure the indicators, where appropriate, were relevant and linked with other policy initiatives. In some cases, this meant adopting indicators from other government initiatives and strategies. These selections tended to cover broader sustainable development objectives rather than more specific policy performance indicators.

So on the education side, for instance, they wanted a headline indicator relating to equipping people with the skills to fulfil their potential in life. For this reason, they used an indicator relating to vocational and educational qualifications at the age of 19, rather than an indicator reflecting the success of schooling alone at the age of 16.

THE 15 HEADLINE INDICATORS IN THE UK SUSTAINABLE DEVELOPMENT STRATEGY

Maintaining high and stable levels of economic growth and employment

H1 Total output of the economy (GDP and GDP per head)

H2 Total and social investment as a percentage of GDP

H3 Proportion of people of working age who are in work

Social progress which recognises the needs of everyone

H4 Indicators of success in tackling poverty and social exclusion (children in low income households, adults without qualifications and in workless households, elderly in fuel poverty)

H5 Qualifications at age 19

H6 Expected years of healthy life

H7 Homes judged unfit to live in

H8 Level of crime

H9 Emissions of greenhouse gases

Effective protection of the environment

H10 Days when air pollution is moderate or higher

H11 Road traffic

H12 Rivers of good or fair quality

H13 Populations of wild birds

H14 New homes built on previously developed land

Prudent use of natural resources

H15 Waste arisings and management

Similarly, for the health headline indicator, rather than looking at the performance of different health policies (such as those combating heart disease, etc.) a broader perspective was taken. In this case, an overall outcome measure – 'the number of expected years of healthy life' – was taken from the government's health strategy and used as the headline indicator. This indicator thus retained the policy focus and reflected the health of the population overall.

For the poverty and social exclusion headline indicator, four indicators from the 35 indicators in the anti-poverty strategy were presented together. These four were regarded as giving good over-arching indication of the range of issues in the strategy. They covered elderly households experiencing fuel poverty, working age people with no qualifications, working age people in workless households and children in families with persistently low incomes.

The inter-linking challenge

Addressing the inter-linkage of the economic, social and environmental fields statistically is no easy business. On this subject, Custance says "our work has been along the lines of developing cross-cutting and decoupling analyses. We have looked, for example, at the decoupling of environmental impacts from economic growth, CO_2 emissions and energy use, and tensions in agriculture between production and the environment. In each case, we have presented a number of indicators in one chart, and this has started to tell the story. But, what we have avoided doing is aggregating such indicators into a single indicator.

"We have considered the possibility of composite and aggregate indicators quite extensively", he adds. "Measures such as the ecological footprint are great awareness-raising tools but their drawback is that they are often based on subjective weightings and not yet scientifically valid nor technically robust enough to be used for reliably monitoring progress over time."

Looking at them critically, he explains, "you have to make inevitably subjective choices about the components you include and the weights to be applied. And a different selection of components or weights can generate different results, and thus, the measures could be leading you to the wrong conclusions. What is more, you might well have conflicting trends in your components which mask or cancel one another. For example, educational achievement could be increasing, but the number of bird species decreasing, so the two series might balance each other out. In this way, such aggregated indicators can, in fact, play down some of the trends in their components which may be of particular concern."

With public resonance firmly in his mind, Custance also underlines that such aggregate indicators can be complicated for people to understand, "you may end up having to disaggregate them to explain the messages. Moreover, it is potentially quite easy for people to conclude that their actions do not make any difference to such weighted aggregated indicators, so we lose the opportunity to influence people's behaviour."

For all of these and other reasons, headline indicators offer a sounder, more transparent and comprehensive alternative in his opinion. He convinces me, "the idea of a single indicator is not the answer – the state of the art is not there yet."

A counterweight to GDP?

Given the increasing shift of sustainable development to centre-stage and the debate about revamping GDP to become greener and/or more social, a pertinent question is whether the GDP's privileged political power could ever have to share the limelight with sustainable development.

Custance: "At the moment, there are one or two economic indicators like GDP which grasp the public eye. What we are trying to do is try to redress this balance and introduce social and environment indicators to set alongside GDP, so perhaps one day in the future, they may be reported together in this way." However, he realises that this is a tall order.

"The advantage of keeping GDP in our set of headline indicators", he continues, "is that it is an indicator accepted the world over and it is calculated in a standard way. Greening GDP is a nice idea but will it gain the necessary support and will it be calculated the same way in different countries?

Acceptability and ownership

Custance also stressed "indicators need to be agreed and accepted and those that use them take some ownership of them. If you present an indicator trend and then the resulting policy debate concentrates solely on the validity of the indicator, then your indicator is a failure. But if people accept the indicator, and the resulting debate concentrates on the underlying issues influencing the trends, you have a success. You have produced a useful tool to raise awareness and aid the discussion." Evidently, we come back to indicator acceptance time and time again.

The power of indicators

Custance shares with me an interesting example of how a simple indicator can raise awareness. Although the indicator is not in the UK's indicator set, "one of the local indicators produced by the Stockholm community", Custance explains, "was 'the time parents spent with their kids'. This was mentioned, in passing, by a Swedish presenter in an OECD workshop a couple of years ago. This definitely struck a chord with delegates. It started to arouse people's interest and to broaden the debate about what sustainable development means. Since then, it has also come up from time to time in other meetings. That simple indicator has resonance and has helped people appreciate the broad concept of sustainable development and quality of life."

John Custance is very positive about the development of sustainable development indicators in the UK. Judging from the work carried out to date, he has every reason to be. But when all is said and done, one thing stands out very clearly from meeting him. Sustainable development – especially when translated as 'quality of life' – offers a comprehensive strategy for the multitude of challenges looming on the horizon. ■

Created in 1990 to collect and provide environmental information, and operational since 1994 in Copenhagen, the European Environment Agency must be feeling satisfaction now that sustainable development has found its way to concrete policy application. *Sigma*'s BARBARA JAKOB asked the EEA's Executive Director, **DOMINGO JIMÉNEZ-BELTRÁN,** to share his views about sustainable development, EU strategy, the input of statistics as well as the Agency's role.

Working for and on the future

Domingo Jiménez-Beltrán never tires of reminding us to respect the environment better and change our policy-making ways. And he plays his own part – he is one of thousands of Copenhageners who cycle daily to work. Of course, the fact that the EEA's premises are situated in Copenhagen's historic centre makes it an attractive ride, but he does this too on the harsher sides of the rather short-lived Danish summer.

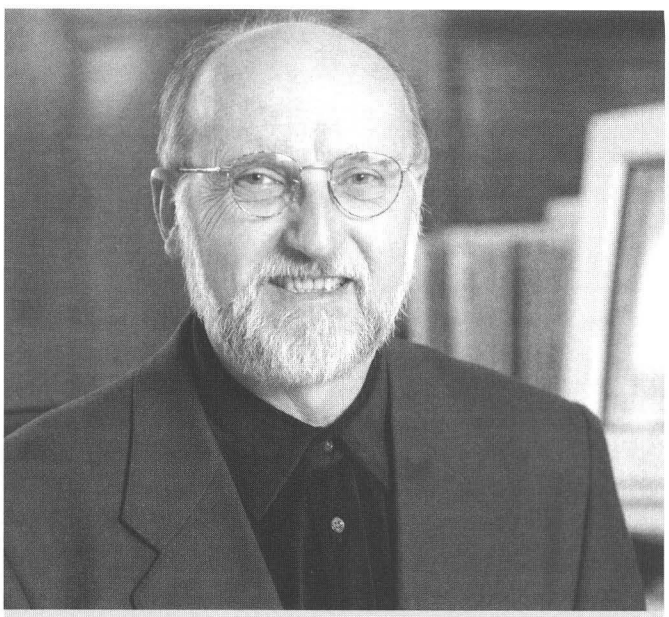
Meeting Jiménez-Beltrán as he was getting off his bike, it somehow seemed natural to talk about environmental issues – any ice was easily broken. And he does not beat about the bush, going swiftly to the heart of the matter. For him, the novelty about the EU Strategy on Sustainable Development is that it establishes a new way of thinking and of policy-making, which clearly gives the Community a worldwide lead.

An ending and a beginning

The EU sustainable development strategy launched in Gothenburg marks, in Jiménez-Beltrán's opinion, the end of a reactive approach for environment, which attempts to cope with environmental problems and environmental pollution in a one-dimensional way, and the beginning of a new approach that merges the interconnected social, economic and environmental areas and actively pushes forward sustainable development. According to him, it constitutes a new way of policy-making and heralds an end to the policy of 'more market', still persisting in many parts of the world.

"Gothenburg is not the terminus; it is a long journey and we are only taking off", he says, obviously pleased that sustainable development has now been embedded in a political framework – particularly the planned annual review of the progress achieved and the further integration of environmental concerns into sector policies. Furthermore, with climate change, transport, public health and natural resources, he feels that the Strategy addresses those areas where the EEA identified the most unsustainable trends. "Although this can only be a starting point, it finally puts us in the position to really start working on the future", he concludes.

In Jiménez-Beltrán's view, the EEA has certainly been instrumental in setting such a process in motion – a logical consequence of its tasks as information provider and alerter. And he continues: "The first thing you need to improve a situation is a good diagnosis. Based on this you will make a prognosis of what will happen under different scenarios before you are able to take



Domingo Jiménez-Beltrán (57) has been heading the European Environment Agency since it became operational in 1994. After studying industrial engineering in his home country, Spain, at the Polytechnic University Madrid, his professional life mostly led him – accidentally or intentionally – into the environmental field.

Before joining the European Commission in 1987 in the Consumers Policy Service, he worked in different functions at the Spanish Ministry of Public Works and Urban Planning and at the Spanish Permanent Representation to the European Union.

He then followed a vocation as Director-General for Environment Policy within the Secretariat of State for Environment and Housing of the Ministry of Public Works, Transportation and the Environment back in Spain before, in 1994, being appointed Executive-Director of the newly created European Environment Agency.

appropriate measures." Diagnosis and prognosis are the EEA's central activities, and its work of the past few years should help to prepare the ground for the process set in action at Gothenburg, according to him.

The EEA and Eurostat are called to provide the right information to support policy and to target the development and delivery of information needed at the very heart of EU policy. In our days of information overload, the EEA's maxim is to deliver synthesis information and to focus its reporting on the essentials.

Statistics condensed for policy

"What policy-makers and the public need in order to make a judgement whether we are progressing or not is, first of all, 'condensed information'", Jiménez-Beltrán states and goes on to explain his expectations in statistics: "On the one hand, indicators have to allow us to get a comprehensive, holistic view of developments and to identify distortions. Politically, however, having a full picture is of minor interest. Politicians are interested in targeted information that identifies the leverage points and that enables them to decide quickly whether political action is needed and which type."

He takes it as a challenge to be expected to deliver quick, easily understandable, and at the same time, in-depth information. "Trying to overcome this ostensible contradiction is part of the complexity that expert institutions like the Agency or Eurostat have to handle. We should not try and pass the ball back to the politicians", he says.

Discussing the indicators needed to provide a comprehensive picture and how to distil those required for policy-making was therefore an important first step in implementing the strategy within the EEA.

From best-available to badly-needed information

Jiménez-Beltrán goes even further, claiming that statistics must move away from the current practice of providing "best-available information", and instead strengthen its efforts to present "badly-needed information".

"And", he says, "we must not hesitate. We have been discussing the theory for years and cannot afford to wait any longer. Every moment we spend discussing how to evaluate the situation, the environment is already being destroyed. By the time we have finished deliberating on the consequences of building an airport, it will have been built. And while we are discussing how to measure bio-diversity, bio-diversity will no longer exist.

"If we go on discussing theory, we will soon have no environment to protect", he says fiercely, adding: "there is nothing wrong about

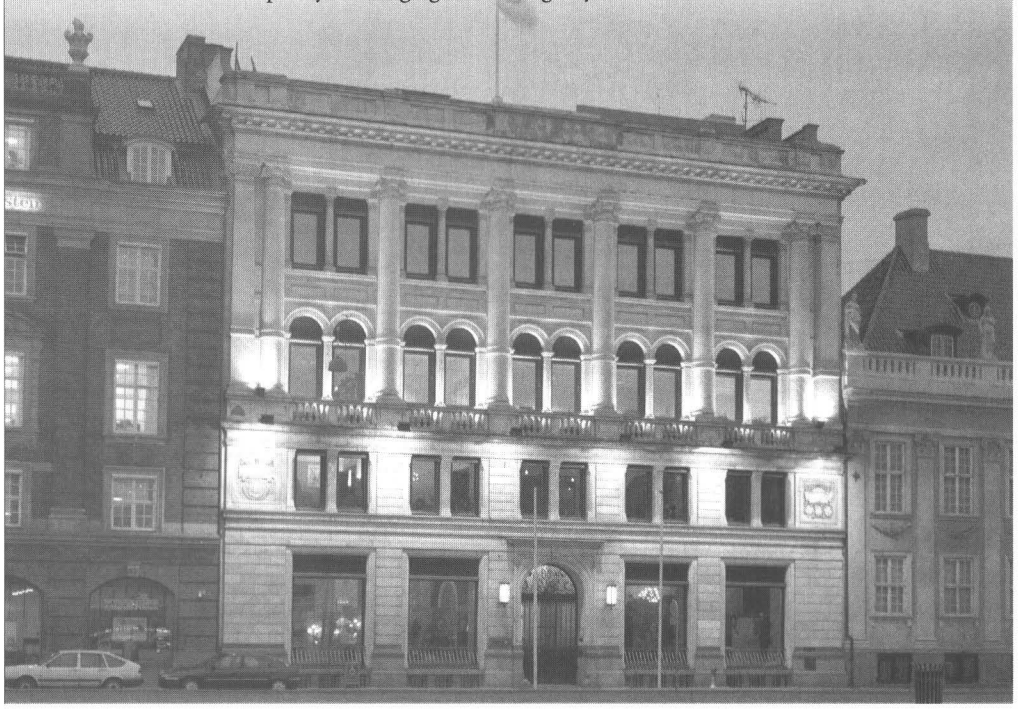
Europe's gateway to environmental information

The European Environment Agency (EEA) is a specialised EU agency, established in 1990, with the aim of ensuring the supply of objective, reliable and comprehensive information on the environment at European level.

Based in Copenhagen, it is at the centre of the European Environment Information and Observation Network (EIONET), a network of some 600 environmental bodies and institutes across Europe involved in environmental data collection and assessment.

In providing timely, targeted, relevant and reliable information to policy-making agents and the public, the EEA aims to support sustainable development and help achieve significant and measurable improvement in Europe's environment.

Operational since 1994, the EEA's first members were the EU and EFTA countries. But since its creators felt that the EEA's remit should be a European one and not confined to EU borders, it is open to all countries that share its objectives and are able to participate in its activities. Hence, since the beginning of 2002 all 13 Candidate Countries in Central Europe and the Mediterranean countries are full members of the Agency.



EEA principles for statistical indicators

- Indicators should report progress over time and should be linked to policy questions.
- Indicators should be few in number, and users should get used to their presentation and significance.
- Indicators are more powerful when linked with formal targets or informal or indicative reference values.
- With or without targets, using indicators to compare or benchmark individual sectors, countries or companies with one another, both failure and success stories become evident – eg. name & fame, name & shame leading to peer-pressure.

'learning by doing'. We simply have to make a start and get a package of indicators on the table even if they are imperfect. If GDP is not spotless, why should the bio-diversity indicator be impeccable?"

Jiménez-Beltrán is convinced that environmental information and satellite accounts will receive a tremendous boost now that it serves a political purpose. The political usage of environmental data in the framework of the Sustainable Development Strategy will put the necessary pressure to this type of statistics so that it will be finally developed and improved.

Expansion, refinement ...

A sustainable development index would, in the medium- to long-terms, certainly be desirable in his eyes. It points to problems, in general, and makes it possible to establish early warning signs – and it is visible to the public. But the most urgent needs, Jiménez-Beltrán believes, lie in the provision of data in the priority areas chosen, ie. climate change, transport, public health and natural resources.

More comprehensive and better data obviously will be needed on the emissions of greenhouse gases especially when the plan to establish tradable permits is to be implemented. A statistical information system on bio-diversity will have to be established since, for example, statistics on species as the capital of bio-diversity do not even exist.

Concepts such as person-kilometres in the transport area will have to be refined. Existing data show a distorted picture, eg. the Danes driving more person-kilometres than other Europeans. This concept, however, neglects the fact that the Danes usually have more passengers in one car whereas in other countries fewer person kilometres are done with more cars simply because there is very often only one person in one car.

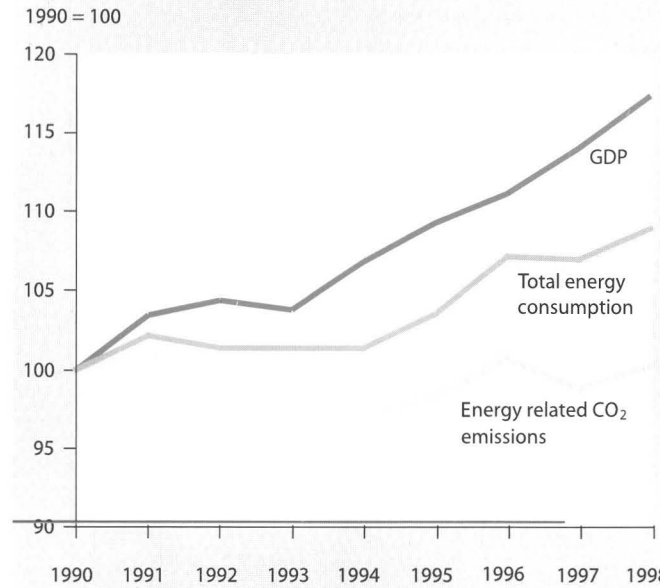
Equally important is that the annual review* planned at each year's spring European Council meeting, to which the Agency will now be contributing, also suggests an annual information cycle so that most of the environmental data that very often have been provided in multi-annual intervals should now be presented at least annually. With a view to tradable permits for greenhouse gases and the immediate economic dimension that this implies, it might even be necessary to envisage infra-annual data.

... and speeding up

Since this will not be easily feasible, Jiménez-Beltrán recommends using more modelling. This will, anyway, gain importance because of "now-casts" required to provide more up-to-date statistics and because of the increasing demand in forecasts. He says: "I am not interested in four-year-old data about emissions from industry, I want to know what is happening now and what the situation will be next year."

Statisticians should also strive to make the interrelations between the different systems

COUPLING/DECOUPLING BETWEEN ENERGY/EMISSIONS AND GDP, EU15



Note: *Total energy consumption (or gross inland energy consumption) equals the domestic energy production plus energy imports, minus exports and plus net withdrawals from stocks. GDP at constant prices*
Sources: *EEA and Eurostat*

The above graph is an example of how economic data are linked with environmental information. It shows a decoupling of energy consumption and energy-related CO_2 emissions from GDP: While GDP continued to increase over the years, emissions remained rather stable showing a declining emission intensity of GDP. In other words, when producing one unit of GDP, less CO_2 is emitted. For energy consumption, the results are less evident but a relative decoupling of energy consumption from GDP can also be seen with energy consumption rising at a lower rate than GDP.

* Following the Lisbon European Council, the Commission annually draws up a synthesis report to give details on the progress in the fields of employment, innovation, economic reform and social cohesion. This is done on the basis of a limited number of key structural indicators; the first of these reports has been presented for the Stockholm meeting in spring 2001. In the future, the environment will be added to this synthesis report as the third pillar next to the economic and the social areas.

visible. This goes for energy and air pollution, for air-quality and other environmental data and their implications on health but also for a number of other fields. It should also help to avoid, or at least detect, where different policies are jeopardising each other.

But, what is more, environmental data should be geographically referentiated. "This is a crucial issue", says Jiménez-Beltrán. "Environmental data that are not related to the territory begin to have less and less value because averages are, especially in this field, very often misleading. On average, you can have a very good water quality in a country, but looking at it in detail you can have a brilliant situation in the South but a disaster in the North."

All these measures will hopefully contribute to bring the European environmental house in order. But we must not overlook the global aspect of sustainable development, Jiménez-Beltrán cautions. Therefore, concepts like the material use per unit of GDP must be complemented by information about the imports of material from abroad and the related environmental pressures in the country of origin. To avoid "developed countries harvesting the benefits while the third world foots the bill", he regards concepts such as the environmental footprint, which measures human impact on nature, as worthwhile and suitable for further development.

Developing a common, international information system is another important element for Jiménez-Beltrán. He expects that benchmarking will help to put some pressure on those performing badly and hold up a model of those performing well, thus contributing to push things in the right direction.

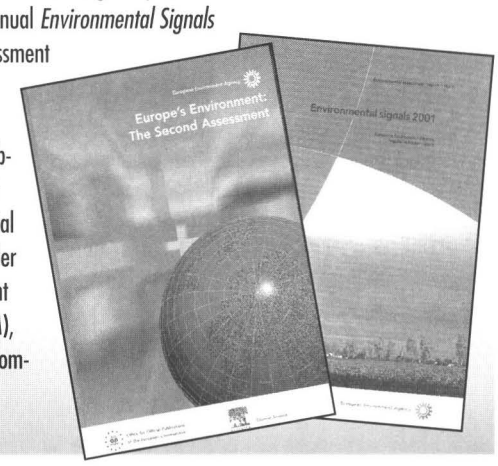
Finally, he feels that the EU has a special responsibility for the Candidate Countries who recently all became full members of the EEA. "They know that we have gone a long way in the wrong direction, and that it is easier to start from scratch than leaving well-known paths and changing direction mid-way.

"It is always easier to point to the problems of others than to resolve your own", Jiménez-Beltrán concludes. "With all the limitations the Sustainable Development Strategy may have – not enough engagement at national level, lacking international support etc. – it provides a unique opportunity to correct some of the mistakes we did in the past and we are still doing. And maybe it will finally lead to a halt in environmental dumping and free riding on the environment's account." ■

EEA publications

Three series of reports stand out in the large number of publications out from the EEA:

Comprehensive assessments of the state of the European environment and the outlook for it, from Ireland in the West to the Ural mountains in the East, are published approximately every five years (the most recent being *Europe's Environment: the Second Assessment*, issued in 1998). The annual *Environmental Signals* series provides an indicator-based assessment of developments in a number of key environmental policy areas in EEA member countries. The Agency also publishes an annual indicator-based report on progress in integrating environmental considerations into transport policy under the so-called Transport and Environment Reporting Mechanism for the EU (TERM), which is supplemented by a statistical compendium by Eurostat.



EEA and Eurostat pulling together

The work of the EEA as the specialised agency for environmental information and of Eurostat as the EU's statistical office overlap in the field of environmental statistics. The collaboration works on the simple principle "that each does what it does best", as Jiménez-Beltrán puts it.

That means, in practice, that Eurostat is the depository of statistical data producing statistical reports, while making assessments, evaluations and reporting beyond statistical aspects is the task of the Agency.

For the future, the EEA and Eurostat agreed to collaborate more closely in the production of reports that are neither purely statistical, nor purely assessment. "With the tremendous workload we are facing, we have to be careful not to jeopardise each other and disappoint the expectations of policy but to join forces", Jiménez-Beltrán concludes.

MARK HAYDEN of the Commission's Directorate-General for Economic and Financial Affairs translates sustainable development into economic terms and understands the EU Strategy as a chance to overcome the narrow, sectoral mindset that hitherto prevails ...

Sustainable development, economically-speaking

Sustainable development is widely recognised as having three dimensions – economic, environmental and social. For that reason alone, it seems natural that European Commission economists played a central role in developing the Commission's proposals for the EU's sustainable development strategy.

A purely economic definition of sustainable growth would incorporate elements such as rising real Gross Domestic Product, with low rates of unemployment and inflation, and small public debts and deficits. This is some distance from the way sustainable development was defined in the Brundtland report as *"development that meets the needs of the present without compromising the ability of future generations to meet their own needs"*, and serves to remind us that "growth" and "development" are not necessarily the same thing. But other than defending the interests of economic sustainability, what can economists bring to the development of a sustainable development strategy?

Verging on a definition

How the Commission's Directorate-General for Economic and Financial Affairs answered this question was to start by asking what we understood by "sustainable development". In very broad terms, sustainable development is probably generally recognised as being about our overall well-being. Refining this a little, we can think of sustainable development as relating to levels of economic, environmental and social well-being.

But what is "well-being"? The most widely used measure of economic well-being is Gross Domestic Product. GDP measures flows of goods and services, and these flows depend on maintaining a stock of assets which can be used to continue production of goods and services in future periods.

By analogy, environmental well-being can then surely be regarded as depending on flows of environmental goods and services and an underlying stock of environmental assets. Similarly, social well-being is related to production of social goods, services, and assets. This is fairly uncontroversial so far. Indeed, although there is a multitude of definitions of sustainable development, almost all include the notion of maintaining "the capital stock" intact so that future generations can use it to generate goods and services for their own use.

While considering each of the three dimensions separately was a useful way to "kick-start" our thoughts on sustainable development, putting economic, environmental and social assets in separate boxes has its limits. Some advocates of sustainable development are fond of referring to it as a "holistic concept". In more mundane terms, this just means that everything is connected to everything else. For example, many industrial processes – which produce "economic" goods – depend on clean water supplies. Does this make water an economic or an environmental asset, or

Mark Hayden, an economist by training, joined the European Commission in 1985 after working for five years in the Irish Central Statistics Office, where he oversaw the introduction of the annual Labour Force Survey.

His first job with the Commission was at Eurostat, again on the Labour Force Survey. After three and a half years, his itchy feet took him to Brussels, to the Directorate-General for Regional Policy, specialising in the French overseas departments. Tired of missions to the Caribbean (!), he moved in 1992 to the Directorate-General for Economic and Financial Affairs, where he worked on the economic analysis of the transition economies of Central and Eastern Europe, before in 1998 moving to his current job in the unit responsible for economic evaluation of Community energy, environment and transport policies.

From January to May 2001, he was part of the small task force which developed the Commission's proposal for a European Union Strategy for Sustainable Development.

both? Maintaining social cohesion – surely an important social asset – depends in part on social protection systems, which require economic activity to generate the money for social transfers.

The idea that the economic, environmental and social dimensions of sustainable development are interdependent raises the question of whether, and how much, they are substitutes for one another. While there may be consensus that sustainable development depends on maintaining a stock of capital, there is less agreement on what that stock should include, and in particular on the degree to which natural capital – natural resources – can be run down and replaced with physical, or produced capital.

Rather than trying to seek agreement on this issue, where differences of opinion often reflect different ethical stances, we preferred to set it to one side, and to focus instead on identifying threats to sustainable development. This pragmatic approach made it relatively easy to reach agreement within the Commission on the importance of sustainable development as a policy principle, and on the policy responses needed to address unsustainable trends.

Overcoming the sectoral mindset

The proposition that the three dimensions of sustainable development are interdependent seems obvious, even trivial. Perhaps it is precisely because the notion is so obvious that it is so often overlooked. Too frequently, we talk of "economic sustainability", or "environmental sustainability", or "social sustainability", as if each exists in isolation from the other two.

This way of thinking can have unfortunate consequences in the real world. Too often, economic, social and environmental policies are pursued separately, in the unspoken hope that each will – led by an invisible hand, perhaps – offset the excesses of the other two, and everything will be alright on the night. The same "compartmentalisation" is perhaps even more acute in sectoral policies, in which a focus on the interests of (for example) agriculture, or industry, or transport can lead to neglecting the interests of society at large.

Overcoming the 'compartmentalisation' of sectoral policies with the whole of society in mind

Overcoming this narrow, sectoral mindset is probably the crucial obstacle to putting in place consistent policies that will promote sustainable development. The "sustainability impact assessment", which the Commission has proposed should accompany all major legislative proposals, is a first step in trying to broaden the horizon of sectoral policies.

In practical terms, the assessment would start by identifying the problem that gave rise to the need to consider a possible policy response, and determining the cause of the problem. From this starting point, it should be possible to set out a number of alternative approaches to resolving the problem. Possible options to deal with water pollution, for example, might include placing restrictions on the use of the polluting substances, or putting a tax on their use.

Having identified a number of different measures, the next step is to identify the economic, environmental and social impacts of each option, in qualitative and quantitative terms. This should provide decision-makers with a clear picture of the advantages and disadvantages of the alternative options, and of the various trade-offs which may have to be made.

The somewhat grandiose title "sustainability impact assessment" should not hide the rather simple idea which lies behind it. This is that policy proposals for any given sector should consider the spillovers onto other sectors of the economy, onto the environment, and onto society. In this way, policy-makers should be able to take decisions in the fullest possible awareness of their overall economic, environmental and social impacts. In turn, this would mean that the public would have a comprehensive, transparent explanation of all major policy decisions.

Data that policy-makers really want

In a sense, the challenge thrown down to statisticians by sustainable development is the same as that in other policies. Statisticians need to interpret – and, whenever possible, anticipate – the needs of policy-makers, so as to deliver not only the data they think they want, but better than that, the data that policy-makers *really* want.

However, sustainable development is an area where there is a particular need for a detailed and continuous exchange of ideas between policy-makers and statisticians. The concept of sustainable development is open to many different interpretations, and potentially covers such a wide range of issues, that it does not readily lend itself to the sort of precise definition needed for statistical measurement. One

obvious example is the subject of social capital – everyone agrees that it is terribly important, but nobody knows exactly what it is. As with so many aspects of sustainability, it is easier to identify its absence than its presence.

More specifically, sustainable development requires two responses from statisticians. In the short-term, we need indicators which allow us to measure progress against the objectives of the Community's sustainable development strategy. At least at first, this need will have to be met mainly – if not exclusively – from existing data. This is likely to require a certain amount of creativity and imagination: often, we will have to make do with proxies, which do not precisely correspond to the objectives of the strategy, but nonetheless illustrate the issues it raises.

An example is "resource productivity". Almost certainly, it will be some years before we can develop a satisfactory, comprehensive indicator which tells us how productively we are using natural resources. But we do have data on our use of essential inputs such as water, or land, and these statistics can be used to convey important messages to our political masters.

Beyond the current fashion for indicators, which must leave many statisticians feeling rather like Molière's *bourgeois gentilhomme* who spoke prose for more than forty years without knowing it, the system of statistics for sustainable development needs to be placed in a solid and consistent framework. Returning to the notion that sustainable development is dependent on flows of goods and services and on the underlying stocks of assets which can be used to produce these flows, this surely points to the need to (further) develop environmental and social accounts. If sustainable development is to be the core of all policies, and if the three dimensions of sustainable development are equally important, then we must give equal importance to economic, environmental and social well-being – and to their measurement.

Limits of valuation

Mention of measurement immediately raises the question of the units of measurement, and in particular, the assigning of money values to items for which market prices do not exist. While it is unquestionably desirable in principle to measure everything using the same yardstick, the limits of valuation should not be pushed too far. At least initially, the focus should be on accurate and comprehensive accounting of economic, environmental and social assets, goods and services *in their own terms*.

While there are some "win-win-win" policy choices which will have positive impacts across all three dimensions of sustainable development, most policies require trade-offs to be made between economic, environmental and social costs and benefits. Arguably, it is more useful to provide decision-makers with a clear statement of these trade-offs, rather than to reduce them to a single number representing the net benefit of the policy.

While the data needs of designing policies for sustainable development raise many challenges for statisticians, we shouldn't lose sight of the opportunities. The emphasis on developing a small number of "headline indicators" may look like a "dumbing down" of statistics, but potentially, it is exactly the opposite. The fact is, these indicators have been requested by the European Council, as a way of assessing progress towards the strategic goal they set at Lisbon, to make the EU "*the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion*", and to which an environmental dimension was added when they met in Gothenburg.

This means that our governments are aware, at the highest level, of the vital importance of statistics in policy-making. This is a major opportunity for statisticians to show that they are able to respond, by producing reliable, timely, policy-relevant data, and in so doing, to raise awareness of the value and usefulness of official statistics.

The way ahead

Now that the Commission has made its proposals for a European Union Strategy for Sustainable Development, disbanded the Task Force which developed the proposal, and the Gothenburg European Council has set out priorities for the strategy, does that mean that DG Economic and Financial Affairs involvement with sustainable development is at an end? We hope not.

First, we will be active players in the inter-DG "network" which has been created under the leadership of the Commission's Secretariat-General. In line with the overall philosophy of the Commission's strategy proposal, we will be encouraging an economic approach to solving environmental and social problems. This means trying to work with market forces, not against them, and using market-based instruments such as tradable permits or taxes to deliver both value for money and environmental and social policy goals.

Second, some of the issues identified in the Union's Sustainable Development Strategy, such as the ageing of the population, have direct consequences for economic policy. Together with other parts of the Commission and Member States, we will continue to examine how this challenge can best be met.

Finally, we will work to ensure that the Broad Economic Policy Guidelines take due account of environmental objectives, so that the economic and social goals of the Lisbon strategy are indeed completed by an environmental dimension, in line with the decisions of the Gothenburg European Council.

Quite a full agenda, I would say! ■

Over the last few years, social statistics has definitely established a more spacious and prestigious place on the UK's statistical map. And it has also become a serious neighbouring pillar in its sustainable development strategy triad – next door to the economy and the environment. So, Sigma's GLEN CAMPBELL spoke to **KAREN DUNNELL,** currently Acting Executive Director of Social Statistics at the UK's ONS.

Turning sustainable development social

The UK Government strongly favours integrating the sustainable development dimension into its overall policy package – of which the social pillar stands pretty much equally as high as the economic and environmental ones. Comparing the Gothenburg Council's priorities for sustainable development with that of the UK and its statistical offshoot, the tune being played on both sides of the Channel is very much the same.

Social pillar grows taller

The government's commitment to inequalities, social inclusion and the community has already been injecting much-needed cash into these kinds of social statistics. 'Neighbourhood statistics', as part of the UK's National Strategy for Neighbourhood Renewal, has benefited from a massive input of funds while more money has also been flowing into health and crime surveys.

Moreover, there have been sizeable increases for labour market statistics because of needing larger samples for small area analysis. But, "while this has been a boost", Karen Dunnell cautions, "the money is often for using what we have more productively or covering larger samples of surveys we already do, and not necessarily for the more adventurous projects."

In terms of adopting a working framework for the social sustainable sphere, they boiled down all the indicators to the best selection. "But this doesn't mean that things stay put because all sorts of things are moving on the social front", says Karen Dunnell. "In a sense, we could say that the sustainable development framework is taking a subset of our total social statistics picture and linking them with other information about the environment and economy to understand how these things interrelate."

What are communities up to?

Given the expanse of social data development at the ONS, one of the areas deserving inspection is its neighbourhood statistics. The ONS is responsible for coordinating a database to collate all available information at the community level. And it is one of the largest and most far-reaching initiatives in the information field in the UK.

The strategic backbone for this is the UK's National Strategy for Neighbourhood Renewal – which addresses the social trends, sometimes, the Government admits, overlooked by national and local government policy. According to Karen Dunnell, "this represents quite a sea change in government emphasis with neighbourhood statistics promising to become a cross-cutting information base at the heart of the Government Statistical Service." Going on for over a year now, there are now some 150 variables and the programme's aim is to set up a huge web-based database – the Neighbourhood Statistics Service.

The goal is not just to address society at national and regional levels but at the community or neighbourhood level too, using small area indicators. These are essential at both national and local levels. At the national level they are important in deciding where to target new initiatives and in evaluating them. Different areas across the country, targeted by a particular initiative, can then be compared. At a local level they can be used to assess the conditions in local areas, to target resources effectively and to provide a baseline against which future progress can be monitored, as well as to set targets.

Using the building-brick approach, the aim is to define an area rather than take ward or local authority boundaries. The ultimate objective is to look at a neighbourhood defined by whomever, a council estate or a rural neighbourhood, and which possibly stretches across boundaries.

The 2001 census includes some information on sustainable development and will

form the central core of the neighbourhood database. Because the latter is a geographic system, it makes it possible to tackle questions such as how close people live to schools, the proximity to employers and post offices, etc.

Linked more generally to the idea of measuring sustainability in the social area, Dunnell says that we need to move beyond the individual indicators and see how we can link them to establish a point at which a particular problem can be identified. "The whole thing is complicated", she states. "Many of the things that we are discussing about neighbourhood statistics focus on individuals and households, but some people say that you have to understand more; statistics on individuals just aren't enough.

"A community is not just the sum of people who live in it", she continues, "but the quality of housing stock, the kind of firms there and the geographical characteristics. This is obviously one of our greatest challenges, but we should get much better when we develop our analysis of neighbourhood statistics."

'Social capital'

Another of the ONS' major social statistics projects is 'social capital', which is picking up increasing momentum within the UK Government in many research, statistical and policy areas. To put it succinctly, 'social capital' is seen as a social resource created through formal and informal relationships between people within a community. It describes the social environment that people live in, and comprises the collective resources to which individuals, families, neighbourhoods and communities have access.

Dunnell explains: "Social capital is felt to be an important measure of a healthy society or community and, therefore, should find a suitable home within the sustainable development concept. Moreover, it has been felt that the ONS can take a lead in bringing together the disparate pieces of research and statistics that currently exist. Therefore, our aim is to try and build up effective measures of different social capital levels."

Several established UK research programmes in health, crime and civic participation have focused, for example, on the levels of trust, reciprocity and social cohesion within society. But, "for questions such as what the impact of less crime and better transport is on creating better social capital, we just don't know. We are only at the beginning", Dunnell says.

Fertile labour market statistics

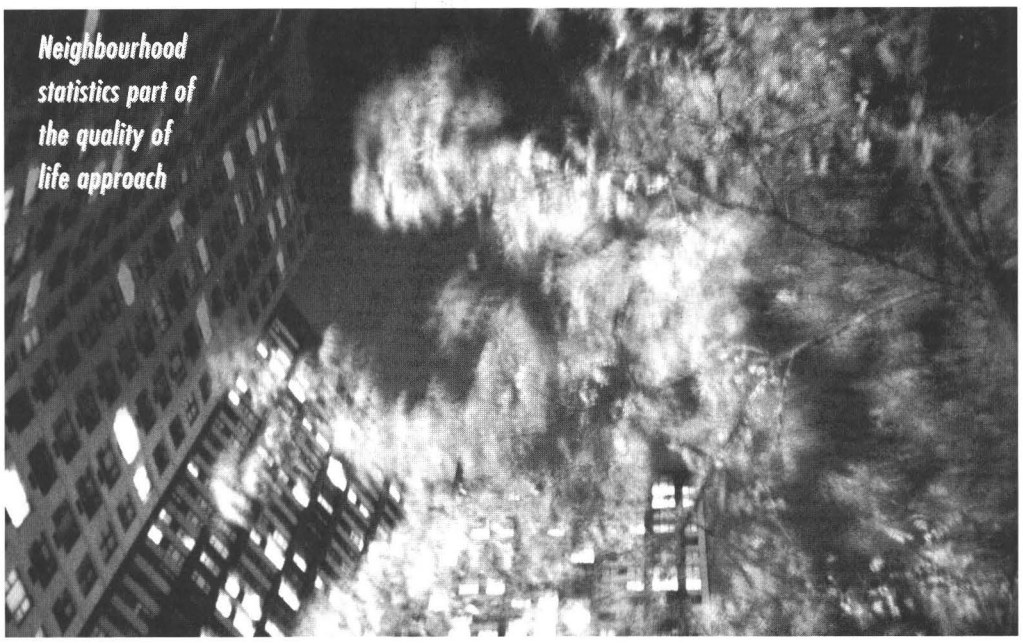
Among the more mainstream areas, there is also extensive work on labour market statistics. This is almost the largest division in social statistics because of coordinating data from the Labour Force Survey and business-based surveys. Action is currently underway on low pay, the links between the labour market and demography, the impact of the ageing population – which, besides the pension dilemma, throws up the problem of a potential labour shortage.

Both a cyclist and a vegetarian, **Karen Dunnell** seems the perfect candidate for the sustainable development idea – and not just from the personal lifestyle point of view. Appointed Acting Executive Director of Social Statistics at the ONS in January 2001, she has already almost thirty years of experience working between the OPCS (Office of Population Censuses and Surveys) and the ONS.

She started out in academic health research to go on to spend 15 years working on the social survey side at the OPCS, then went on to do a decade-long stint on health statistics and demography at the ONS.

In June 2000, she became Director of the Socio-economic Statistics and Analysis Group, which is responsible for a wide range of social reporting on health and demography, labour market and a wide range of social and regional publications such as *Social Trends*.

Speaking to Karen Dunnell, she comes across very strongly as somebody with strong interests in, and convictions about, the social and environmental fields, especially about the best way to use resources – technological, natural and human – and how they interact. "This is what I have been doing most of my life – first as social scientist then as a statistician", she concludes.



"Questions such as why we have such high rates of retirement and what the impact is of women's employment patterns on their fertility rates are equally important in the sustainability debate", Dunnell affirms. "We have huge amounts of data and with a good analysis programme we can make the most of it."

Healthy life expectancy

The UK's healthy life expectancy indicator – now adopted as one of the UK's headline sustainable development indicators – has been among those developed by the ONS on the health front as part of the efforts towards more sophisticated measures in the health field. The indicator uses mortality rates and a robust method for estimating years of healthy life based on self-assessment in a survey.

Health statisticians noticed in their countries that mortality rates were getting better but levels of illness and disability weren't. Therefore, the basic traditional health statistics, the mortality rate, was not reflecting reality. With the huge increases in numbers with disability, people off work and so on, the whole thing did not add up. But if you look at both death rates and illness rates, you obtain a completely different picture.

"Our indicator of expected years of healthy life offers an example of generating a single indicator", Dunnell says. "It arose out of the thinking about whether we could generate a single indicator linking information about death and illness rates. When we started on this, we had information on death rates, but only sample information about people's health. What was needed were larger, more robust health surveys – which is the case now."

Putting heads together

"The more we think about sustainable development, the more we will understand, in my view", she advises. "We are very active everywhere", she says, rattling off a long list of international or bilateral level meetings taking place around our interview. "We learn where we can and are very prepared to help others; UK statisticians – even retired ones – do much work in developing and Candidate Countries. We try to be up at the front and get involved in as many things as we can."

Our interview comes to end. She has a plane to catch for another international meeting on social statistics. It never stops. ■

'Social capital' for socially-minded sustainable development

Social capital has become a topic of interest in many policy areas in the UK. Definitions vary but it is often understood as a social resource created through formal and informal relationships between people within a community. It describes the social environment that people live in, and is the collective resources to which individuals, families, neighbourhoods and communities have access.

According to the World Bank (1999):

"Social capital refers to the institutions, relationships, and norms that shape the quality and quantity of a society's social interactions. Increasing evidence show that social cohesion is critical for societies to prosper economically and for development to be sustainable. Social capital is not just the sum of the institutions [that] underpin a society – it is the glue that holds them together."

The most commonly used definition originates from Robert Putnam and he defines it as the:

"... features of social life – networks, norms, and trust – that enable participants to act together more effectively to pursue shared objectives. Social capital, in short, refers to social connections and the attendant norms and trust."

Within Government, the Home Office, Department of Health and the Social Exclusion Unit have all expressed interest in projects aimed to define, measure and analyse the impact of social capital. In addition to the ONS' activities, the Home Office has commissioned a survey on citizenship covering race equality, voluntary and community activities, human rights, parenting and regulation.

To round up the series of profiles presenting statistical offices in Europe, *Sigma*'s BARBARA JAKOB went to where Europe geographically meets America: Iceland. In **HALLGRÍMUR SNORRASON**, Director-General of Statistics Iceland, she found a person very much dedicated to international statistical cooperation and willing to look beyond their own backyard.

A statistical office like any other!?

Brimming with volcanoes, geysers, waterfalls and staggeringly beautiful landscapes, there was no difficulty in complimenting Hallgrímur Snorrason on the geological wonders of Iceland. But if Iceland is rather a spectacular place to visit, its statistical office is not much different to its EU partners – a position which Snorrason vehemently brings to the fore.

"There is sometimes the tendency to forgive countries with special circumstances for not following international standards. I do not think this really applies to Iceland", says Snorrason. "We are more or less like other countries: the economy is similar, the standard of living is more or less the same as in the neighbouring countries, and the industrial weights are the same. So why should we have special standards?"

Iceland has been an EFTA member since 1970 and a founding member of the European Economic Area (EEA) since 1994. Joining the Schengen Agreement last year, travellers to and from Iceland do not even have to present their passports. Although, politically, EU membership has never really been discussed, there is no question about their full commitment in statistics.

Consequently, Snorrason decided when he became Director-General some 17 years ago that Statistics Iceland would not try and 'discover the wheel once more' but apply international rules instead. "If we want to compare ourselves with the rest of the world, we'd better use the same classifications, methodologies and practices", he explains.

Because Eurostat has become one of the key players when it comes to developing worldwide standards and the fact that EU standards are being aligned with international practices make life a good deal easier for the Icelandic statistical office. "While applying EU standards we can also fulfil our obligations towards the UN system."

A quality strategy

The relatively small size of the office with only 85 employees and the costs of travelling to mainland Europe necessarily set limits to their international engagement. But for Snorrason, it is a worthwhile investment and this explains why his staff altogether attend around 70 international meetings a year with roughly a quarter of the staff having attended Eurostat meetings.

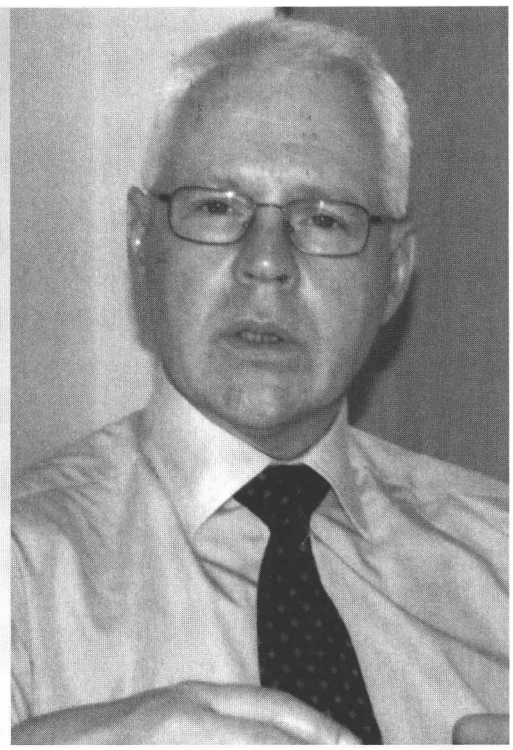
This is part of his quality strategy. "We find that this institution is too small to start implementing a comprehensive quality project. Taking part in international discussions about classifications and methodologies is therefore a very important ingredient of maintaining and improving quality. We would certainly not get the same ideas, incentives and criticism if we retreated into isolationism." And then, it is simply a necessity to keep in constant touch with developments – at least the most significant for us. The European development of

Off with the suit and on with the hiking boots

After an SPC (Statistical Programme Committee) meeting in Luxembourg, a UNECE Conference of European Statisticians or one of his various national or international commitments,

Hallgrímur Snorrason

(55) usually rips off his business suit and goes hiking in Iceland's breathtaking landscape, or he dips into one of his other passions – salmon fishing in one of Iceland's cold rivers – to recharge his batteries for his job as Director-General of Statistics Iceland.



After studying economics at the universities of Edinburgh and Lund (Sweden), Snorrason joined the Icelandic National Economic Institute in 1972 and became deputy director of that institute in 1980. When the second director-general in the history of Statistics Iceland (established in 1914) retired after 34 years of service, Snorrason was appointed Director-General in 1985 – for the simple reason that he was young enough to continue the tradition of staying for at least 30 years, he says with a twinkle in his eyes.

His international engagement – Snorrason has been Chairman of the EFTA Heads of Statistical Institutes, he is a member of the CES Bureau (Conference of European Statisticians, UNECE) and an elected member of the Statistical Commission of the UN for the period 1998-2001, was President of the IAOS (International Association for Official Statistics) in 1993-1995 – is for him not only a way to bring the office out into the open but also to break away from Iceland's insularity – an island situated far up in the North Atlantic and home to a population of only 280 000 people.

price statistics in the last few years is a good example of this but it also applies to a number of other fields.

According to Snorrason, pointing to recognised international standards is also a way to increase credibility and confidence and "it is motivating for people. Asking somebody to produce harmonised European statistics is one thing but to ask the same person to attend a working group meeting in Luxembourg and get acquainted with what is going on, how and why, is quite another and will change their understanding of, and attitude towards, the task."

However, Snorrason finds it more and more difficult to "keep head above water" as he puts it. "It is not only a question of travel costs and budget limits, but equally important is the absence from work of those attending Eurostat meetings. European cooperation is fine up to a certain point but we are reaching our limits and have to be selective."

A pragmatic spirit

This is not the only reason why Snorrason appreciates the pragmatic approach in the cooperation between Eurostat and Statistics Iceland or the EEA members in general. The EEA member countries have never differed widely in interpreting their obligations. "The EEA Agreement is reasonably clear in what we have to deliver", finds Snorrason. But he also feels that the real strength of the cooperation is its pragmatism.

The Agreement obliges EEA countries to deliver all general statistics but exempts them from statistics produced for monitoring the workings of the EU. That applies eg. for agricultural statistics assembled to monitor the Common Agricultural Policy, which is not required in such detail for EEA countries.

"We may sometimes have a problem with some boundaries where we can see that it is not exactly EEA relevant but still a question of general statistics", Snorrason admits. "In these cases, we are happy and sometimes very eager to take part. Recent examples are the EU short-term structural indicators – not officially required from EEA countries. However, statistically, we need to produce comparable statistics to be able to evaluate our own performance in relation with EU Member States. So, we simply asked whether we could join the exercise, although formally we are not expected to do so.

Of course, Statistics Iceland sometimes raises its hand to express negative opinions in the working groups. But Snorrason finds himself very often in a dilemma: "Iceland is so small, and to take up new concepts or surveys is extremely expensive in terms of money and human resources. We always have to ask ourselves: 'Can we do it?' – 'Not certain.' 'Is it a sensible thing?' – 'Yes, it probably is.' And then we cannot allow ourselves to vote against a proposal, which we think is sensible, even though we may have great difficulties in living up to it. We would risk dragging things down, rubbing partners the wrong way and playing ourselves out of the game. So we try to discuss the acts on their merits and not only on the basis of how well we can live up to them.

Living up to promises

The more difficult part follows when it comes to putting agreements into action. Although quite large by Icelandic standards, Statistics Iceland is one of the smallest central statistical offices in Europe. Excluding interviewers, it employs a total of 85 people in what amounts to around 80 full-time jobs. More than half of these are performed by university graduates of which 40% are women – who altogether make up for 60% of total staff.

Around half of the staff are directly involved in producing statistics while the other half are in central administration and supporting services, the National Register of Persons and in enterprise registration.

Roughly 40 people produce the rather classical range of official statistics concerning demography, education, social, cultural and health matters, production, business, prices, labour force, wages, household budget surveys, environment and external trade.

The ideal way

Like other Nordic countries, Icelandic statistics are largely based on registers. Given the large size of the country together with a rather small population of 280 000 people, this seems to be the only way to provide reliable statistical data at a reasonable cost. "If we were to rely on surveys for our data, we would go bankrupt", Snorrason states.

"You need a certain minimum size for surveys in order to be able to analyse and obtain the most basic breakdowns. In addition, in a small country you tend to survey the same people and the same businesses over and over again. And small economies are often characterised by a large number of small businesses whose effort to answer a questionnaire is relatively bigger than that of big enterprises. All these are good arguments for trying to rely as much as possible on register information."

Statistics Iceland mainly falls back on two administrative registers that it maintains itself, the population and the enterprise register. The National Register of Persons was established in 1953 for the purpose of providing unified, centralised registration of the entire population for administrative and statistical uses. Because of its unique identification key, it occupies a central place in the administrative system and is used by virtually all relevant public authorities, eg. the taxation authorities, the social security and health systems, the education system; and it forms the basis for the electoral rolls for all public elections in the country.

The enterprise register is also extensively used for administrative purposes but also forms, by virtue of its unique identification number system, the basis for extensive statistical application. Statistics Iceland is currently working on setting up a coordinated statistical database of firms using the enterprise register as a foundation and supplementing it with information from other sources.

Apart from this, taxation registers are the main source for many economic statistics, including the national accounts.

Although the registers provide unique possibilities for statisticians, Snorrason bemoans the absence of a designation covering flats or apartments in the population register such as in other Nordic countries. With such information, households – a field in which Snorrason feels Statistics Iceland has a shortage – could be studied more extensively, and it would even be possible to base a census entirely on information from the register.

An open society

A specific feature, particularly in the context of registers, is that the private sector, under certain conditions and adhering to certain rules, is granted access to the Register of Persons for the purpose of updating their customer database. "Iceland is a very open society", replies Snorrason to my question whether this is not rather unusual, "and registering persons is basically a public act and principally not regarded as privileged information. Of course, you have to take the right precautions and follow data protection rules. And then, there is the Data Inspectorate monitoring compliance.

"The question of how to deal with confidentiality is continuously under scrutiny. The debate in Iceland is influenced by international discussion but has been predominantly of a preventive nature."

Confidentiality considerations are partly the reason why Statistics Iceland rarely pub-

Broadening the view

Snorrason attaches great importance to statistical cooperation within the UN – he is actively involved in the Conference of European Statisticians (UNECE) and the UN Statistical Commission. It is the global dimension that gives the UN special significance in his eyes. "It brings us into contact with problems that we in Europe simply do not see but that we have to face on a global scale."

An important element of the UN system is that while bringing together different parts of the world, it clears the fog and fosters an outlook which is more global and less centred on European or industrialised countries. Snorrason still remembers the days when East and West racked their brains in interminable discussions to reconcile Western national accounts with the Eastern concept of MPS (Material Product System) – an attempt to put square pegs into round holes that became obsolete over night.

Today, the question is more about aligning the statistical systems of the former communist countries with Western standards but it is still a question of give and take. The Fundamental Principles of Official Statistics, drawn up and agreed upon in 1991, were originally seen as an instrument for the Eastern European countries to break with the centralised system. What is more, they were regarded as a means of justifying a statistical frame of mind – one that the politicians in these countries still had to grow used to. "Today, also developed and well-established countries are citing and relying on the fundamental principles", Snorrason says. "Statistics Iceland, in fact, refers to them increasingly. Our statistical legislation is quite old and the Fundamental Principles bring clarity to a number of issues that are taken more for granted in our legislation than actually spelled out in black and white."

lishes regional data except on population. A regional breakdown usually comprises the capital area, the densely populated area outside the capital area and the other regions together. And even at the national level, it would be sometimes possible to trace back the units for the simple reason that only one enterprise exists in a specific sector in the whole of Iceland. In these cases, Statistics Iceland tries to obtain the assent of these enterprises for disclosing data to avoid, for example, external trade statistics becoming distorted.

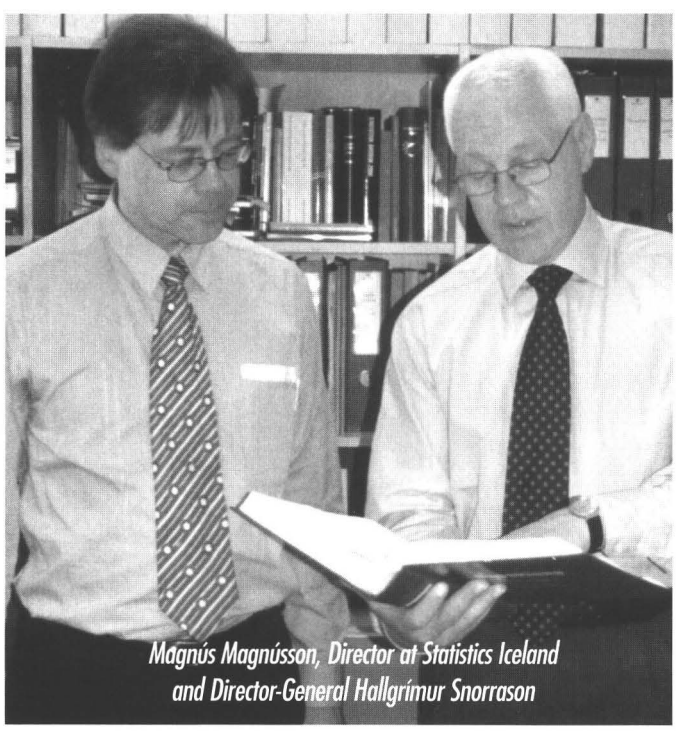
An element of possible friction

More than the question of confidentiality, Snorrason perceives the fact that the statistical office runs the administrative register as a possible element of friction. This implies dealing with individuals directly who, because of the registering act, might perceive the statistical office as a state authority which they disapprove of.

"From a puritanical point of view, such administrative tasks should certainly not be entrusted to a statistical institute", Snorrason states. "On the other hand", he admits, "it signifies an increase in efficiency especially for a small-sized central administration such as ours. Another advantage is that Statistics Iceland can directly influence the elements of the register with a view to a statistical use, and has direct data access."

Although Statistics Iceland formally has a ministry status – at each government formation one minister is appointed to be the Minister for Statistics Iceland (currently the Prime Minister Davíð Oddsson) – the Office is careful to stay away from the political day-to-day business and political debate. For this reason, when he became Director-General in 1985, feeling uncomfortable with the practice of giving the minister advance notice of the consumer price index and similar releases of market moving statistics, Snorrason abandoned the procedure at the first opportunity.

Today, Statistics Iceland follows the general practice and publishes a release calendar for all press releases which is being extended to publications because, as Snorrason says "it turned out to be a very good instrument to plan and direct our work internally."



Magnús Magnússon, Director at Statistics Iceland and Director-General Hallgrímur Snorrason

Icelandic statistics strengthened

In Iceland, as in many other European statistical systems, there are several actors apart from the statistical office and the central bank such as the Wage Research Institute, the Agricultural Institute or the National Economic Institute, which is presently responsible for the national accounts. The government is now proposing in a legislative bill to transfer the statistical activities of the National Economic Institute to Statistics Iceland.

"I think a decentralised system cannot be applied in the very small context, in which we are working. It calls for a more coordinated, more centralised approach", Snorrason is convinced. He welcomes therefore the move to bring statistical tasks together under one umbrella. "It will undoubtedly strengthen Icelandic official statistics, and greatly improve coordination, both internally and internationally."

According to this proposal, Statistics Iceland will take over national accounts and all related statistical activities from the National Economic Institute – Snorrason's previous employer before he joined the statistical office. The Institute itself will cease to operate, and its second task, covering macro economic forecasting, economic outlook and advice to the government in questions of economic policy, will be transferred over to the economic departments of the Ministry of Finance and the Central Bank.

Snorrason welcomes this development and obviously looks forward to the new challenge. "My feeling has always been that although we worked very well together, a certain lack of coordination and alignment lingered. In my mind, a statistical task like national accounts will naturally suffer if it is produced in an institute mainly concerned with macro economic forecasting and policy-advice. The focus will always be on the politics of the day, on the forecasts and on the assessment of the situation. But it will certainly be much better placed in the context of overall statistical policy conducted in this office. We will try to give it greater attention and emphasis."

Preoccupations

Incorporating national accounts will of course be the biggest challenge of the office in the near future – not forgetting about other fields where the Director-General notices shortcomings that he would like to see tackled: A new comprehensive statistical business register is on the drawing board. A project of new labour cost and labour price indices is under development and nearing completion. A producer price index, which is currently not available, at least not in a satis-

factory manner, is in the pipeline. Better short-term statistics should be tackled in the context of the EMU Action Plan, which Iceland is not obliged to implement but to which Statistics Iceland attaches great importance.

Weaknesses exist also for production data not least because of the small size of economy and businesses and in environmental statistics, which Snorrason feels "should definitely be developed further".

A project is underway that aims to improve the information about housing: A country-wide register for buildings and fixed assets has been reorganised and has recently started to operate and to provide data on new buildings.

"There are surely more weaknesses, but I feel that is enough", Snorrason concludes and points to the strengths of the office, which are "in fishery statistics: ample, as expected for a fisheries nation; in external trade: relatively easy due to the island factor and because we can use the customs declarations and in demographic statistics: thanks to the register".

Back to Europe

Going back to Europe, how does he judge political initiatives such as the recent Sustainable Development Strategy? "I think that it is a good thing to focus on a certain area, give the impetus and ask statisticians whether they are able to answer the questions.

"However, the danger is that politicians or their aids start making long lists of what they think might be needed without properly considering how it is going to be used. Statisticians need to be brought into the picture at an earlier stage to help make informed decisions on the kind of statistics needed for a specific issue. Depending on whether you want to shed light on the development, situation or structure, statistics have to address the problem differently – something which is often neglected when such lists are drawn up."

Looking concretely at sustainable development, Snorrason feels that increasing the availability of environmental, social or economic data alone would not be sufficient but that it is more a question of linking the different fields and establishing a common system, which makes it far more difficult than simply providing data on different items.

Nordic cooperation

International cooperation in statistics has a very long history in the Nordic countries. This has involved not only the exchange of views but also following common standards and practices and pursuing joint projects.

"Statistics Iceland has always had plenty to gain from Nordic cooperation", says Snorrason, "and we still benefit from it, although it has changed since the Nordic countries became either EU or EEA members. The exchange of experience and views has always been tremendously important for us because we simply neither have the power nor the strength to conduct our own research and discover the best practices. Cooperation is therefore vital for us."

The way ahead

International, and more so European statistics, has come quite far in terms of harmonisation, Snorrason thinks. "During the last few years, the scope of European statistics has been widening and at the same time quality has definitely been improved. Now we enter a new phase in which the primary demand is timeliness. There is no question that the US is quicker and more timely than us in releasing many short-term economic statistics.

"But one, has to look beyond this simple finding. A great deal of the US' speed is because, unlike ourselves, they don't have to go into the finer details, the small print. Their rapid results are more approximate, relying partly on estimates or assessments and corrected when possible. In stark contrast, we wait for semi-final or final figures.

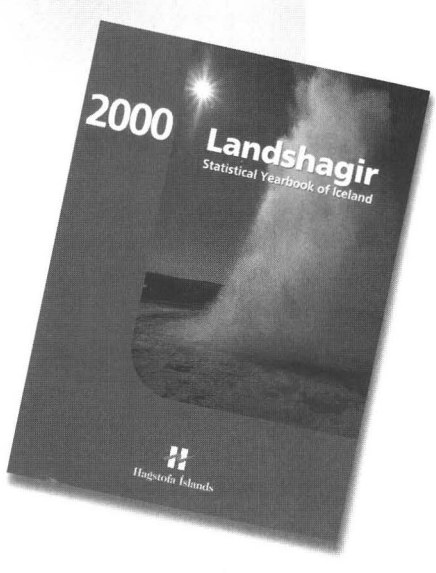
"We will have to make up our minds on what we really want", he continues. "At the moment, we are inundated with irreconcilable requests. Europeans seem to have a tendency to try and steer things inside out, which contradicts with what we are preaching – that we should rely on general economic policies. Take monetary policy, for example: It very much relies on general mechanisms. And the same holds true for many other policies. But we have not followed this evolution in statistics.

"No doubt, the demand for better and quicker statistics will grow further and we will have to make up our mind on how we can live up to that." ■

The *Statistical Yearbook* is a reference work for a number of economic and social fields and a guide to statistical sources. The tables carry, as in most publications, English translations. Statistics Iceland charges marginal costs for printed publications, while statistics on the website *(www.statice.is)* are free of charge.

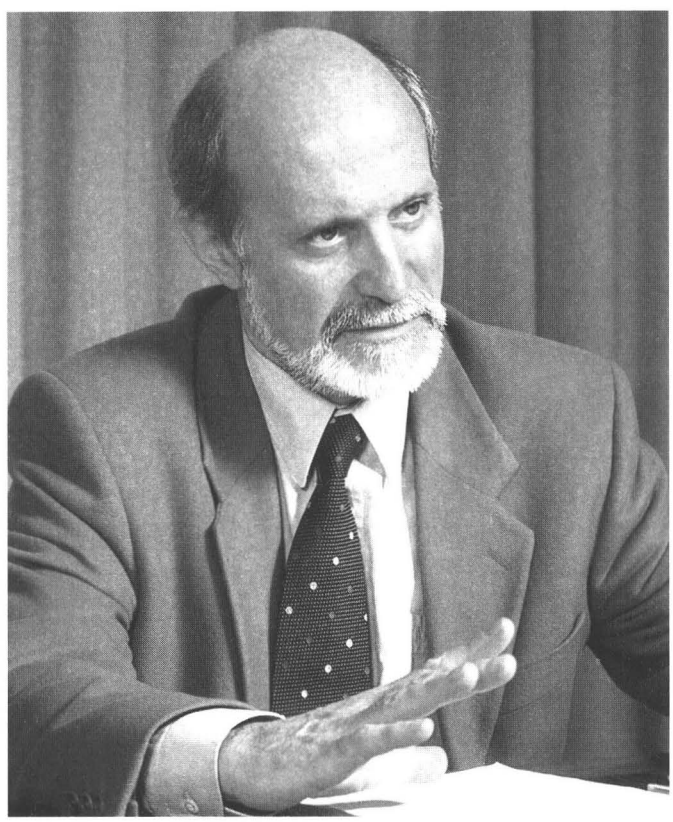
"We have discussed that issue enough ", Snorrason replies when asked for his opinion on marketing statistics and financing through commercial activities. "For large institutions it might be possible to carry out commissioned work and raise revenues from that, but it is not feasible at Statistics Iceland.

"One should also realise that the marketing interest originated primarily from resource considerations after budget cuts. It is also a way to get closer in touch with user needs. But it is limited and I see the opposite trend gaining importance." Statistics Iceland takes charges for the use of the population and the enterprise register and finances a large part of its operations from these revenues; in statistics, the revenues from publication sales are marginal.



Two ESS statistical offices change heads

At INE Portugal, Paulo Gomes (53) succeeds Carlos Corrêa Gago.



Paulo Gomes (53), who had been heading INE's regional office in Porto since 1989, took over as President of INE Portugal in September 2001. He succeeds Carlos Corrêa Gago who retired at the age of 67 after terminating his third mandate as INE's President.

With Paulo Gomes, the national government has appointed a trained statistician to steer Portuguese official statistics who is not only acquainted with the day-to-day business of statistics – as director of the Northern Regional Office he was directly involved in the restructuring process of the Portuguese statistical system – but who is also no stranger to the international scene.

Paulo Gomes, after studying applied mathematics and statistics in Portugal and at the University of Montpellier, France, first stepped into an academic career. He lectured, among others, statistics, econometrics and data analysis at various Portuguese universities, including the universities of Lisbon and Porto. He also headed the data analysis laboratory of Porto university for several years and has published scientific works on the selection of variables and teaching books on survey methods and data analysis.

The president's mandate lasts for a renewable three-year term.

Thinking strategically

In terms of management, national statistical institutes are confronted with the need to respond to the new demands and challenges posed by profound and constant changes in contemporary societies. INE Portugal is no stranger to this; efficiency and efficacy in managing their resources top their agenda too.

According to Gomes, a main priority is revamping statistical output and implementing information subsystems to increase the consistency and integration of information, eliminate redundancy and rapidly detect problems.

In addition to lessening the survey overload for households and businesses, INE's strategy will also promote efficient management of resources, organise design and implementation schedules with more synchronous information output cycles and more integrated analysis.

This streamlining also means improving the integrated data collection model – applicable to central government agencies and to businesses – using the state of the art and making the most of what information and communication technologies can offer. The overall efficiency of the system is a major goal, together with trimming down statistical output costs, as well as costs borne by the suppliers of basic information.

The EMU Action Plan – for the statistical needs of the Economic and Monetary Union – has also thrown up a new challenge for many statistical data and a very demanding schedule in which the target is to converge, by 2002, towards a data dissemination schedule corresponding to the average of the three best performing Member States.

Apart from planning and managing quality by reassessing internal procedures for statistical output and the services provided, a robust human resources policy – which optimises staff skills – is also at the centre of the new president's forward-thinking.

"Optimising the timeliness of information and, subsequently, its usefulness are the foremost aims of INE Portugal", Paulo Gomes concludes. ■

Heli Jeskanen-Sundström (54) took up the post of Director-General of Statistics Finland ...

Heli Jeskanen-Sundström started her career at Statistics Finland in 1968, while still a student. In 1976, she graduated from the University of Helsinki as Master of Social Sciences, with economics as her major subject, and continued to work at Statistics Finland, first as Senior Statistician and, later on, as Head of Division and as Director of the Office's business statistics unit.

Jeskanen-Sundström has been Deputy Director-General of Statistics Finland since 1997. She has headed the Director-General's Secretariat, with the principal tasks of assisting the Director-General in the management of Statistics Finland and the Finnish national statistical service, related strategic planning, and development of the Office's management, planning and follow-up systems. Jeskanen-Sundström has also been a permanent expert on the Board of Statistics Finland and deputised for the Director-General.

On an international scale, she has participated widely in statistical cooperation within the EU, the UN-ECE and the OECD, as well as at the Nordic level and chaired the statistical working groups of the EU Council during Finland's Presidency of the European Union.

Past ...

She takes over from Timo Relander who retired at the age of 60. Relander had been appointed Director-General of Statistics Finland in spring 1992 but, following the request of the then Finnish Prime Minister, acted as Secretary of State at the Prime Minister's Office from 1992 to 1995.

One of the greatest changes during his leadership was, without any doubt, Finland's accession to the European Union in 1995, which in the field of statistics, too, altered almost everything. A lot of effort has been put into the harmonisation of statistics and much has been achieved. The development of technology and the arrival of the Internet has also brought about substantial changes.

In 2000, Relander initiated a discussion about the organisation of Statistics Finland, which thoroughly analysed the agency's organisational structure and identified areas needing change. Although the discussion brought no acute crisis areas to light, it became clear that staff competence and training are crucial development targets. Following this exercise, and well aware that developing statistics is slow, far-reaching work, Relander also launched long-term strategic planning at Statistics Finland.

... and future challenges

Her predecessor passes the Office over in a good shape, needing no radical changes, the new Director-General Jeskanen-Sundström feels. Resources are relatively secured, and relationships with data suppliers and users function well.

However, there are, of course, a number of challenges to be tackled, among which she singles out the continuous improvement of statistics' international comparability , speeding up statistical production – which has been set as a special EU target and the provision of fast and well harmonised euro-zone statistics for Economic and Monetary Union.

International statistical cooperation will increase even further as statistical production becomes increasingly global. Moreover, keeping up with technological development is an additional, major challenge while new technologies also offer new possibilities for data collection and dissemination.

The generation change within the staff will be a further test, when at least 300 of the 1 100 or so employees of Statistics Finland retire by 2015. The handover of skills and knowledge during this period is therefore imperative for the quality of statistics.

Changes in the operating environment mean that statistical offices must use efficient strategic management systems to monitor and anticipate these changes systematically. Jeskanen-Sundström intends to continue strengthening Statistics Finland's efforts in this area. Strategy work also interrelates with total quality management with quality being a strategic matter. "Its continuous improvement is the cornerstone of all activity and the only way a statistical agency can foster its reliability", she says. ■

Building EMU's statistical house

The EMU Action Plan is an important element for facilitating the sound management of Economic and Monetary Union (EMU) and the EU's recently launched single currency, the euro. Eurostat's MARCO DE MARCH and KLAUS REEH spoke to *Sigma's* GLEN CAMPBELL to explain more.

If the euro-zone economy is to become a robust, global economic player, it needs frequent, reliable and timely EU/EMU short-term economic statistics. Moreover, these need to be brought together in something akin to a cockpit's control panel, with antennae, flashing lights, alerts, fuel gauges and the like, so that policy-makers – our imaginary air pilots – can then obtain an accurate statistical snapshot of economic momentum to make the right economic decisions and promote the euro's stability.

More euro-zone information urgently wanted!

So much for aeroplanes, cockpits and pilots. Key users of such information include not just the EU's policy-makers or the European Central Bank (ECB), the institution responsible for EMU monetary policy, but also those active in the financial markets – unquestionably, a leading force on the world's financial stage, shaping economic and financial developments.

All of these need EU/EMU macro-economic indicators of adequate quality and at the right time – makeshift and tardy estimations can be rather costly for the economy in terms of growth, employment and income. Moreover, because of the key roles played by the dollar and the euro on the world's markets, these indicators need to contain similar information and be synchronically available as those released by the US.

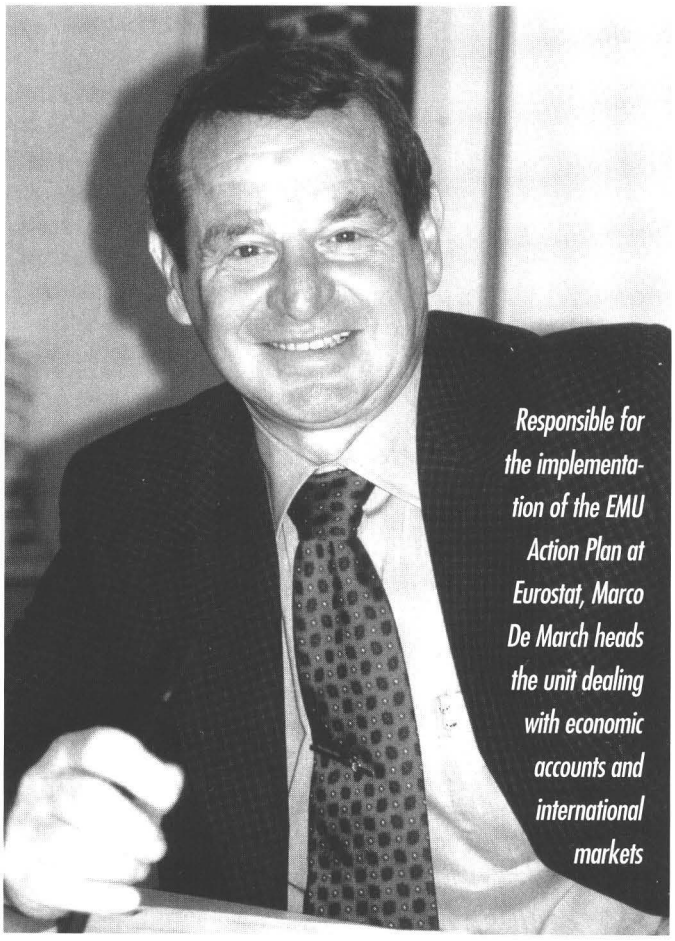
However, since EMU's launch, and despite the progress in producing euro-indicators, such as Eurostat's 100 or so key indicators, users' messages have had a similar ring: "too little, too late." More dramatically, and without any doubt exaggeratingly so, it was even said that statistics were to blame for the euro's current weakness vis-à-vis the dollar – an alarming suggestion.

The problems are essentially twofold. First, the euro-zone cannot yet enjoy fully-fledged euro-zone indicators since the system in which they are compiled is nationally based – based on national data with an economic significance of their own.

Second, they are published too late – particularly when compared to the US. This state of affairs is also due to the fact that the regulatory set-up, such as EU statistical legislation in general and in particular the European System of Accounts (ESA 95), was set up before EMU.

As Marco De March points out, "the fact that the US declares economic information first – even though economic changes are pretty much simultaneous between itself and the EU – gives it a head-start in impacting the world economy."

Given these and other considerations, the need for a sufficiently adequate information and alert system became more than urgent. For Eurostat and the European Statistical System, it was high time something was done to correct the problem.



Responsible for the implementation of the EMU Action Plan at Eurostat, Marco De March heads the unit dealing with economic accounts and international markets

Enter the EMU Action Plan

In order to improve the situation, national finance ministers adopted in September 2000, via the Economic and Financial Affairs Council (Ecofin Council), the so-called EMU Action Plan. It is a joint endeavour between a symbiotic triangle involving Eurostat, the ECB and the Commission's Directorate-

General for Economic and Financial Affairs – the latter two being major data users.

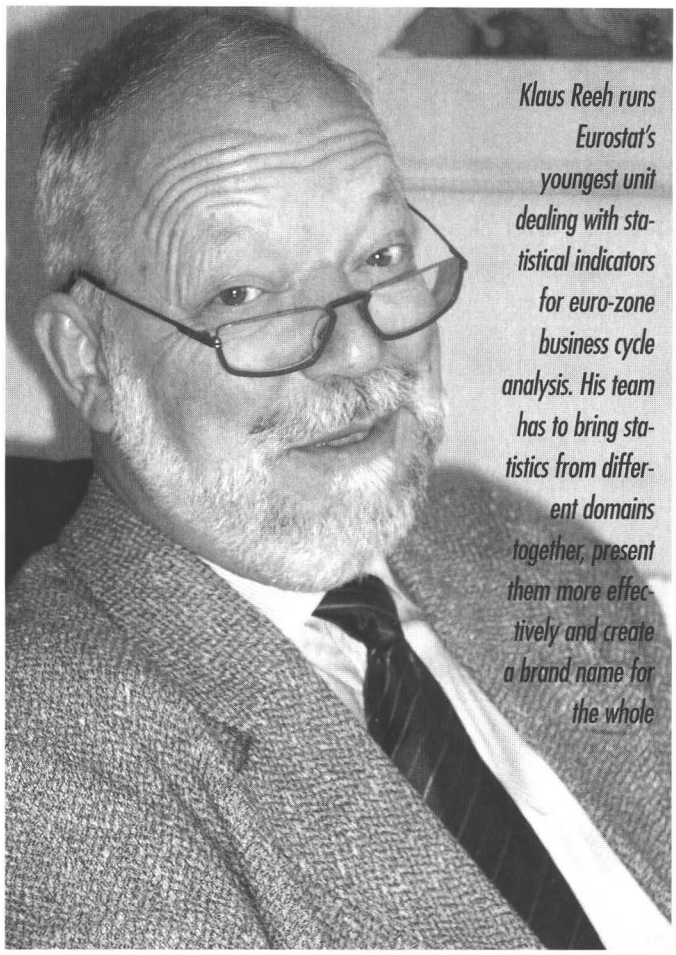
The Plan consists of four actions:

- regular progress reports identify the main deficiencies and priorities for each main area of statistics covered,
- for each Member State, a list of action points and the corresponding initiatives envisaged under the National Action Plans (NAP) are drawn up,
- action points for Eurostat (ie. development of euro-zone indicators and access to these), *and*
- priorities for modifications to statistical legislation.

In a nutshell, the plan identifies for each Member State and for each statistical field the areas where progress is needed in the compilation of national indicators to allow Eurostat a timely compilation of key infra-annual EU/EMU aggregates. Member States then attempt to attain these goals through National Action Plans (NAPs). Where necessary, existing statistical legislation will be recast along the lines of: out with derogations, and in with commitments.

Hitting the nail on the head

The most urgent areas for improvement are higher frequency of data (monthly or quarterly), their timely delivery and coverage as well as greater transparency and accessibility. They concern national accounts, public finance statistics, labour market statistics, 'short-term business statistics' and external trade statistics.



Klaus Reeh runs Eurostat's youngest unit dealing with statistical indicators for euro-zone business cycle analysis. His team has to bring statistics from different domains together, present them more effectively and create a brand name for the whole

The Action Plan, therefore, lays down that Member States, as set out in their NAPs, have to focus on these areas if the compilation of timely EU/EMU aggregates is to be facilitated. The objective is to converge in each area of statistics to the standard of the three countries best performing in terms of timeliness. Further, they must do this without compromising the quality standards attained so as to limit revisions and maintain public confidence in the data – a notably important point for countries with a high weighting in the aggregate.

The Action Plan is already producing positive results – and some quicker than expected. De March highlights one of the Action Plan's specific aims which is to obtain first reliable estimates of quarterly national accounts data within 70 days after the end of the quarter, instead of the 120 day time limit laid down in the ESA 95 Regulation which is going to be revised. Pointing to a handful of data tables showing the transmission times recorded for the fourth quarter in 2000, De March says confidently "together, we are getting there. Most countries are meeting the targets, or are on their way to doing so."

In some cases, data completeness already arrives at the 100% mark. Before the close of 2001, the necessary threshold of 80% of national data available should be exceeded so that first estimates of aggregates for the main quarterly national accounts, public finance, labour market statistics, external trade statistics and most short-term statistics can be calculated. Other domains will follow in 2002. What is more, new legislation laying down requirements and deadlines for data coverage and transmission is working its way through the legislative system – pretty much in the fast lane for the most pressing items.

Clearly, gradual implementation of the Action Plan is improving coverage and timeliness in most areas. In De March's words, the Action Plan is "a big step forward." However, he continues, "if the EU's aspiration is to follow the US' example, more ambitious targets will have to be set such as shrinking delivery times still further and expanding coverage." Because the US' *modus operandi* offers an attractive template, Eurostat actually envisages it as its benchmark for timeliness.

Marketing an infra-annual brand

The Action Plan is about making short-term – 'infra-annual' statistics. And with their NAPs, Member States will be helping Eurostat to bring such statistics into a uniform and digestible whole. Up until now, while Eurostat has been able to excel in compiling annual statistics – a merit borne out by its preparatory work for EMU, for 'infra-annual' statistics, it was quite a different story. The European Statistical System was very much below par and had to shake itself up: everyone needed to play the same tune.

In order to equip itself for the task, Eurostat created a special unit, headed by Klaus Reeh, to conduct this eclectic orchestra of data, bringing the data together and 'packaging' them into a marketable set

The Euro-indicators website – http://www.europa.eu.int/comm/euroindicators/ – provides infra-annual information on the following topics:

- **Balance of payments:** current account, financial account
- **Business and consumer surveys:** industry, construction, retail sales, consumers, sentiment indicators
- **Consumer prices:** harmonised indices
- **External trade:** current prices
- **Industry, commerce and services:** industry, construction, retail trade, energy, other statistics
- **Labour market:** harmonised unemployment, labour cost, conventional earnings
- **Monetary and financial indicators:** interest rates, exchange rates, monetary aggregates, financial aggregates
- **National accounts:** aggregates by industry, main aggregates, income aggregates, government accounts (annual data), price and cost indices

Behind these seemingly 'anonymous' indicators, there are teams of experts working daily to issue quality data according to a very strict calendar.

of indicators. The unit also ensures quality monitoring and fosters a common language, especially as regards methodology, descriptions and naming conventions for indicators.

Speaking to Reeh, it is obvious that we have much to learn from the US. They possess many of the attributes of a successful system: coverage, timeliness and the enjoyment of a household brand name – "statistics people want and can readily use" says Reeh. In fact, compared to the Americans' speed, we only beat them for balance of payments data and consumer price indices – the only two feathers in our cap to boast about – while for other domains we are clearly lagging behind.

More courageous with estimations

With estimates more widely accepted in the US, Reeh warns with some conviction, "however successful the Action Plan is, it will be off the mark as far as our American counterparts are concerned. We have to think differently and be more courageous with estimations." In his view, this includes devices such as constructing proxies, compiling nowcasts, interpolation or retropolation.

Moreover, he believes that there is a change needed in the way aggregates are perceived: "We are very much constrained by the perception that the EU number should be the result of a spreadsheet operation", ie. adding up Member States' figures. But, he continues, "we have to move towards the logic of building an aggregate and then providing the breakdown. With only a fraction of the data, you can already generate a reliable aggregate."

"We should not be scared of revisions", he says, "they don't have to let things run riot." Provided that the methodology is transparent and the revisions clearly explained, Reeh sees no unconquerable battle – even if it is sometimes of the uphill variety.

Improving euro-indicators: online

In order to respond to the growing demand for easily accessible economic infra-annual statistics since the start of EMU, Eurostat has been constantly improving the data it makes available via its website. Recently, complying with a commitment in the EMU Action Plan, it launched a new euro-indicators site from which it is also possible to access the underlying New Cronos domain called 'Euro-IND', devoted to the most important indicators. Currently available in English, the French and German language versions are planned for mid-2002.

Intended for those interested in the evolution of the business cycle in the EU, euro-zone and Member States, the new Euro-indicators site contains infra-annual European and national data – updated daily and fully documented. Data and metadata are accessible at any moment via a new uniform, user-friendly browser. Finally, a host of information is only another quick click away and includes release calendars, quality reports, policy documents, working papers and newsletters.

With the new database, Eurostat should be bang on course to deliver the infra-annual statistics users want. But it is only the kick-off. Thanks to Member States' efforts for the Action Plan, national statistics should be released on time, allowing Eurostat to compile aggregates much more swiftly and put them online.

Additional services will also be set up such as the compilation of proxies for partially missing series, or the development of new indicators, such as monthly GDP or other more synthetic leading indicators for business cycle analysis.

A benchmarking taskforce was also created to focus on infra-annual economic statistics and has proposed a 'Strategy for progress' which will complement the actions already taken by NSIs and Eurostat under the Action Plan. This includes a strategic commitment for release times on EU/EMU short-term economic statistics to be as timely as in the US within five years, European-wide surveys and the adoption of various methods of improving timeliness including best practice, benchmarking and estimation techniques.

One small step

Since the EMU Action Plan has been in business, it has been helping to pave the way ahead. But, it would be premature to break open the champagne; the best brand names are not made overnight. Clearly, there is still more to do at both EU and Member State levels – in organisational and legal matters, statistical methodology and information content – if this EU/EMU statistical house is eventually to provide the high calibre of roof we need over our heads to promote economic stability.

The Action Plan and the subsequent progress reports are available at Eurostat's Internet site:

http://europa.eu.int/comm/eurostat/

On the homepage go to 'Other Information' and then click on 'Eurostat and EMU'. ■

Within a decade, the Committee on Monetary, Financial and Balance of Payments Statistics – CMFB for short – has turned from a "unique experiment" to a highly regarded coordinating body. Celebrating its ten-year existence was an occasion to remember the beginnings and to weigh up the role it plays today.

CMFB – a pivotal mechanism for cooperation

The creation of the CMFB as an advisory body goes back to the Commission's attempt to harmonise statistical systems in a field that, in most countries, remain the realm of central banks. This division of responsibilities, where monetary, financial and, in many cases, also balance of payments statistics are compiled by central banks, with the remainder of official statistics being compiled or at least coordinated by a national statistical institute, caused a split between the two domains. Official statistics produced by statistical offices had undergone quite some harmonisation efforts with the UN, the OECD and Eurostat as driving forces, but central bank statistics were not included in this system.

EMU calls for action

Even before the Maastricht Treaty was signed in February 1992, it was apparent that the new statistical needs which would arise from monetary union would require intensified cooperation between statisticians from statistical institutes and central banks. Unambiguous harmonised statistics would be needed not only in the economic field, but also in the central banks' statistical domain. Hence the wish to take central bank statistics on board with Eurostat playing a major role in these developments.

This was not an easy undertaking because, until then, there was only little interaction between central banks and national statistical institutes. Establishing an advisory body recruited from central banks to work in parallel with the Statistical Programme Committee (representing the directors-general of the statistical offices) would therefore most likely not solve the coordination problems. After a reflection process, a Council Decision* was finally adopted in February 1991 establishing the CMFB as an advisory committee, in which national statistical institutes and national central banks are equally represented.

Building a bridge

The primary aim of the newly established committee was to enhance the cooperation between NSI and central bank statisticians with a view to implementing statistical instruments for the conception, follow-up and evaluation of monetary union. The decision not to limit the CMFB's role in advising the Commission on the integration of monetary, financial and balance of payments statistics, but to give it an additional role in the area of statistical collaboration with the European Central Bank (and its forerunner, the European Monetary Institute), is regarded by both Eurostat and the ECB as an important precondition for the CMFB's rising profile over the past decade.

The committee's role in the framework of the so-called excessive deficit procedure brought the CMFB into prominence, although its advice on the recording of complicated transactions with substantial consequences for deficit and debt is certainly not its only task. It also provides advice to both Eurostat and the ECB on issues that rely on macro-economic statistics, particularly in statistical legislation, and provides a forum for cooperation and debate on difficult technical issues.

Current tasks include, among others, developments on infra-annual economic statistics, seasonal adjustment, balance of payments statistics, short-term public finance statistics, financial accounts, and financial services statistics.

The CMFB consists of directors of economic and financial statistics in national statistical institutes, heads of statistics departments in national central banks, together with the Director-General of Eurostat and the ECB's Director-General of Statistics. Steven Keuning, Director for macro economic statistics and dissemination at Statistics Netherlands, is currently Chair – taking the baton from Rafael Álvarez, Statistics Director at Spain's central bank, last year.

More details on the turbulent and challenging early years of the CMFB are brought together in a book written by its first Chairman, Hans van Wijk, who until his retirement in 1997 was Deputy Director and Head of the Nederlandsche Bank's statistical department. He recalls the difficult start-up and the committee's search for identity, before being recognised as a central coordinating mechanism, and gives vent to his own personal opinion, adding a very entertaining ingredient to the book's high informational value.

For more details, please contact the CMFB secretariat (Eduardo Barredo, tel: (+352) 4301-35402, e-mail: eduardo.barredo-capelot@cec.eu.int) ■

* Council Decision No 91/115/EEC of 25 February 1991. See also Council Decision No 96/174/EC of 26 February 1996.

United in improving statistical information in the social field

To respond to the increasing importance of the social component in EU policies, the Commission's DG Employment and Social Affairs together with Eurostat are strengthening their efforts to improve the statistical information base in this field. The collaboration is based on a partnership agreement signed last summer by Odile Quintin, Director-General of DG Employment, and Eurostat's Director-General, Yves Franchet.

A core policy concern

The need to promote high levels of employment and social protection, improved working conditions, the strengthening of economic and social cohesion, the raising of the standard of living and the quality of life and the promotion of equal opportunities between women and men are explicit objectives of the EU.

These objectives have moved increasingly to the forefront of the Commission's concerns and have become political priorities. The foundation of a European Employment Strategy following the Luxembourg Council in 1997 and more recently the establishment of a new economic and social policy agenda at the Lisbon and Nice Councils (in March and December 2000) reflect this orientation with a monitoring exercise based on common indicators at Community level becoming crucial for policy coordination. The Stockholm and Gothenburg Councils reinforced the need for such an exercise.

Calling for statistics

Within this new political framework, the number of requests for better and timely statistics has multiplied, while an urgent need has become apparent to develop further statistics in areas where they are in their infancy or virtually inexistent.

"Constructing a Community system of statistics which underpins such policy coordination becomes crucial for both Directorates-General in the next years", says the agreement. "In each of these cases, statistical data are required to provide the necessary background information and to permit monitoring and evaluation of national and Community policies."

The agreement sets out guidelines for the collaboration between both DGs and identifies their respective roles and responsibilities in improving and extending the statistics currently available in the fields of employment and social affairs. It also provides for DG Employment to grant financial assistance for a number of selected, priority projects.

Odile Quintin (left), Director-General of DG Employment and Social Affairs, and Eurostat's Director-General, Yves Franchet, signing the partnership agreement

Moreover, the agreement acknowledges that these activities may also concern other DGs with responsibilities in related areas and recognises Member States' active involvement.

A rolling action plan, which will be regularly updated and monitored until the end of the agreement in 2004, lists the projects underway or envisaged. The plan distinguishes between three types of initiative:

- Improvement of existing statistics: Improving the definition, coverage, disaggregation by sex, and timeliness of current statistics;
- New developments: Developing a more coherent and comprehensive statistical architecture in the economic, employment, education, social protection, and social inclusion domains, *and*
- Occasional initiatives: Statistics and surveys meant to feed into occasional exercises or reports, such as modules in the Community Labour Force Survey, pilot programmes, etc.

Concrete examples for statistical projects that Eurostat and DG Employment aim to carry out are, among others, EU Statistics on Income and Living Conditions (SILC), a job vacancy survey, the development of a database on labour market policy and the collection of data about employment of disabled people (the latter as a module in the Community Labour Force Survey). ■

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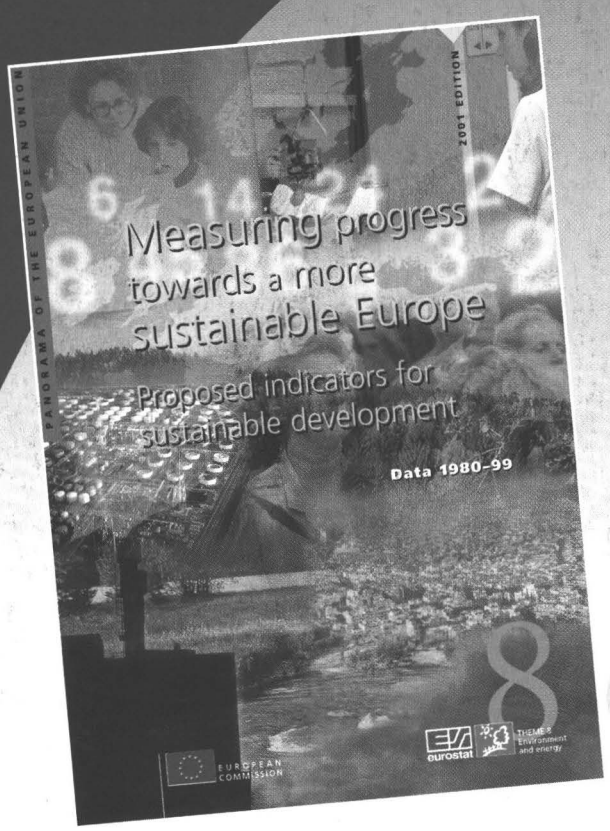

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