

Annual report 2002



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European Environment Agency
Kongens Nytorv 6
DK-1050 Copenhagen K
Denmark
Tel: (45) 33 36 71 00
Fax: (45) 33 36 71 99
E-mail: eea@eea.eu.int
<http://www.eea.eu.int>

Preface

By Interim Executive Director Gordon McInnes

It has been a great pleasure to follow Domingo Jimenez-Beltran as Interim Executive Director until Professor Jacqueline McGlade takes up the post of Executive Director in June 2003. I was able to carry forward the work programme through the vision, enthusiasm and determination Domingo had built into Agency staff. We have given added focus to completing several major reports, developing a core set of indicators to underpin our future work, adapting our work programme to requirements under the sixth environment action programme and building up relations with the European Parliament, DG Environment and member countries. The latter was given a major boost by participating for the first time along with representatives of the European Parliament in the informal meeting of environment ministers held in Sonderborg in June.

Within the Agency, we have developed management capacities, established a range of cross-cutting work teams and improved communications through structured use of a redesigned intranet. We have also made as much progress as possible with the review of European topic centres and preparations for the next multiannual work programme, pending the arrival of the new Executive Director.

First and foremost, I would like to thank the Agency staff for their support and continued loyalty to the Agency and to me during this period of consolidation and preparations for change. I would also like to thank the board for their confidence in me during the transition period. I look forward to handing the Agency over to Jacqueline McGlade in good order and ready to develop the next phase of our work in support of our main clients in the Commission, Parliament and 31 member countries.



By former Executive Director Domingo Jiménez-Beltrán

I am grateful for this opportunity to say a few words looking back at my time at the Agency

The EEA has helped Europe to move from simple monitoring of environment changes to identification and assessment of the factors determining change. These factors are strongly related to economic and sectoral policies. The EEA pioneered reporting on transport and environment, and has since expanded to energy and now to agriculture and tourism. At the horizontal level, the EEA has been active on economic instruments and land use planning. Greater knowledge of these factors is indispensable if we are to achieve the needed changes in the environment and the protection of natural resources, and make real progress towards the ultimate goal of sustainable development.

2002 was the year in which the environmental reporting system reached maturity. The year also saw the extension of the work of the Agency to systematically cover the accession countries, as shown by the report on transport. Enlargement consolidated the role of the EEA as the environment reporting capacity for the whole of Europe, as also reflected in the task of preparing the Kiev report. My hope is that these developments will lead in time to the Agency becoming the recognized assessment facility behind the EU sustainable development strategy, reflecting my dream of the EEA becoming the European Agency for Sustainable Development.



Thanks again to the very professional and motivated staff of the Agency, managed after my departure by Gordon McInnes, to the very inspiring and supportive scientific committee, chaired now by Professor Bendrich Moldan, and management board, led by Professor Kees Zoeteman, and to the highly cooperative national administrations, our many partners in the Commission and contacts at the European Parliament and among the NGOs. Thanks to all of them for their contributions to our shared achievements during my time at EEA. And above all, congratulations and thanks for the sustained progress of the EEA after my departure. Now as a user, I will try to put the Agency's information to the best possible use in my new task of implementing sustainable development in the Castilla La Mancha region of Spain.

Foreword

By the Chairman of the Management Board Kees Zoeteman

The European Parliament and the Council adopted in 2002 the sixth environment action programme of the European Community, providing a clear framework for the work of the European Environment Agency in the years to come.

As regards achieving sustainable development, the cautious start at the spring European Council and, on the global scene, the mixed outcome of the World Summit on Sustainable Development in Johannesburg demonstrated the size of the task ahead. One important lesson from Johannesburg especially was that the different issues are strongly connected – economy, development, social aspects, environment, trade, security and poverty. Real progress on environmental matters at the global level is impossible if these links are not acknowledged and acted upon.



It is also important to note the lack of serious companions of Europe in world leadership on these issues. As a major economic power with a relatively progressive agenda, Europe must continue to fulfil this role in the years to come, without losing the links with the other continents

The increasing unipolar orientation of the reaction to this development may have large consequences for the process of globalisation and impact sustainable development and global governance issues. In this changing context the EEA has to play its part in meeting the global responsibilities. More specifically, it must develop its environmental information systems to put Europe in the global context, provide understanding of the links to other dimensions of sustainable development and support the identification of viable long-term solutions. By doing so the Agency has an undisputed role in the unification process in Europe.

With the twin challenges of the sixth environmental action programme and sustainable development in mind, the Agency began in 2002 to develop its third multiannual work programme for the period 2004–2008. The overriding aim of this exercise is to ensure that the information the Agency provides is of direct use to its key clients, the European institutions and the member countries, as well as other users of environmental information at the European level, the media, businesses, NGOs and European citizens.

It is clear that the presently maturing Agency cannot expect significant budget increases in real terms in the coming years, beyond what enlargement brings. This is an added incentive to ensure that the multiannual work programme addresses the needs of its clients in the most cost-effective way. Yet new developments including integrated scenario and outlook studies that help assess the need for future policy measures will have to be accommodated.

2002 was also the first year of the significantly enlarged Agency with 29 member countries, the first Community body to open its doors to the accession countries in central Europe and the Mediterranean area. Having welcomed the new members last year, I am happy to see that their integration into the work of the EEA is going very smoothly, and I am grateful for the constructive contributions they are making to the work of the Management Board and Scientific Committee. In 2002, more efficient internal procedures were successfully put in place to ensure good management of the enlarged Agency.

It is also good to see that Poland's membership has been clarified — they joined on 1 January 2003—and that we should soon be able to welcome Turkey also, rounding off the enlargement agreed in 2001.

I will take this opportunity to say heartfelt thanks to Domingo Jiménez-Beltrán for the outstanding effort he put into leading the Agency for its first 8 years. There is little doubt in the minds of the Board that without his vision, enthusiasm and determination the Agency would not be where it is today. We wish him all the best in his future activities, with the sure knowledge that he will make a major impact wherever he is.

The Management Board has now appointed his successor, and we look forward with high expectations to the arrival of Professor Jacqueline McGlade, an outstanding environmental scientist. On top of her scientific background, her experience in communicating scientific issues to a wider audience make her an ideal person to lead the Agency in the coming years.

Finally, I am sure that the whole Board would also join me in thanking Gordon McInnes for the hard and excellent work he has put into leading the Agency in the interim period. There has been no loss of momentum in the work of the Agency, and he has been very successful in forging stronger links to the key clients in the European institutions and the member countries. I hope he will continue to play an important role in the management of the EEA.

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2002: the year in brief

2002 saw the adoption of the sixth Community environment action programme (6EAP) in July and the start of work to implement the programme. The first spring meeting of the European Council in Barcelona in March addressed the combined Lisbon agenda, aimed at making the European Union (EU) the most competitive and dynamic economy in the world, and EU sustainable development strategy, launched in Gothenburg in June 2001. Negotiations on enlargement of the European Union were a major issue throughout the year. At the international level, the United Nations Environment Programme (UNEP) published its third global environment outlook report (GEO-3) in May as part of the run-up to the World Summit on Sustainable Development in Johannesburg in August/September.

In accordance with its mission statement, the European Environment Agency (EEA) together with the European environmental information and observation network (Eionet) supported these and other policy activities by providing information and expertise, and by improving access to information. At the same time, they worked to improve support for future policy development and assessment activities by developing information capabilities in different ways.

Closer to home, 2002 was the first year of the significantly enlarged EEA with a total of 29 member countries. The EEA was the first EU body to welcome members from the accession countries — before enlargement of the EU itself.

Domingo Jiménez-Beltrán, Executive Director for the first eight years of the EEA's existence, left as planned at the end of May.

EEA mission statement

The European Environment Agency aims to support sustainable development and to help achieve significant and measurable improvement in Europe's environment by the provision of timely, targeted, relevant and reliable information to policy-making agents and the public.

Policy support

Sixth environment action programme

The EEA is supporting the Commission and Member States in the development of most of the seven thematic strategies (such as air and soil) under the 6EAP and is active in the 4 priority areas of climate change, nature protection and biodiversity, health, and natural resources and waste.

This support is typically in the form of information and expert support to the Commission. Several reports published during the year were also linked to the 6EAP:

At the general level, the Agency published *Environmental signals 2002* in May, giving an overview of progress (or otherwise) in the environmental field in Europe. The overall picture was very mixed, with progress in some areas, such as water and air pollution, counterbalanced by deterioration in others, such as soil and natural resources.

As concerns specific priority areas, *Greenhouse gas emission trends and projections in Europe* was published in December, giving for the first time a comprehensive overview of Europe's prospects of fulfilling its commitments under the Kyoto protocol on climate change. The overall message was that further action is needed from the present EU and its Member States to meet the targets.

The Agency also started to publish overviews on the internet of the condition of and pressures on Europe's 11 biogeographical regions and seven regional seas.

Sustainable development and sector integration

Turning to the EU's sustainable development strategy, the EEA provided input into the structural indicators provided by the Commission for the spring European Council and worked together with the Commission to improve the quality and coverage of the indicators for future summits.

An important dimension of sustainable development is the impact of economic sectors on the environment. Developments in two important economic sectors — energy and transport — were covered in *Energy and environment in the European Union* and *Paving*

the way for EU enlargement (TERM 2002).

These reports highlight some success stories, especially linked to air pollution, but strong concerns in other fields such as greenhouse gas emissions and land fragmentation.

The development of similar information covering other sectors (agriculture, tourism, fisheries) progressed in 2002.

The European Parliament and the Council

The Agency continued to support the work of other European Institutions, especially the European Parliament through its Committee on the Environment, Public Health and Consumer Policy, and the Council through the Spanish and Danish Presidencies. This support was typically in the form of working papers, presentations and expert participation in meetings.

International activities

On the international scene, support was given to Community activities under several conventions covering issues such as climate change, long-range transboundary pollution and biodiversity.

The production and near finalisation of the report for the Kiev conference in May 2003 was a major task. This report will be the third pan-European assessment by the Agency supporting the pan-European 'Environment for Europe' process under the auspices of the United Nations Economic Commission for Europe (UNECE).

The Agency was also the European partner for UNEP in the production of its GEO-3 report.

Improving information capabilities

The Agency and the Eionet continued to work on many fronts to improve the quality and coverage of the information it can provide to EU institutions, member countries and other interested parties.

Bridging the gap

With the aim of bridging the gap between the information presently available to European policy-makers (and other actors) and the information they need to be able to do their job properly, work continued on the development of an agreed core set of indicators covering the main environmental issues and sectors.

The Agency also supported the Commission in its review of the Community reporting system, another task arising from the 6EAP.

Finally, work was carried out together with Eionet members and EU and non-EU organisations to develop and implement the concept of a shared environment information system, meaning a system that meets the differing information needs of the various actors at the national and international level at the same time. Tools to help implement the concept were developed through the Reportnet project.

Networking

As implied above, networking — with countries and with organisations at EU and international level — is a core element of the work of the Agency.

In 2002, work on expanding Eionet into the new member countries of the EEA progressed satisfactorily. The performance of member countries in providing information under the defined priority data flows is in general improving. It is also interesting to note that several of the new member countries are performing just as well or better than many EU Member States.

Partly because of the work on the Kiev report, cooperation with non-member countries in the West Balkans and eastern Europe, Caucasus and central Asia (EECCA) developed considerably during the year.

All five European Topic Centres (ETCs) established in 2001 were fully up and running in 2002 and contributing significantly to the work of the Agency in their respective fields, both as regards providing information to cover present needs and in improving information capacities for the future. The ETCs are air and climate change, water, nature protection and biodiversity, terrestrial environment, and waste and material flows.

Cooperation with partners within and outside the EU framework continued on many fronts in 2002. Main partners within the EU were the Directorate-General for the Environment (DG Environment), Eurostat and the Joint Research Centre (JRC) while the United Nations Economic Commission for Europe (UNECE), UNEP, the World Health Organisation (WHO) and the Organisation for Economic Cooperation and Development (OECD) were important partners outside the EU framework.



Developing assessment tools

Improving the Agency's support for policy evaluation is a priority task. In this field, considerable effort was put into developing skills in scenario techniques and prospective analysis adapted to the specific needs of the Agency. A major focus of this work is providing input into the next five-year report on the state and outlook on the environment due in 2005.

Making information accessible

New EEA web site

A completely restructured web site was launched in May. Hitherto, the dominating function of the site had been to provide access to the Agency's reports. While keeping and strengthening this function, the new site greatly improves direct access to the information contained in and underpinning the reports, as well as other material. Updated information is provided as it becomes available, independently of reporting cycles.

The multilingual aspects of the site have also been strengthened, mainly through the continued development of the multilingual glossary of terms frequently used by the EEA in its publications.

Publications and translations

The EEA published 56 reports and other documents. For the first time, some material (summaries of main reports) was produced in 23 languages (all except Turkish) of the enlarged Agency.

Information centre

The Information Centre provides information services internally for Agency staff and handles specific requests for information from outside.

In 2002, the centre started giving preference to procurement and subscription of electronic versions of documents. In line with this, it set up a new intranet-based library indexing/search system.

After some years of steady growth, the number of external requests stabilised in 2002 at around 18 a day on average.

Media

The Agency continued to develop its support for the media. Most press releases were provided in several (and in one case all) EEA languages to improve geographical coverage.

Database resources were improved to provide more targeted contact to journalists working in specific fields such as waste or transport.

Developments at the EEA

Enlargement

On 1 January 2002, 11 new countries joined the EEA, bringing membership up to 29. Poland joined on 1 January 2003 and Turkey is expected to join in the second quarter of 2003, rounding off the enlargement agreed between the Community and accession countries in 2001.

The role of the enlarged Agency was the subject of a high-level meeting in Copenhagen in May with participation from the EU and new member countries.

The geographical coverage of most major reports reflected the enlarged membership of the EEA.

Executive Director

At the end of May, the Agency said goodbye to its Executive Director throughout the first eight years of its existence, Domingo Jiménez-Beltrán. He led with great personal dedication the Agency's development from scratch into an authoritative and internationally respected provider of policy-relevant environmental information with a membership of nearly 30 countries and a pan-European reach.

On 25 February 2003, the management board appointed Professor Jacqueline McGlade, an environmental scientist active across a broad spectrum of the life sciences, as his successor. She is expected to take up the post by 1 June. In the period from Domingo Jiménez-Beltrán's departure to the arrival of his successor, Gordon McInnes, senior programme manager at the EEA, is Interim Executive Director.

Scientific Committee

There were also major changes in the Scientific Committee of the Agency, as many members came to the end of their maximum of two terms (8 years). The EEA is very grateful for their excellent contributions to the scientific work of the Agency, and in particular Philippe Bourdeau, who chaired the committee throughout the eight years.

Several of the new members of the committee, including the new chairman, Bedrich Moldan, come from new EEA member countries.

New multiannual work programme

Work on developing the next multiannual work programme for the EEA, which will run from 2004–2008, started in 2002. Several activities during the year, including management board seminars in May and November, contributed significantly to this work.

Reform process

The Agency followed the Community reform process closely, as it has major consequences for strategic planning, financial procedures and personnel policy in the EEA.

Implementation of the new systems began in 2002 and will continue in 2003.

Resources

Income increased substantially again in 2002. Total resources amounted to EUR 25.3 million, EUR 4.0 million more than in 2001. The increase came mainly from first year contributions from the 11 new member countries (EUR 2.3 million), but also from increased supplementary income for specific projects:

- EUR 1.5 million from the Tacis programme for the strengthening of environmental information and observation capacity in EECCA
- EUR 0.5 million from EuropeAid for the West Balkans
- EUR 0.675 million in total from DGs Environment and Agriculture for the IRENA project (Indicator Reporting on the Integration of Environmental Concerns into Agricultural Policy)
- EUR 0.3 million from DG Environment for the Bio-IMPs Project (Biodiversity Implementation Indicators).

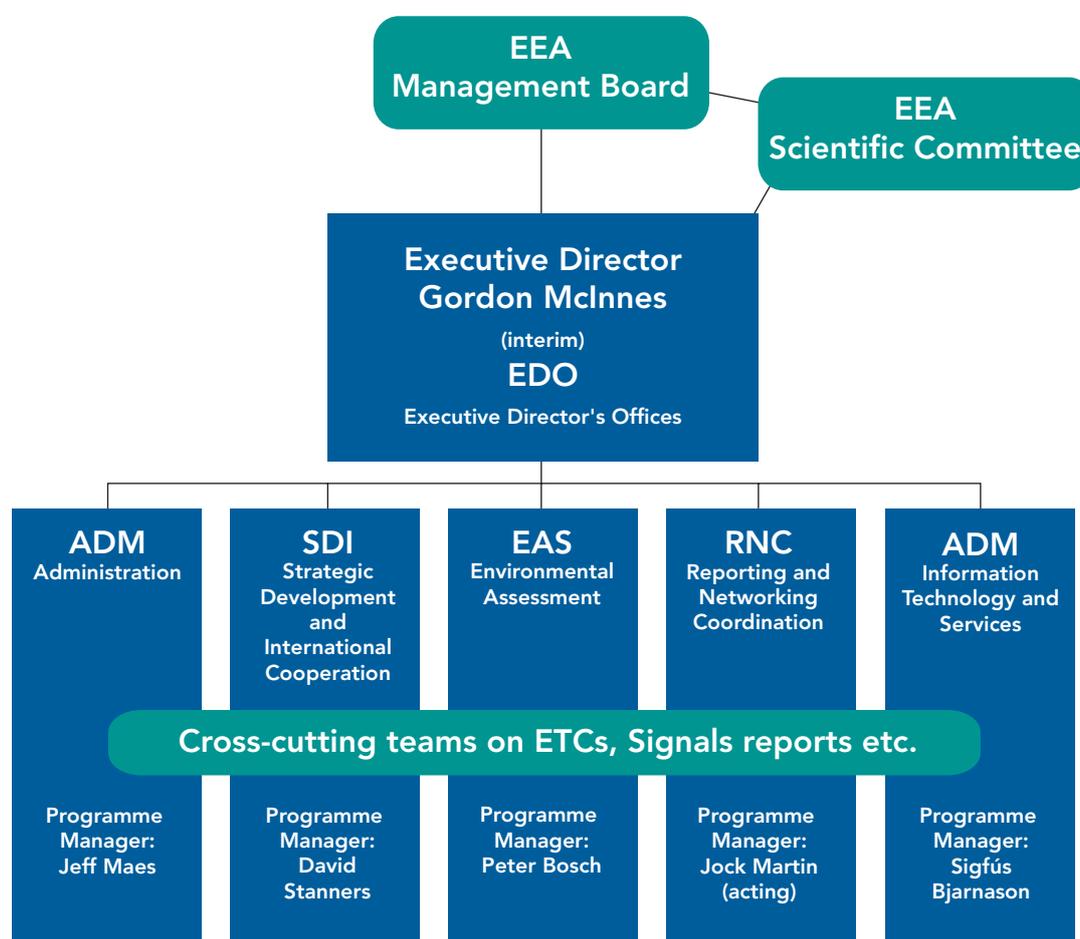
Similarly to previous years, around 53 % of the operational budget was allocated to co-financing of the European topic centres.

The number of staff increased from 80 to 95.

Key figures for budgetary and staff resources are given in Annex 2 to this report.

EEA organisational chart January 2003

Figure 1



1. Supporting policy

1.1. Overview

In accordance with its mandate, the EEA together with the Eionet supported the development and implementation of European and international policies on environment and sustainable development by the European Commission, other EU institutions and member countries. This work covered a wide range of activities, including:

- publication of the indicator-based *Environmental signals 2002* report supporting the monitoring of progress under the sixth environmental action programme (6EAP)
- participation in the development of thematic strategies, such as the clean air for Europe (CAFE) programme, by the Commission under the 6EAP
- support for the implementation of the water framework and habitats directives by the Commission and Member States
- provision of indicators and assessments for the Commission synthesis report to the spring European Council in Barcelona (Sustainable development strategy/Lisbon process)
- development together with the Commission of indicator-based reports on key economic sectors (transport and energy) to support the Cardiff integration process, and the initial development of similar reporting mechanisms for other sectors (agriculture, tourism, fisheries)
- support for the implementation of EU commitments under the climate change, biodiversity and long range transboundary air pollution conventions
- support to the Commission and member countries on the review of Community reporting obligations
- development of the global monitoring for environment and security (GMES) and infrastructure for spatial information in Europe (Inspire) initiatives and related activities to streamline international cooperation and environmental indicators
- preparation of the Kiev report for 2003 to support the pan-European 'Environment for Europe' process under UNECE
- input into UNEP's global state of the environment report (*GEO-3*)

- input into the environment and health programme of WHO.

In the next section, policy support activities are briefly summarised from the institutional point of view. This is then followed by a more thorough presentation of work done in the different fields of environmental policy. As the same work is being described from different perspectives, here and elsewhere in the annual report, repetitions can occur.

Major reports published during the year are highlighted. This is only intended as an illustration of some of the work of the EEA and the Eionet and the reports themselves should be consulted for a more complete picture.

An important aspect of providing information to support policy is to ensure good dissemination of and access to the information, also for the public. Activities in these areas are described in chapter 3.

A full list of printed publications is given in Annex 1.

1.2. Support to European institutions and international organisations

1.2.1. The European Commission

Close cooperation with the Commission, in particular the Environment Directorate General (DG Environment), continued at many levels throughout the year. A draft memorandum of understanding between the EEA and DG Environment has been developed to establish guidelines for closer cooperation.

This cooperation supports the pursuit of a joint agenda by the two bodies. Enhanced cooperation aims also at increased awareness and use, within the Commission, of the Agency's products and services to support work in framing, developing and implementing environmental policies.

The EEA and Eionet delivered proposals for revising the environmental reporting and assessment systems for the EU, within the framework of the DG Environment-led review of reporting. In various meetings, ideas

and proposals for streamlining reporting and on the importance of identifying indicators were introduced. Input to a DG Environment pilot group on waste reporting and the expert advisory forum on water reporting from the EEA and its European Topic Centre on Waste and Material Flows (ETC/WMF) contributed to the proposal for a new framework reporting directive expected to be released by the Commission by the end of 2002. Support continued to the CAFE programme, the EU greenhouse gas monitoring mechanism, the water framework directive, the marine strategy, Natura 2000 and the strategy on sustainable resource management, by participation in and/or co-chairing meetings and preparation of various papers. The EEA was part of the Community delegation to the World Summit on Sustainable Development in Johannesburg in August/September, supporting the Commission and its press office.

Cooperation with other DGs concerned in particular:

- Eurostat on input to structural indicators and regarding the annual EEA indicator-based report *Environmental signals 2002*
- DG Research and Joint Research Centre on scenarios, chemicals, and use and dissemination of research results
- DG Agriculture on development of agri-environment indicators
- DG Fisheries on development of indicators regarding fish and marine biodiversity
- DG Regional policy on Inspire and GMES
- DG Energy and Transport on transport and environment, and energy and environment
- DG External Relations, assisting the EEA in its cooperation with the countries in the West Balkans and the new independent states in the Tacis programme, where the EEA is supporting capacity building and working with the countries to prepare a report on Europe's environment for the Kiev conference in 2003
- DG Enlargement regarding the Commission support for the Phare and MEDA contributions for the new member countries of the EEA
- DG Budget, in particular in developing the necessary new financial regulation and other actions to follow up on the Commission reform process
- DG Administration, also to follow up on the reform process, in particular towards

harmonised staff policy in European institutions and European decentralised bodies.

1.2.2. Council

A programme for EEA support was developed in dialogue with the Spanish and Danish presidencies.

Advice was provided to the Spanish presidency on several topics including soil and indicators for sustainable tourism. The EEA participated in several events of the Spanish presidency, including on such issues as soil in Barcelona, land registry and cadastre in the EU in Granada, and sustainable tourism in Murcia. An exhibition 'The changing European land' was presented during the Spanish presidency in Barcelona and Majorca. Finally, the first Eionet workshop on the terrestrial environment was held in Barcelona in March 2002.

The EEA provided a paper on the environmental dimension of the EU sustainable development strategy for the Environment Council in March.

The EEA participated in the informal environment council of the Danish presidency in Sønderborg in July. In that context the Agency provided an annex to the presidency paper on the selection of the structural indicators for the synthesis report.

The EEA took part in preparation for and execution of several presidency initiatives including a conference on international cooperation on environmental reporting and information in Copenhagen, conferences on European nature and forests in Vigsø, a European platform for biodiversity research strategy in Silkeborg, and workshops in Copenhagen on chemicals (new and existing substances) and on water indicators.

1.2.3. European Parliament

The Agency continued to follow the work of the Environment Committee of the European Parliament closely during the year to help improve support for the work of the Committee.

On the day of the launch of *Environmental signals 2002* in May, the EEA Executive Director met the Committee to discuss the achievements of and prospects for the Agency.

The Committee established an informal group to follow the development of the



Agency's new multiannual work programme (2004–08). A meeting was held with the group in September in Strasbourg.

The EEA provided input into the Parliament's own-initiative report on the implementation of the existing Community reporting directive. Agency staff also provided expert input into the development of the parliamentary position on the proposal for a liability directive.

In February, *Genetically modified organisms: the significance of gene flow through pollen transfer* and in December *Chemicals, monitoring and exposure (draft)* were presented to interested MEPs at meetings in Strasbourg. The two reports flow from a project undertaken for the European Parliament by the Agency in cooperation with the European Science Foundation.

In the second half of the year delegations from two other Parliamentary committees — the Industry, Trade, Research and Energy Committee and the Petitions Committee — visited the EEA during missions to Copenhagen linked to the Danish presidency.

1.2.4. International organisations and conventions

1.2.4.1. World Summit on Sustainable Development

The World Summit on Sustainable Development held in Johannesburg from 25 August to 4 September 2002 was the major political event for the environment in 2002. The EEA, since the revision of its regulation in 1999, is required to assess the environment in the context of sustainable development. With this in mind, participation of the EEA in Johannesburg as a member of the European Commission delegation was regarded as a unique opportunity to meet the multiple views and interests that the concept of sustainable development encompasses.

Lessons learned in Johannesburg are feeding into the Agency's work on the environmental dimension of sustainable development.

1.2.4.2. United Nations Economic Commission for Europe

The EEA's support to the next pan-European 'Environment for Europe' conference to be held in Kiev in 2003 constitutes a major part of the cooperation with UNECE.

The main achievement of 2002 was the production of the assessment report on the pan-European environment — the Kiev report — by the EEA. Working documents (list of contents, guidelines for data collection, questionnaires on soil, waste and water topics for non-EEA member countries) were developed in English and Russian and disseminated in early 2002. Main activities were data collection, production of indicator fact sheets as the factual basis for the assessment, writing and editing of chapters, and reviewing of the draft report by consultation within the countries, international organisations and non-governmental organisations. A special session of the UNECE Working Group on Environmental Monitoring was organised in November 2002 in Geneva to review with the countries of the UNECE region the final draft of the Kiev report and draft executive summary. The EEA processed comments of the review phase in December 2002. The Kiev report will be available in April 2003 and launched officially at the Kiev conference in May 2003.

The UNECE Working Group on Environmental Monitoring mentioned above played a major role in the development of the report. The group aims to support the development of monitoring and reporting

From the report on genetically modified organisms

Different crop species have different rates of self-pollination and outcrossing. In addition, some crops have hybridising wild relatives while others do not.

Oilseed rape is a high-risk crop for gene flow.

Crop	Frequency of gene flow from outcrossing	
	Crop to crop	To wild relatives
Oilseed rape	High	High
Sugar beet	Medium to high	Medium to high
Maize	Medium to high	No known wild relatives
Potatoes	Low	Low
Wheat	Low	Low
Barley	Low	Low
Strawberry, apples, grapevines and plums	Medium to high	Medium to high
Raspberries, blackberries, blackcurrant	Medium to high	Medium to high

networks in countries in eastern Europe, Caucasus and central Asia (EECCA) and acts as the network of national contacts points for these countries. The EEA began intensive cooperation with this group, including the preparation and setting-up of task forces on air pollution, water, waste, the use of remote sensing information and the development of metadata.

The EEA took part in the UNECE Working Group on Environmental Monitoring contributions to the Kiev conference by preparing the 'conclusions of the lessons learned from the data collection' and 'recommendations on strengthening national environmental monitoring and information in EECCA', in addition to the Kiev report itself.

1.2.4.3. United Nations Economic Commission for Europe/Convention on Long-range Transboundary Air Pollution

Coordination and cooperation between the European Community and the Convention on Long-Range Transboundary Air Pollution (CLRTAP) continued with the CAFE programme as its main focus. The EEA, its European Topic Centre on Air and Climate Change (ETC/ACC) and CLRTAP's Cooperative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants in Europe (EMEP) have cooperated in developing work both in the Community and in the Convention. The EEA produced the EU CLRTAP emission inventory. The EEA and the secretariat for the UNECE Task Force on Emission Inventories and Projections (TFEIP) have jointly developed a new user interface to the third edition of the web-based EMEP/Corinair *Emission inventory guidebook*. The guidebook, hosted by the EEA, has been further updated by EEA/Eionet and the UNECE TFEIP. The EEA and ETC/ACC have supported the development of revised *Guidelines for estimating and reporting emissions data for the protocols under CLRTAP* through participation in workshops and editorial meetings. These guidelines, now much more in line with the UN Framework Convention on Climate Change, were formally adopted by CLRTAP and will be used by Parties to CLRTAP protocols in 2003.

The EEA and ETC/ACC have together with TFEIP and EMEP supported the proposal and initial developments of an inventory improvement programme with the aim of strengthening the review of emission inventories under CLRTAP and

the national emission ceilings directive from 2003 onwards. The EEA harmonised air quality data flow with EMEP, with a common deadline for delivery. Software for data reporting was adjusted; the air quality data exchange module is now also fully compatible with EMEP.

1.2.4.4. United Nations Framework Convention on Climate Change

Detailed agreements for implementing the Kyoto Protocol were reached at the UN Framework Convention on Climate Change conference in Marrakech (November 2001). However, on full agreement was not achieved on monitoring of greenhouse gas inventories (including removals by carbon sinks), accounting, reporting and reviewing. Therefore, during 2002 the EEA and ETC/ACC continued to provide support to the Commission in the finalisation of these negotiations through preparations for and participation in the European Community delegation at the Bonn (June) and New Delhi (November) conferences of the Convention. In New Delhi agreement was reached on all guidelines.

EEA/ETC work also included assistance to the Commission in the revision of the current decision on the EU greenhouse gas monitoring mechanism to bring it in line with these Convention guidelines and provisions for the EU-wide scheme on emissions trading that was adopted in December 2002.

1.2.4.5. The Convention on Biological Diversity — the European Community biodiversity clearing house mechanism

The EEA supports the work of the Convention on Biological Diversity through support to the European Commission's work on the EU biodiversity strategy (see the section on nature protection and biodiversity), its reports and related indicators. In 2002, the EEA also continued to develop the European Community biodiversity clearing house mechanism for the Commission (DG Environment) in order to fulfil the Community's obligation as signatory party to the convention. The clearing house mechanism is accessible via the EEA web site (<http://biodiversity-chm.eea.eu.int/>).

The portal web site was enlarged in 2002 with an extended set of management functions, allowing content to be managed directly. It converges in software solutions towards the



EEA information technology techniques as well as towards EnviroWindows. Its concepts are being used by Dismed (the desertification information system for the Mediterranean). Biodiversity clearing house mechanism contractors visited the United Kingdom in 2002 for consultation on UK use of the technologies.

Only one meeting was held with the steering committee. This time representatives from six new EEA member countries participated. The meeting dealt mainly with preparation for collaboration with national clearing house mechanisms in 2003 and for holding a joint European regional seminar with the Convention on Biological Diversity in mid-2003. Collaboration with the convention secretariat on the portal toolkit was proposed at the meeting and will be taken up in 2003.

Included in work on the biodiversity clearing house mechanism, the EUNIS database on species, habitats and sites continued to be developed (see the section on nature protection and biodiversity).

1.2.4.6. Council of Europe

As part of the cooperation with the Council of Europe on nature conservation, biodiversity and landscape under the memorandum of understanding between the Council and the EEA (signed 2001) the EEA and the European Topic Centre on Nature Protection and Biodiversity (ETC/NPB) continued to support the Bern Convention and its Emerald network, which complement Natura 2000 in non-EU countries. The EEA and the Council of Europe joined in producing an updated and coordinated version of the software for Natura 2000 and Emerald. The EEA also supported the pan-European biological and landscape strategy. For more details see the section on nature protection and biodiversity.

1.2.4.7. United Nations Environment Programme

The release in May 2002 of the UNEP *Global environment outlook 3 (GEO-3)* report was an important event. The EEA, as the UNEP collaborating centre for Europe, had an important role to play in the production of this report. GEO-3 was presented to the European press back-to-back with the launch of *Environmental signals 2002*. Some elements of the GEO-3 report were in turn utilised by the Agency in the preparation of the Kiev report. UNEP and the EEA have initiated a review of their reporting activities in order to streamline further their provision

of information to policy-makers. In this context two joint messages were started, for publication in 2003: one on biodiversity in farmland, the second on the Arctic environment. Cooperation also intensified on the cross-development of web portals on environmental data.

1.2.4.8. United Nations Environment Programme/Mediterranean action plan

Attention on Mediterranean issues in 2002 converged on the ministerial conference in Athens in July 2002, where the EU-Mediterranean partnership on the environment was reviewed after five years of implementation. This event reinforced the need to consolidate the synergies between the short and medium-term action plan on the environment (the EU MEDA programme in Mediterranean non-member countries) and UNEP's Mediterranean action plan (UNEP/MAP). To this end, there will be important policy developments for which provision of information on the environmental situation in the Mediterranean area will be required. These policy developments, which were initiated in 2002, include the preparation by UNEP/MAP of a regional strategy for sustainable development and the preparation by the EU Commission of a MEDA strategy for integration of environmental concerns into sectoral policies. The EEA participated in and followed very closely related discussions in both these processes. In particular, cooperation with UNEP/MAP on the forthcoming report on environment and development in the Mediterranean was intensified, including a first publication in 2002 by UNEP/MAP of a preset of sustainable development indicators for the region. In parallel the EEA provided inputs to the related project on environment statistics for Mediterranean countries (in the context of the MEDA-Medstat programme). Another important activity in 2002 was discussions on a biodiversity action plan for the region to which the EEA contributed through ETC/NPB.

1.2.4.9. World Health Organization (WHO)

After the move of the relevant WHO office from Bilthoven to Bonn, progress continued in developing a pan-European system of indicators to support the monitoring of environment and health policies under the leadership of WHO (European office). The EEA provided inputs on aspects of data collection, indicator development and web-based tools.

Children's health and environment: a review of evidence shows that up to 40 % of the global burden of disease attributable to environmental factors is estimated to fall on children under the age of five years. As developing organisms, children are particularly vulnerable to the impact of environmental pollution. This is so for a variety of reasons, which include the following:

- early exposure has long-term consequences
- children have a unique susceptibility to specific chemicals, and are exposed to substances in their immediate environment (such as soil and toys), particularly through their practice of picking things up and putting them into their mouths
- in proportion to their body weight, children breathe, drink and eat more than adults, with a consequently higher uptake of potentially toxic substances
- further, children have no choice about the factors to which they are exposed. They are also likely to be the most 'sensitive indicators' for the environmental health of populations.

In the WHO European Region, the rise of hazards in the settings where children live, learn and play is increasing concern about the effects on children's health of the deterioration and contamination of the physical environment.



'Core' indicators have been developed and are being piloted in selected member states. The WHO report *Children's health and environment: a review of evidence*, which the EEA supported with editorial contributions, was published in March during the Commission's Green Week.

Further joint work with WHO continued with the meeting at the EEA on 'Children's environment and health indicators' organised with the Rome office of WHO, and with participation from the WHO Bonn and Geneva offices. A wide cross-section of organisations active in this area participated in the meeting, including the US Environment Protection Agency, Environment Canada and non-governmental organisations. The meeting supported the development of the first pan-European indicator-based report on children and environmental health called for by the 1999 WHO London Conference of Health and Environment Ministers.

The EEA continues to participate in the European Environment and Health Committee as the organising committee for the 2004 Budapest Health and Environment Ministerial Conference. Supporting the development of an integrated, shared information system on environment and health remains a major objective of this cooperation.

1.3. Support in different fields of environmental policy

1.3.1. EU sustainable development strategy

The EEA provided input into the Commission synthesis report to the spring European Council in Barcelona and, in order to support the preparations for the Summit, provided an update of the indicators of the environmental dimension of the EU's sustainable development strategy for the Environmental Council in March.

In this connection there was an exchange of letters between the EEA and the Commission correcting a misrepresentation in the synthesis report of how up to date the available indicators on the environment were and confirming the need to work closely together to improve the information underpinning the EU Sustainable development strategy.

Subsequently, the EEA was involved together with Eurostat (the Statistical Office of the European Communities) and DG Environment in developing a Commission communication on possible environmental indicators for future synthesis reports. The Agency also provided concrete input for the 2003 report.

1.3.2. Sixth environmental action programme

The EEA was involved in many activities under the 6EAP, a number of which are detailed in the following sections. At the general level, in May the Agency published the report *Environmental signals 2002*.

Environmental signals 2002 showed that efforts to lessen pressures on Europe's environment are making uneven progress while pressure is continuing to grow on some natural resources, especially fish stocks and land.

The report points to positive overall trends across the European Union in emissions of climate-changing greenhouse gases and generation of waste, as well as to confirmed reductions in water and air pollution.

Greenhouse gas emissions were 3.5 % lower than in 1990 and emissions of several air pollutants have been substantially reduced. The total amount of waste, though still increasing, appears to be growing more slowly than the economy; and the introduction of many new sewage treatment plants is cutting polluting discharges to rivers and other water bodies.

However, these overall reductions are in many cases due to large cuts in only a few countries or economic sectors. Many countries and some sectors, especially transport, have not contributed to the positive trends, making progress patchy.

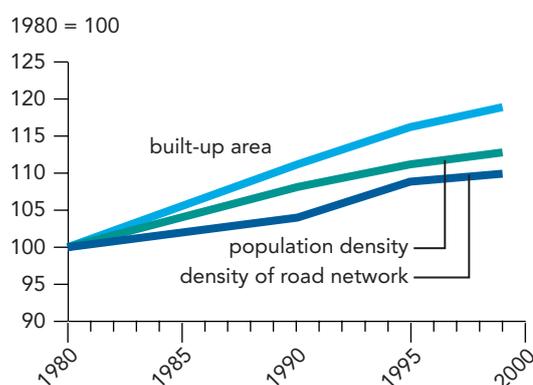
Furthermore, time lags before these falls translate into improvements in the quality of the environment, combined with high background concentrations of pollutants from past emissions and sources elsewhere, mean that the impact of these pressures remains a concern.

Consequently, large areas of natural habitats and agricultural land are still exposed to acidification. There is little sign that eutrophication is becoming less of a problem in coastal waters, and a substantial proportion of Europe's urban population remains exposed to high concentrations of harmful ground-level ozone and fine particles.

Pressure on some natural resources is continuing to increase. This is particularly the case for fisheries. Despite an overall decline in fleet capacity, continued overfishing is putting many of the commercially important European fish stocks at high risk of collapse.

Land resources also remain subject to significant pressures, such as urban sprawl and the expansion of transport infrastructure.

Over the last 20 years, the built-up area in major western and eastern European countries has increased by some 20 %, much faster than EU population growth (6 %). This has caused loss or disturbance of natural areas and significant fragmentation of animal and plant habitats in most of Europe.



Preparations began for the next EEA five-year report on the state and outlook on the environment, due in 2005, which will contribute to the mid-term review of the 6EAP. In this first phase particular emphasis was put on two major aspects. First, setting the scope of the report so it reflects environmental changes in the context of sustainable development. Second, identifying the type of scenarios to be developed to illustrate possible environmental futures in Europe.

1.3.3. Topics

1.3.3.1. Air and climate change

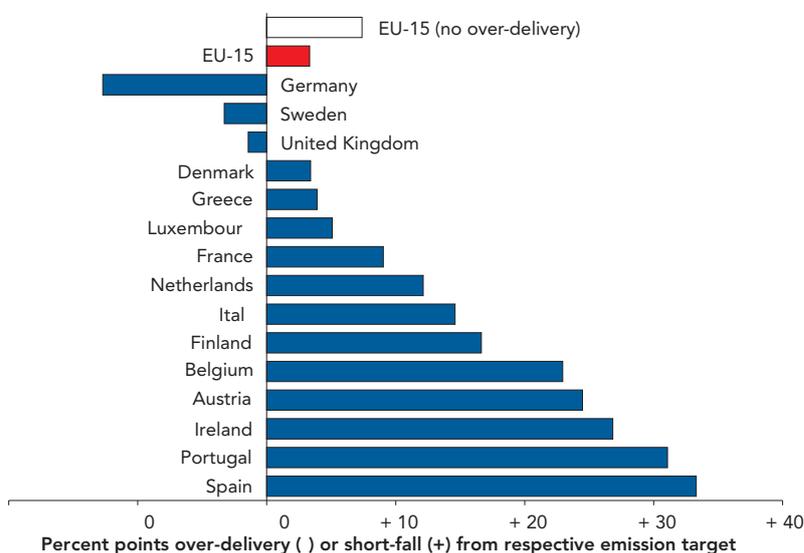
Primary tasks in this area are to support the EU CAFE programme and the EU climate change programme and EU greenhouse gas monitoring mechanism. These are linked to CLRTAP with associated protocols and the Framework Convention on Climate Change and its Kyoto Protocol.

EEA and ETC/ACC supported the development of the CAFE programme

Latest projections in *Greenhouse gas emission trends and projections in Europe* show that policy measures taken so far by Member States to curb their greenhouse gas emissions fall well short of enabling the EU to meet its obligations under the Kyoto Protocol. However, additional measures under discussion, if fully implemented, as well as use of emissions trading or other instruments could still ensure that the EU complies with its target.

Existing policies and measures — those already being implemented at domestic or European level — will yield a total EU emissions cut of 4.7 % by 2010: 3.3 percentage points short of the Kyoto requirement. Most of this decrease would be due to Germany, Sweden and the United Kingdom cutting emissions by more than they are required to do

Distance to target with existing measures



under the EU's 'burden-sharing' deal — something which cannot be taken for granted. If these three countries merely meet their burden-sharing targets instead of 'over-complying', the overall EU emissions decrease by 2010 will be minimal, at only around 0.6 %.

Based on policies and measures implemented so far, all of the 12 other Member States are projected to have emissions in 2010 above their burden-sharing targets.

In practice, the EU and most Member States are planning additional policies and measures to limit emissions. Assuming that all of those under discussion will be fully implemented and will have the effects expected of them, the total EU emissions cut projected is 12.4 % — well beyond the 8 % decrease required by Kyoto. Even under this 'additional measures' scenario, however, at least five Member States — Austria, Belgium, Denmark, the Netherlands and Spain - would still exceed their burden-sharing limits. (Greece, Luxembourg, Portugal and Sweden have yet to specify emissions savings from any additional policies and measures they are considering.)

These exceedances would be more than compensated by 'over-compliance' by Finland, France, Germany, Ireland, Italy and the United Kingdom. However, such over-achievement can, again, not be assumed since it is not required. If these six countries only achieved their targets without doing more, the total EU emissions cut would be 6.2 % — still leaving a shortfall of 1.8 percentage points.

The report showed that five countries in central and eastern Europe that are due to join the EU in 2004 are on track to meet their own Kyoto commitments on the basis of existing policies and measures alone. These are the Czech Republic, Estonia, Latvia, Poland and the Slovak Republic. The other five countries in the region did not provide projections.

intensively, with active participation in CAFE's steering group, working groups on ozone, particulate matter and implementation, and its technical analysis group. A core set of air quality and air emissions indicators produced for *Environmental signals 2002* and the sectoral

reports on energy and transport (see below) were used as a starting point in CAFE.

The priority data flow on emissions of air pollutants was further improved, resulting in a more extended EEA information system on air emissions data for both CAFE and

CLRTAP. *Emissions of atmospheric pollutants in Europe, 1990–99*, analysing how far emissions are from agreed targets and what the contributions are from the main sectors, was finalised and published in early 2003.

The further development of the European air quality monitoring network, Euroairnet, and the European air quality information system, Airbase, continued. Based on this monitoring and information infrastructure, a report on air quality in Europe 1990–1999 was finalised and will be published in early 2003. A report on air pollution in Europe was also drafted. This report, combining previous separate reports on air quality and air emissions, addresses air quality in relation to sources and economic sectors and to impacts on human health and ecosystems. *Air pollution by ozone in summer 2002* was sent to the Council at the beginning of October 2002.

During 2002, indicators were developed for integrated assessments that allow cross-benefits of combating climate change and air pollution to be assessed.

Support to the EU greenhouse gas monitoring mechanism and its working groups on annual inventories, policies/measures and projections, and emission trading continued. This resulted in the annual European Community greenhouse gas inventory, published in April, with an extended methodological report.

Greenhouse gas emission trends and projections in Europe, published in December, and supported by two technical reports, formed a key input into the Commission's annual evaluation of progress towards the Kyoto Protocol published the same month.

A technical report was finalised with a proposed set of climate change state and impact indicators. This report will form the basis for a report in 2003 on climate change indicators in Europe.

1.3.3.2. European pollutant emission register

The EEA assisted the Commission in preparing for the implementation of the European pollutant emission register (EPER) covering emissions to air and water. The work involved initiation and participation in a steering group for a project covering collection, storage and dissemination of EPER data. Subsequently, the EEA and ETC/ACC worked closely with the EPER contractor to integrate the EPER registry and

web site into the existing EEA infrastructure. The EEA and ETC/ACC will continue and intensify support for the implementation of EPER during 2003, the first reporting year, with an option for the EEA to host the EPER from 2004 onwards.

The EEA and ETC/ACC assisted the Commission during the ongoing negotiations on a protocol on pollutant release and transfer registers under the United Nations Economic Commission for Europe (UNECE).

1.3.3.3. Water

The main focus of work here is to provide effective support for the water framework directive. In addition, work was carried out on the development of a monitoring mechanism for a sectoral integration strategy for fisheries.

Considerable resources of the European Topic Centre on Water (ETC/WTR) were invested in the activities of the common strategy on the implementation of the water framework directive. In particular, the production of agreed guidance notes on monitoring was a major achievement. The ETC/WTR co-chaired the working group responsible. Similar progress was made in working groups on groundwater and the typology of transitional and coastal waters.

New biological and hydromorphological indicators are needed to assess the effectiveness of the water framework directive, and their development started in 2002.

In terms of streamlining the reporting of data, there is a common agreement between the EEA and DG Environment on the reporting process, and Eurowaternet plays a significant role in water reporting. In agreement with DG Environment, Eurowaternet emissions (or pressures) will be tested in some of the pilot river-basin projects set up under the common implementation strategy.

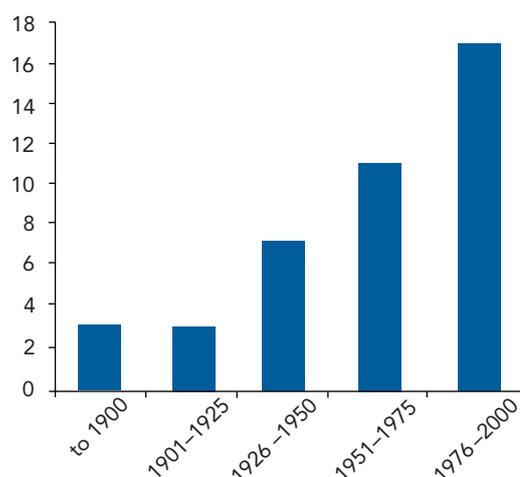
A set of indicators aimed at integrating environmental policy into fisheries has been developed and discussed at a joint meeting of EEA, DG Environment and DG Fisheries held under the umbrella of the inter-regional forum. Representatives from all stakeholders (marine conventions, international and national agencies and non-governmental organisations) participated. The fisheries indicators are being improved and further



From the chapter on the Black Sea in Europe's biodiversity — biogeographical regions and seas

Among the 41 introduced alien species, 34 % have been imported for aquaculture and 66 % have entered the Black Sea as pelagic larvae in ballast waters and/or fouling organisms on ship hulls. The number of introduced species continues to increase, as shown in Figure 2. About one fifth of these (eight species) have invaded the Black Sea during the past decade, all through ballast waters, due to insufficient measures to control such introductions.

Introduction of alien species into the Black Sea



consultations will take place in 2003. This work could form the basis of the first fisheries and environment reporting mechanism.

Eurowaternet and other data sources were used to develop the first thematic indicator-based report to be produced by the EEA. This report will be published in mid-2003.

1.3.3.4. Nature protection and biodiversity

Work in this field was primarily in support of the implementation of the habitats and birds directives and in the development of biodiversity indicators. Internationally, support was *inter alia* given to the Convention on Biological Diversity and the Council of Europe.

In 2002, the EEA through the European Topic Centre on Nature Protection and Biodiversity (ETC/NPB) continued to provide support to Member States and the Commission in the EU Natura 2000 process. The ETC/NPB performs quality control and handling of data from Member States, management of the Community databases on special protection areas (birds directive) and for proposed sites of community importance (habitats directive). It also performed evaluation of the national proposals for Natura 2000. This included preparation and co-organisation of two major seminars on continental and Atlantic biogeographical regions and support to a series of smaller separate meetings on Alpine issues and issues related to only one or a few countries. The ETC/NPB represents the EEA in working groups under the birds and habitats directives. It has played a major role in adapting the annexes of the directives to take into account the accession of new countries and, with other European countries, has

supported the Emerald network (Council of Europe).

Publication of chapters of *Europe's biodiversity — biogeographical regions and seas* began in 2002. Each chapter describes the condition of and influences on main habitat types and species groups in one of the 11 biogeographical regions or seven seas around Europe. Chapters on four seas (the North, Mediterranean, Black and Caspian) and the Arctic region have been published so far. When complete, the report will cover Europe from the Arctic to the Mediterranean and from the Atlantic to the Ural Mountains.

In order to improve international cooperation on biodiversity monitoring and indicators the first meeting was held with the International Working Group for Biodiversity Monitoring and Indicators set up by the EEA.

Work progressed on biodiversity indicators to be included in the EEA set of core environmental indicators. Specific attention to forest indicators was given through active participation in the process to improve the indicators for sustainable forest management within the framework of the Ministerial Conference for Protection of Forest in Europe. An agreement was signed with the Commission to initiate development of biodiversity implementation indicators in the coming two years (the Bio-IMPS project).

At the Sixth Conference of the Parties to the Convention on Biological Diversity in April, the state of biodiversity indicator development in Europe was presented by the European Centre for Nature Conservation, also representing the EEA. The EEA and the ETC/NPB assisted the Commission in the EU



reporting to the Convention on Biological Diversity on mountain ecosystems and indicator development.

ETC/NPB continued to maintain and develop the European nature information system (EUNIS). This includes collection of data on areas designated nationally for nature conservation. This data set is a part of the framework collaboration on the common database on designated areas (CDDA) with the UNEP World Conservation Monitoring Centre (UNEP-WCMC) and the Council of Europe. Work on CDDA is also being coordinated with the project on forest protected areas under the Ministerial Conference for Protection of Forest in Europe.

Access to EUNIS data was further developed during 2002 as part of the European Community biodiversity clearing house mechanism. The species part was concluded and it is now available (<http://eunis.eea.eu.int/>), the habitats section is close to completion and conceptual work was started on the sites element.

Besides support to the Bern Convention and its Emerald network, cooperation with the Council of Europe in 2002 included support to the pan-European biological and landscape diversity strategy. Late in 2002 this strategy endorsed the concept of a European biodiversity monitoring and indicator framework (EBMI-F) with fora to discuss and promote coordination across Europe on indicators and monitoring. This concept was developed by the European Centre for Nature Conservation and the EEA with ETC/NPB, BirdLife International, Wetlands International and Connect (the European Conservation Institutes Research Network). The EBMI-F will be further developed during 2003.

The EEA cooperated with the International Forest Condition Monitoring Programme, mainly through participating in its working group on biodiversity, which is developing parameters to follow the effects of air pollution on biodiversity. Furthermore, the EEA monitored the development of the new Commission proposal for an EU forest focus and the discussions about inclusion of additional aspects in forest health monitoring (soil, biodiversity, climate change).

1.3.3.5. Terrestrial environment

The main policy focus for work under this topic was the Commission's work on soil

protection, land-use indicators and coastal erosion together with the Inspire and GMES. Internationally, support was given to the Convention to Combat Desertification, specifically the desertification information system for the Mediterranean (Dismed).

On soil protection, input was provided to the preparation of the communication published in April by the Commission. The EEA was also consulted on the setting up of the thematic strategy on soil protection. Furthermore, in support to the Spanish presidency priorities (one major priority being soil protection) materials were prepared for the informal meeting of the environmental ministers in May.

The EEA was also actively involved in the preparation of a Dismed conference, providing input on desertification mapping.

A considerable contribution was made to Inspire and GMES. A position paper on environmental thematic data needs was prepared by the EEA in support of a future framework directive on a European spatial data infrastructure. The document received a positive response from the Commission services and participating countries. The EEA took part in the first GMES forum organised by the Commission in July 2002.

A third joint publication of DGs Environment and Agriculture, Eurostat, the Joint Research Centre and the EEA on the development of land-use indicators was prepared in 2002. The European Topic Centre on Terrestrial Environment (ETC/TE) was involved in the preparation of this document by providing articles on the use of Corine land cover data for producing agri-environmental indicators.

For the first Eionet workshop on the terrestrial environment in Barcelona in March, the ETC/TE prepared a thematic exhibition 'The changing European land' which was launched by the EEA Executive Director. The exhibition was presented in various Spanish regions as well as within the EEA in May.

The ETC/TE was fully involved in the coordination of the coastal erosion project launched by DG Environment in 2002. The results of the project will support the activity of ETC/TE in this area as well as contributing to the development of the terrestrial environment information system (Terris) managed by ETC/TE. At the same time, ETC/TE is coordinating the working

group on coastal information systems as part of the process of reviewing the integrated coastal zone management strategy.

1.3.3.6. Waste and material flows

Specific policy activities supported in this field in 2002 were the development by the Commission of the thematic strategy on sustainable resource management and the review of the Community reporting system.

Close cooperation with DG Environment was established in 2002 on these issues.

Reporting on waste management was used as case study to analyse the weaknesses of the present reporting system and to develop proposals for improvements.

A preliminary study on sustainable resource management was carried out for DG Environment in December 2002. The report had two objectives. The first was to describe the resource use patterns of the EU (and the accession countries) including imports and exports, using the method of material flow accounting. The second was to develop preliminary ideas for an analytical framework to explain and assess the resource uses of the EU.

In this context, the European Topic Centre on Waste and Material Flows (ETC/WMF) and the EEA also organised a seminar in November on decoupling resource use and waste management from economic growth. The seminar came up with many concrete ideas for how national authorities, industry, the Commission and the EEA can work with decoupling.

Topic reports on biodegradable municipal waste and on case studies of waste minimization in Europe were published in 2002.

Work on the development of waste and material flow indicators has been almost completed. Work on additional indicators (environmental impacts and policy response indicators) started in 2002 and will be continued during 2003.

Within the framework of the development of information assessment tools, the design of two prospective models started in 2002. One is on prospective analysis of waste quantities linking economic activities with waste quantities generated while the other, a computerised model, predicts waste quantities and emissions of dangerous substances into the environment for selected

waste streams. Both models will be finalised and submitted to the EEA in 2003.

Wastebase was reviewed in 2001, and it was recommended that it be re-organised and updated. During 2002, the site was restructured and several data sets updated. New sections on waste definitions, pollution prevention, and news and announcements were added. At the end of 2002 a new structure for Wastebase was proposed, and will be implemented in 2003.

The content of the joint work programme with Eurostat was finalised in 2002. Within this programme a first joint workshop (EEA, ETC/WMF and Eurostat) was organised in Athens in November. Both networks, the statistical and Eionet, met for the first time and agreed topics for cooperation on collection and evaluation of data and information.

1.3.4. Sectors

1.3.4.1. Transport

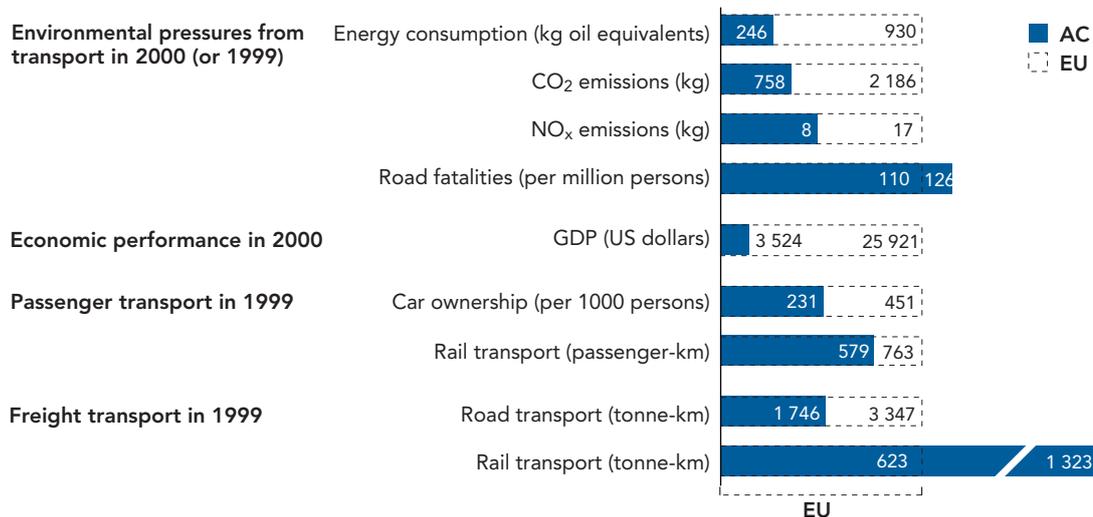
The third indicator-based transport and environment report *Paving the way for EU enlargement (TERM 2002)* was published in December 2002. At the same time, all updated TERM indicator fact sheets were made available on the EEA web site. For the first time, TERM includes the 13 countries that have applied for membership of the EU, as recommended by the informal transport and environment council held in Leuven/Louvain under the Belgian presidency in 2001. The final draft of the report also served as input to the preparation of the Transport Council under the Danish presidency and to the working group on enlargement under the Commission Joint Expert Group on Transport and Environment.

In general, data from the Member States were more complete, and of better quality, than those of the accession countries. Some methodological discrepancies between statistics from various international organisations also became apparent. To reflect this, the TERM system now includes clear notes on the quality of the information used.

Networking between the EEA and countries has been enhanced by the transport primary contact points. The EEA has also participated in the project group on international carbon dioxide policy benchmarks for the transport sector (a Dutch project begun following the 2001 workshop on country benchmarking).

Paving the way for enlargement (TERM 2002) finds that transport trends in both the EU and accession countries are moving away from, not closer to, the main environmental objectives of EU policies on transport and sustainable development. These call for breaking the close link between economic growth and transport expansion, as well as stabilising the 'modal split' — the market shares of the different transport modes — at 1998 levels by 2010, then shifting traffic from the roads back to rail and inland waterways.

Comparison between accession countries and EU for key parameters



In the EU and accession countries, energy consumption by transport and the associated emissions of greenhouse gases are increasing rapidly, mainly due to growth in road transport. Land-take by transport infrastructure is rising and increasing pressures on designated nature protection areas.

In the accession countries the environmental pressures from transport are still less than in the EU, but this favourable position is changing fast.

Transport volumes in the accession countries, which fell significantly following the economic recession of the early 1990s, are now rising again as economies recover. By 1999, volumes were almost back to their 1990 levels, and this trend is expected to continue. Railways' share of freight and passenger traffic remains well above EU levels but overall transport infrastructure in the accession countries is evolving towards a road-oriented system. This will make it harder to maintain a substantial market share for rail.

The transport sector's energy consumption and greenhouse gas emissions are three to four times lower than EU levels on a per-capita basis but, as in the EU, are growing rapidly.

Road and rail networks are less dense than in the EU, causing less fragmentation of the land, but motorway lengths have almost doubled over the past 10 years.

On a brighter note, the accession countries' transport emissions of certain air pollutants fell at the beginning of the 1990s and, helped by fleet modernisation and improved fuel quality, stabilised in the second half of the decade despite rising transport volumes.

Networking with international organisations continued with regular participation in the transport and environment expert groups of the Commission, the UNECE, the Organisation for Economic Co-operation and Development (OECD) and the European Conference of Ministers of Transport, and the International Energy Agency (IEA). The Commission is — at the request of the Transport Council — developing a legal framework for TERM. This should ensure long-term continuity of the system and provide appropriate resources for the EEA, Eurostat and member countries, contributing also to the quality of the required data. As a first step, DG Environment is preparing a communication on TERM. The EEA provides feedback to proposed drafts. The EEA also initiated a technical study to develop further the set of pricing indicators for measuring progress in restructuring transport pricing mechanisms to make them more fair and efficient.

Transport scenario and forecasting work was again undertaken. The EEA became a member of the steering group of Tremove (emission estimates for different transport modes), led by DG Environment, in order to keep abreast of, and influence, work on transport scenarios and forecasting. The Tremove model, together with the transport forecast model Scenes (led by DG Energy and Transport), will feed into the CAFE programme, and possibly into the next state and outlook on the environment report in 2005.

1.3.4.2. Energy

The first indicator-based report on energy and the environment, *Energy and environment in the European Union*, was published and widely disseminated (including at the Johannesburg World Summit on Sustainable Development). It provides policy-makers with information to assess how effectively environmental policies and concerns are being integrated with energy policies, in line with the environmental integration process initiated by the European Council's Cardiff summit in 1998.

The on-going production of energy and environment indicator fact sheets continued to assist with regular reporting, such as *Environmental signals 2002*. Work is under way to expand the fact sheet process to cover all EEA member countries as officially reported Eurostat data for the EU accession countries becomes more comprehensive. One-off fact sheets also supported the production of the Kiev report.

The EEA continued to provide emissions data and support to Eurostat for the publication of its yearly pocketbook of indicators for energy.

At the end of 2002 and following on from the success of last year's report *Renewable energies: success stories*, a similar study on energy efficiency was initiated to investigate successful energy efficiency policy implementation. The study will focus on benchmarking, identifying critical success factors and providing examples of successful energy efficiency policies, and should contribute to the debate on a number of related policy actions not only at EU level but also in all EEA member countries.

1.3.4.3. Agriculture

A presentation was given at the High-level Pan-European Conference on Agriculture and Biodiversity in Paris (5–7 June), organised by the Council of Europe and UNEP. This presentation raised awareness of the conservation value of extensive farming systems and the cost effectiveness of agri-environment schemes. A more in-depth analysis will be carried out in cooperation with UNEP. Preparations for this joint message on agriculture and biodiversity were started in 2002, and publication is planned for 2003.

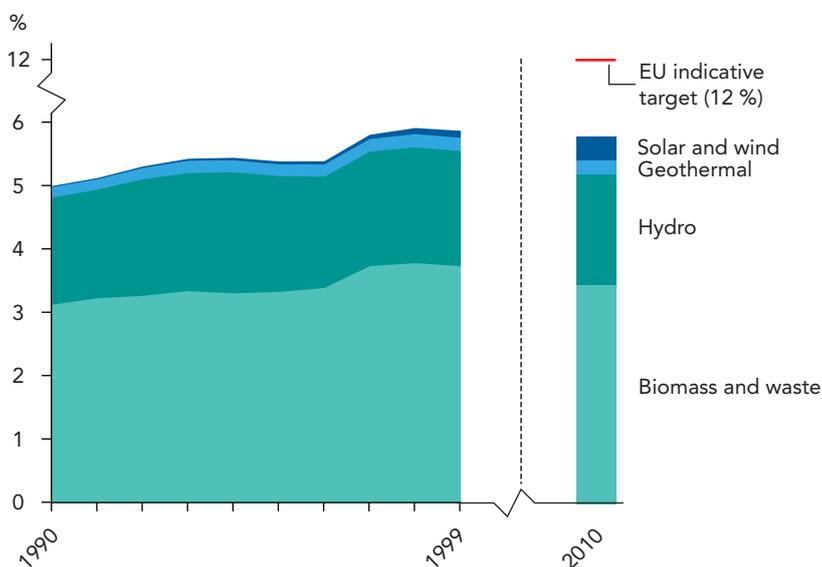
An expert meeting on high nature value farming areas was arranged in February 2002 to develop our understanding of farming systems of high biodiversity value. Identifying such areas is key for the understanding of the biodiversity impacts of agriculture and the evaluation of rural development and agri-environment schemes. An indicator for high nature value farming areas will be developed during 2003. A corresponding map of extensively farmed areas with associated high biodiversity will also be produced and presented in 2003.

The EEA analysed the environmental aspects of agriculture in the accession countries. The analysis showed negative environmental impacts related to soil erosion and water pollution but also the species richness of many farmed areas. These results were used to evaluate the possible environmental implications of expanding the EU Common Agriculture Policy to the accession countries. An interim report was produced in 2002; the final report will appear in 2003.

Support to the Cardiff process is given within the framework of the IRENA

Key findings of *Energy and environment in the European Union* were that energy consumption in the EU is rising, mainly because of transport growth, energy efficiency is improving only slowly and renewable energies need to expand by at least double the current rate if targets for boosting their market shares by 2010 are to be reached.

Share of renewables in total energy consumption



Furthermore, energy consumption levels are expected to continue increasing beyond 2010. This will make greenhouse gas emission cuts difficult to achieve unless policy action is taken now to change long-term patterns of energy production and consumption.

Despite increases in energy taxation, most energy prices in the EU have dropped since 1985. The report warns that this trend is likely to discourage energy saving efforts and may even encourage energy consumption unless policies are put in place to improve energy demand management and integrate energy's 'external' costs — to the environment and human health — into its price.

On the brighter side, the report shows that measures to cut air pollution from energy use have been successful and that discharges of oil into the sea have been reduced, although they still put significant pressure on the marine environment.

Manufacturing industry has successfully 'decoupled' its energy consumption from its economic growth, but it is the only sector to have done so. Its energy consumption in 1999 was about the same as in 1990.

Another positive element is that several countries have led the way in demonstrating the effectiveness of specific measures in promoting growth in renewable energy and in improving energy efficiency.

(indicator reporting on the integration of environmental concerns into agricultural policy) operation. This is a joint initiative of the EEA, DG Agriculture, DG Environment, Eurostat and the Joint Research Centre to develop the agri-environment indicators proposed by the Commission. It is funded jointly by DG Agriculture and DG Environment. During the autumn of 2002, the EEA appointed two staff to work full-time on the IRENA operation, responsible for

indicator fact sheet development and the production of two indicator-based reports. The operation will run to the end of 2004. In the context of the IRENA operation two papers on indicators for agri-environmental policy integration were prepared.

For a pilot project on land-use scenarios to feed into the state and outlook on the environment report in 2005, two expert meetings were organised in 2002, narrowing



the issue down and proposing a concrete scenario approach. Agriculture is a major driver for land-use change and agriculture policy is one of the factors that can be used for scenario differentiation. A follow-up is foreseen in 2003.

1.3.4.4. Tourism

Policy awareness about the cross-cutting dimension of the tourism sector widened considerably in 2002, at both international and European levels. The need for a more integrated approach to developing tourism markets and activities, in order to preserve a high-quality environment, was particularly appreciated. The holding of the first world eco-tourism forum, in Quebec, Canada and the first European tourism forum in Brussels are a direct expression of this development. It was also mirrored at the World Summit on Sustainable Development in Johannesburg where ideas about the potential of the tourism sector to contribute considerably to economic growth while helping maintain cultural and environmental assets were put forward. The EEA was present at these events to promote the work on indicators for tourism and environment assessments, as part of its strategy to support progress towards sectoral integration. To this end, links with the World Tourism Organisation and UNEP were established.

Recognition of the need for indicators in the context of policy-making for tourism came from the EU Internal Market Council. This required the European Commission

to come up with a proposal for a set of indicators on sustainable tourism in 2003. This demand links to the continuing preparations by the European Commission for a European Agenda 21 for tourism. The EEA participated in the various working groups and committees looking at these activities. In cooperation with DG Enterprise and Eurostat, in particular, work was consolidated on framing the flows of statistics for indicators on sustainable tourism, looking at the interactions between the socio-economic and the environmental aspects of the sectors. This should give rise in 2003 to a revised data collection process by Eurostat, including environment-related accounting. The publication in June 2003 of the first EEA report on tourism and environment will reflect these activities. The EU Spanish presidency expressed a clear interest in this area of indicators and established with the EEA a specific long-term collaboration to cover the compatibility of European and nationally developed sets of indicators. In a similar context, the EEA also contributed to an EU-funded project on destination indicators in support of eco-labelling policies (VISIT project).

Developing indicators on tourism cannot fill the information gap; the lack of regular statistics hinders progress considerably. In 2002 the EEA, in the context of its EnviroWindows facility, provided a new service on information sharing (DestiNet), including best practices, in the domain of the tourism industry.

2. Improving environmental information

2.1. Bridging the gap

The EEA and Eionet partners took forward the 'bridging the gap' process in 2002, focusing on four aspects. These were development of a core set of indicators for its longer term reporting activities; support to DG Environment on the development of a proposal for a framework directive on reporting; support to the development of a shared information system for the environment in Europe; and the continued development of Reportnet. All these aspects are central to the implementation of the EEA strategy.

2.1.1. Core sets of indicators

The EEA began work on the core set of indicators in 2001, covering six environmental issues (climate change, air pollution, water, biodiversity, terrestrial environment, and waste and material flows) and five sectors (transport, energy, tourism, fisheries and agriculture). A draft core set (covering storylines, indicator proposals, fact sheets) was circulated for consultation with Eionet, Commission services, non-governmental organisations and other stakeholders in July. The set included proposals for 400 indicators, viewed by many stakeholders as too large a number. The consultation process ran to October and has resulted in an analysis of feedback from most countries and some Commission services. A second round consultation will take place in 2003 (March–June) when the EEA will distinguish between a much smaller core set of 120–150 indicators for immediate implementation using Reportnet tools, and a similar number again for further consideration with Eionet and other stakeholders.

2.1.2. Improving the EU reporting system

The EEA made a substantial contribution to the DG Environment-led process towards a proposal for a framework directive on reporting of environmental information. This began with a pilot study on waste reporting and was followed by a wider process with all Member States on the principles that could underpin the content of the proposed directive. Main contributions have come from EEA work and experiences with its core set of indicators, Eionet priority

data flows, the reporting obligations database (ROD) and the reporting on environmental measures (REM) project. Many Eionet national focal points (NFPs) are the official country representatives in the process (all EEA countries are invited). This a good reflection of the central role the EEA and Eionet are playing in streamlining and re-orienting environmental reporting towards the knowledge-based system to support policy called for in the 6EAP.

2.1.3. Shared information system

The concept of the shared information system has evolved from the European environmental information system concept of the EEA strategy. Denmark, under its presidency of the EU, took forward the concept at a major conference on 26 September in consultation with countries and EU and non-EU organisations involved in environmental reporting activities. The EEA participated at all stages of the process by contributing ideas, making presentations and providing a perspective on future challenges. Denmark has written to the countries holding the EU presidency in 2003 asking them to pick up the baton on streamlining issues. The EEA is also following up in its work programme to improve cooperation on shared information system concepts with international organisations and convention secretariats involved at the conference.

The EEA has in parallel worked on streamlining reporting through the implementation process for the water framework directive. In doing so, it has developed a common vision for reporting on water with DG Environment and the JRC. This now forms the framework for piloting the development and implementation of shared information system concepts for water information at the river-basin level within countries.

2.1.4. Reportnet

The planning of Reportnet functions was shaped during 2001 together with a group of interested NFPs, and the first prototypes and stable versions of the main tools were prepared then. This formed the basis for advancing Reportnet implementation during 2002 in the following main areas.



To address the institutional and strategic aspects of Reportnet and assure thorough implementation, a preparatory report to ask for funding of the activities through DG Enterprise's IDA (interchange of data between administrations) programme was prepared and discussed with the committees of Eionet and the IDA programme. The proposal passed the necessary steps for approval. The discussion generated was very helpful in achieving common understanding of the goals and processes of Reportnet and in linking it to the ongoing discussion of the reform of environmental reporting in general. The project will act as a support measure to guide the establishment of the reporting directive as well as making the necessary amendments to the reporting tools developed during the first IDA project. The project raised a lot of interest and involvement among the EEA NFPs, which is necessary to get the intended streamlining of reporting started.

The EEA introduced the Reportnet functions into its priority data flows and into the activities of the EEA data warehouse represented by the data service. The Eurowaternet dataflow, which started in autumn 2002, forms a first test case for a data flow business process realised through Reportnet. The data service has intensified its efforts to apply Reportnet requirements to the data deliveries from the European topic centres. The reporting obligation database content has been further improved but is not yet operational. Main work on this very important aspect will start in 2003.

Much work has been done on the information infrastructure, especially regarding metadata inside Reportnet and jointly with the EEA web services, to ensure that all services can talk to each other.

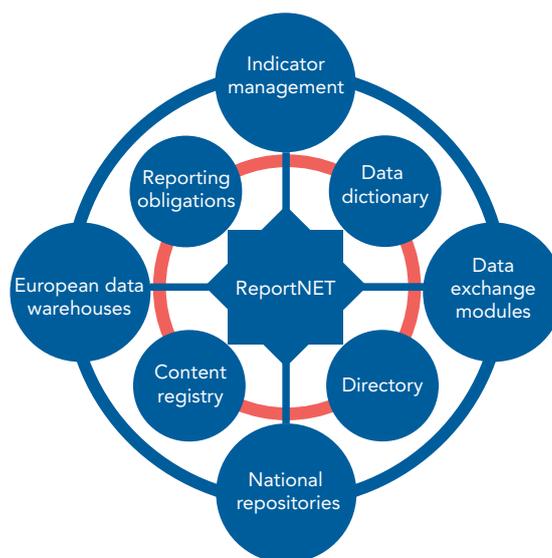
Technical development of the current Reportnet tools in 2002 was mainly around the central data repository, the reporting obligation database, the data dictionary and the content registry. The repository and the content registry were added to the set of operational services, which consist so far of the directory service, and the two data exchange modules on air data flows (which are updated annually). Indicator management is the only area that is currently not yet addressed by developments, because of ongoing discussion on the core set of indicators.

The central data repository at the EEA is where countries deliver their environmental

reports. First and foremost these are delivered to the EEA, but the repository can also be used for deliveries to other clients. It is possible to tag a delivery with the obligation to which it pertains. It is then possible to use the reporting obligation database as a task management tool, and check what still needs to be achieved. The central data repository was developed as a result of requests from some member countries, which felt CIRCA was not appropriate for this specialised use. Member countries were asked whether they prefer CIRCA or the central data repository, and more than three quarters chose the central data repository, mainly because it relieves them of the task of maintaining their own repository.

The Reportnet architecture (the outer, blue circle mainly describes data flows, while the inner, red circle illustrates normative and metadata aspects)

Figure 2

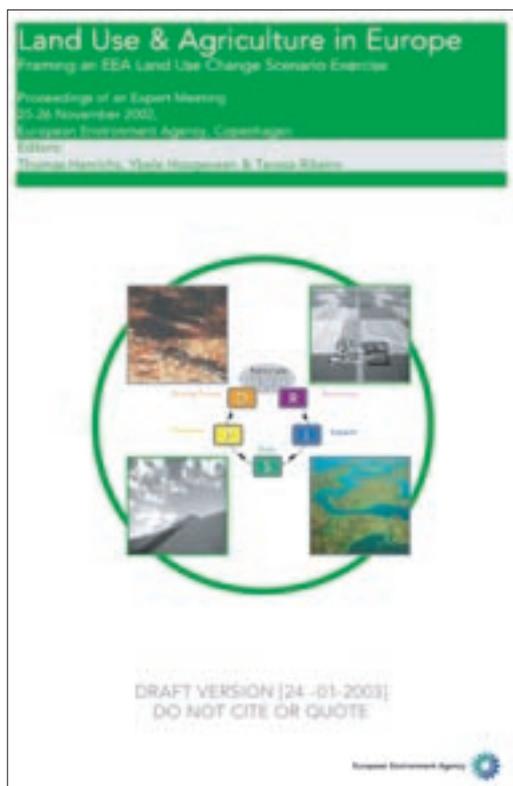


Country services have been integrated with the reporting obligation database application which now provides overviews on which country has to report what, when the deadline is, if the data have been delivered and who was responsible for delivering them.

2.2 Eionet priority data flows

The fifth progress report on Eionet priority data flows was presented to the EEA management board and the NFP/Eionet group in May 2002.

The Eionet priority data flows focus on agreed, stable, well-defined objectives in order to allow countries to put regular data



reporting procedures in place. Progress on timely data deliveries was assessed in nine priority areas. Information on two additional data flows was also provided in this progress report. Ten of the EEA's new member countries and three collaborating countries were included in the analysis for a number of the priority data flows so that the report covers data flows from 31 countries in Europe.

In terms of timely and complete data deliveries to our reporting system, Sweden was the best performing country last year. Austria, Denmark, Estonia and the United Kingdom maintained their consistently good performance but now they face strong competition for the top places from Finland, Bulgaria and the Czech Republic.

Last year's edition of the report was published as an Eionet working document and as such it is available for main clients in the EU institutions and member countries, mainly through the management board and NFP/Eionet group. The intention is to publish next year's edition as an EEA technical report, as it is considered that this report series is now ready to be made public to show what has been achieved and what remains to be done in order to improve the provision of information at the European level.

2.3. Scenario methodologies and prospective analysis

The first training session on scenarios for EEA staff was held at the EEA. Follow-up sessions are being prepared with the goal of improving Agency understanding and capacity in the field of scenarios.

In order to improve the coupling of qualitative and quantitative scenarios a technical report was prepared on the design of a possible pilot project applying this methodology. Two expert meetings on land use were held at the EEA (July and November) to discuss the possibility of developing a pilot project in this area. The participants, many of whom are also involved in related projects, were extremely positive; the proceedings of the two meetings are available upon request.

The EEA has developed working contacts with several relevant ongoing research projects in the area of scenarios (such as ATEAM) as well as universities and research institutes working in the field (including ICIS and Kassel). As part of this work the EEA initiated and fostered the setting up of a network on scenarios through a concerted European research action organised by the European cooperation in the field of scientific and technical research (COST). The EEA organised and hosted a meeting bringing together a number of European institutions that together developed a proposal on scenarios involving several EEA countries. The proposal was approved and two meetings of the new network are planned for 2003.

'The future of scenarios, scenarios of the future', a workshop on scenarios partly sponsored by the EEA and held in Kassel in July, gathered together high-level experts in the field, at both European and international levels. The aim of the workshop was to establish general guidelines for practitioners in this area. A report will be published next year by the EEA, based on the output of the workshop. The report is the first of its kind and is designed to inform and assist environmental professionals and information providers on environmental scenario analysis.

It has been claimed that many surprising environmental problems (e.g. ozone depletion) could have been anticipated if appropriate methods had been in place to screen ongoing developments and so-called weak signals or early warnings. A

report drawn up in 2002 was designed as a complement to the analysis of the EEA report *Late lessons from early warnings*, providing a new insight into the issue of societal surprises, emerging trends and weak signals in a broad perspective. The report attempts to frame the paradoxical issue of anticipating surprises and detecting early warnings based on a solid literature review. It provides a contribution to ongoing discussions on the improvement of the scenario approach in order to better accommodate and exploit potential trend discontinuities and surprises.

Continued contribution to the Millennium Ecosystem Assessment was provided with particular emphasis on the membership of the scenarios group that met in April in Trinidad and in October in Bangkok. Two staff members acted as reviewers for some publications which focused on the framework for assessment and action.

Finally, a web platform on EnviroWindows for scenarios was developed and is currently being reviewed and commented upon. The site will be operational from early 2003 (<http://scenarios.ewindows.eu.org>).

Concerning scenarios for the next state and outlook on the environment report in 2005, a joint water/air workshop on integrated environmental assessment and scenarios was held in September 2002. Several preparatory meetings have been held within the EEA as well as with the topic centres, DG Environment and DG Agriculture for the preparation of scenarios/outlooks.

A draft report has been prepared, with proposals for the organisation of the outlooks for the report, including analysis of main gaps and caveats, and has been thoroughly discussed with the centres and topic centre teams.

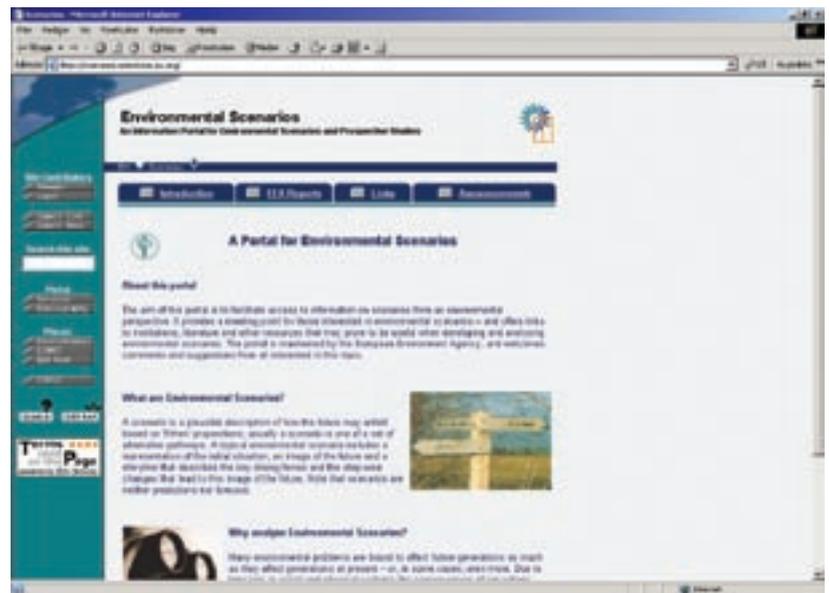
2.4. Developing support networks

2.4.1. European environment information and observation network

A transitional support project granted to the EEA by DG Enlargement under the Phare programme in 2001 continued until the end of May 2002. This ensured continuity in the existing cooperation and gradual enlargement of the EEA and the 10 Phare accession countries (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia). The work with the 10 Phare

EnviroWindows web page

Figure 3



accession countries was fully focused on the enlargement, covering all the main activity areas of the EEA work programme. The major activities in the reporting area were the inclusion of the countries into the *Environmental signals 2002* report, production of the TERM 2002 report including the accession countries, preparation of the Kiev 2003 pan-European report, and work on indicators and regular reporting, all with strong support from the five topic centres.

NFP/Eionet meetings were held in January, May and October 2002.

The first NFP/Eionet meeting of the year focused on reviewing the main products and services provided in 2001 as a basis for planning future work. Plans for 2002 were presented and discussed with the network. The main pillars of EEA activity were addressed, including reporting activities with focus on the *Environmental signals* report and the preparation of the Kiev report, the topic centres' plans and expected deliverables, and the further development of tools for e-Eionet (the electronic communication aspects of Eionet).

In May, the meeting focused on the further development and streamlining of Eionet itself in order to better address and respond to EEA and Commission services demands while at the same time reducing the reporting burden.

The development of a shared European environment information system was also

discussed, with EEA member countries trying to build the necessary technical support for collecting, manipulating and using the environmental information provided by the countries in an easy, multipurpose and efficient way among various international partners.

In October, the traditional two-day set up of the NFP/Eionet meeting was changed allowing one full day for a seminar discussing the development of the EEA core set of indicators. The seminar was requested by the EEA member countries and concluded the first consultation process carried out on this topic over the summer period. The need for further consultations and wider target group participation was clear from the discussions, as a basis for building a relevant and consistent core set of indicators meeting various reporting needs at both national and international levels. A one-day plenary meeting followed, taking as the main item for discussion the preparatory process of the next multiannual work programme 2004–08. The main lines of development included the support to be provided to 6EAP implementation, the EU enlargement process, environmental compliance, and to the sustainability aspects of the Johannesburg final declaration. These areas were investigated with NFPs. It was recognised that in 2003 the dialogue will continue, going into more concrete objectives to be achieved in the coming years to support these processes.

The EEA and ETC review process foreseen for 2003 was also discussed with Eionet and the countries were invited to express their interest in participating in this process.

Various Eionet expert groups met regularly in 2002. This included meetings with the national reference centres working together with topic centres in various topic areas, but also the Expert Group on Guidelines and Reporting, the Information Technology and Telematics Advisory Group and others. The range of topics discussed (from developing indicator-based country comparisons, to national or central data repositories) as well as the intensity of the discussions shows that the Eionet is now a well-established network with a strong commitment to developing and streamlining environmental information systems and Reportnet. It enjoys active participation by both initial and new EEA member countries and additional participating countries, helping each other and developing a broad and deep understanding of national capacities,

data needs, technical options and the policy context. Furthermore, this network interacts with and influences other technical and political networks to enhance understanding, cooperation and synergies in the development of environmental information.

2.4.2. European topic centres

The five new topic centres established in 2001 were in full operation in 2002 and delivering their first products and services. Although starting half a year later than the other four, the ETC/TE managed to catch up with the others and respond in time to various EEA demands. Among these the work on developing the terrestrial environment component of the EEA core set of indicators was a major task.

The five topic centres cover the following areas:

- water environment (including marine environment)
- air and climate change
- waste and material flows
- nature protection and biodiversity
- terrestrial environment.

The work of each topic centre is structured in four 'packages'.

The objective of work package one dealing with 'integrated assessment for policy-making and EEA reporting' is to link socio-economic activities and the pressures they produce with the resulting state and impacts on the environment, taking into account complex inter-linkages between environmental issues, individual substances, spatial relations and costs of response measures. Under this package significant input was provided by all topic centres to the preparation of the *Environmental signals 2002* report and by most of them to the preparation of TERM and energy and environment reports for 2002.

The main objective of work package two: 'indicators, data flows and databases' is to develop a core set of indicators for the topic with the aim of defining a single, harmonised, consistent and integrated set covering selected environmental issues and relevant sectors. Key to the success of this exercise is the identification of data needs, the establishment of streamlined priority data flows between the different components of Eionet, and maintenance and updating of topic databases. Under this package all topic centres have been involved in the gradual development of the EEA core set



of indicators for their specific area. Efforts were also made to connect the respective areas by addressing cross-cutting issues. Several rounds of consultations within the development process were carried out within the EEA and with Eionet participation.

Work package three outlines for each of the centres the key policy frameworks at EU and international level on which they will focus their support, for example, the water framework directive, Natura 2000 and the CAFE programme. Consequently, all topic centres have been involved to varying degrees in supporting the environmental policy process with focus on the implementation of the 6EAP priority areas and development of the proposed thematic strategies. In this area good collaboration was ensured between the centres and the topic teams established in the EEA to coordinate and lead this process.

Work package four describes in detail how topic centres should be managed and outlines how the cooperation within Eionet can be implemented effectively in terms of country visits, arrangement of Eionet workshops, and similar. Annual topic events were organised and held by each centre with the view of informing, and exchanging views with, the corresponding national reference centres established for each area. Many country visits were carried out by topic centre partners in both EEA member countries and cooperating countries. The aim was to further develop the national networks and better connect the topic centres' work with the needs and priorities identified at national level. Last but not least a permanent dialogue was maintained between the topic centres in developing their tasks, as well as with other EU and international bodies involved in similar or related activities.

2.4.3. Cooperation with non-member countries

2.4.3.1. West Balkans

Another two EEA grants from the Commission's AidCo office under the CARDS programme supported strengthening of the cooperation between the EEA and Albania, Bosnia-Herzegovina and the Former Yugoslav Republic of Macedonia, and setting up cooperation with Croatia and the Federation of Serbia and Montenegro.

The cooperation with Bosnia-Herzegovina, FYR Macedonia and Croatia continued to show good progress in the regular reporting system development and data deliveries. EEA cooperation with Albania was strengthened,

and cooperation with the Federation of Serbia and Montenegro was set up in mid-2002.

All five topic centres extended their work programmes to cover these five countries. Specific country visits took place in order to continue the implementation of the European monitoring systems, to help develop the national Eionet networks and to strengthen the regular reporting system.

The countries' experts participated in the major EEA events and annual topic meetings. Regular cooperation through the national focal point was gradually improved. The Federation of Serbia and Montenegro appointed a national focal point in early 2003.

Specific support was provided for the telematic network in Bosnia-Herzegovina and FYR Macedonia. Extension to Croatia, Albania and the Federation of Serbia and Montenegro was begun by setting up the system configuration and equipment delivery. The three Eionet telematic nodes will become operational in 2003.

The major goal of EEA cooperation in 2002 was the inclusion of these countries into the Kiev 2003 report. Specific support was provided to Bosnia-Herzegovina, FYR Macedonia and Croatia. The EEA also helped to develop the reporting network in these countries. The Kiev 2003 report exercise will serve as a basis to develop the indicators work and regular reporting process with the five countries in 2003.

2.4.3.2. Eastern Europe, Caucasus and central Asia

Cooperation between the EEA and countries in EECCA were mainly linked to the development of the Kiev report and focused on:

- securing the monitoring-to-reporting networks in these countries
- strengthening and streamlining existing capacities in order to support improvements in the reliability and consistency of environmental monitoring, reporting and assessment in the countries and at the pan-European level
- enhancing public access to environmental information in these countries as well as delivering environmental information required for international activities.



Work on the Kiev report itself is covered in more detail in the section on UNECE.

A Tacis project on strengthening environmental information and observation capacity in EECCA, with an allocation of EUR 1.5 million, was developed in March 2002 and approved in April 2002 to support this cooperation and the contributions from EECCA to the preparation of the Kiev report.

Discussions with Russia on how to develop bilateral cooperation in the field of environmental monitoring, data exchange, harmonisation of data and environmental reporting continued in 2002. A meeting in the Russian ministry for natural resources was held in November in Moscow and the ministry expressed its willingness to improve cooperation and to replace the existing 'informal' relationship with a more official framework for collaboration. Consultations are now under way to prepare a possible visit of a delegation from the ministry to the Agency in 2003.

Further EECCA countries sought closer collaboration with the EEA in 2002. The Republic of Moldova addressed the Agency and the Commission in order to explore the possibilities and conditions of participating in the activities of the EEA. The ministry of environment of Georgia expressed its interest in developing cooperation with the Agency further and basing it on a memorandum of understanding.

Discussions with the Commission started in 2002 on how to develop EEA-EECCA cooperation (and cooperation with other non-member countries). These had to take into account the EU policy objective of building partnership with these countries, EU and EEA enlargement to the east, the increasing interest of EECCA countries in working with the EEA directly, and the needs and capacities of the Agency.

2.4.3.3. US Environmental Protection Agency

Contacts with the US Environmental Protection Agency (USEPA) resumed in 2002 with support and cooperation from the Commission. The contact point for the Agency was identified as the Office of Environmental Information (OEI) in the USEPA. Two working meetings, in Brussels and Copenhagen, were held during the year to identify the scope of future activities. Information continues to be exchanged on standards, tools and methodologies to support the exchange of environmental

information, including work in the fields of the semantic web, GEMET, registries, XML and metadata. Plans were made for a joint high-level meeting between EEA and OEI at the beginning of 2003 to lay the ground for establishing a more formal relationship within the existing cooperation agreement between the US and the European Community on environmental matters.

2.4.4. Cooperation with partners

2.4.4.1. Statistical Office of the European Communities

Cooperation with Eurostat in 2002 concentrated on the following main themes and areas: the DG Environment-led review of the reporting process, Reportnet developments, indicators for sectoral integration, sustainable development indicators for the spring European Council, the waste statistics regulation, support to the OECD/Eurostat joint questionnaire and environmental accounting. This section focuses on the final three areas since the others are addressed elsewhere in this report.

The Council finally adopted the waste statistics regulation in December 2002, making 2004 the first year for countries to report. Eurostat leads on the directive implementation with support from the EEA on technical and methodological aspects related to some of the more difficult waste streams such as agriculture for which data are to be collected under the regulation. The EEA will also contribute to the review of reporting on waste that Eurostat is required to report on to the Council within two years of adoption of the regulation. A joint workshop was held in Athens in October with Eionet and European statistical system representatives from EU, European Free Trade Association and accession countries. This marked the first step of a process to develop common understanding and working cooperation between the EEA and Eurostat networks at national level on implementation of the regulation.

The biannual OECD/Eurostat joint questionnaire achieved a better response rate in 2002 than in previous years. This was in part because of trilateral cooperation between the EEA, Eurostat and the OECD. This reduced the extent of the questionnaire's coverage, allowed pre-filling of data where appropriate and possible, and improved communication between the three organisations and their networks of countries to improve dialogue and cooperation at

national level. These improvements in responses by countries have beneficial knock-on effects for indicator developments, including those used for reporting on waste to the spring European Council.

The year 2002 was one of reorganisation for the environment statistics at Eurostat, with the merging of statistics and environmental accounting functions into one unit. The Statistical Programme Committee also approved a strategy for implementation of environmental accounting frameworks and methodologies across a number of areas. The EEA is cooperating with Eurostat mainly in the area of land-use accounting through its ETC/TE. A project framework to develop a set of land-use accounting tables at the European level was developed in 2002, and this will be implemented in 2003 for those countries for which data are available through the Corine land cover 2000 process. In 2003 the EEA will explore, through its multiannual work programme development, other possible areas of work on environmental accounting focusing on the economic/environmental/social interactions of sustainable development.

2.4.4.2. Joint Research Centre

During 2002, JRC-EEA collaboration continued as planned, and JRC was present at all management board meetings of the EEA. JRC participates in the scientific committee and a senior scientist and director from the JRC was appointed during the year as an ex-officio member of the committee. JRC also collaborates with each of the topic centres.

There has been regular contacts in all relevant scientific areas including water, air, terrestrial environment, soil, prospective studies and chemicals. In particular, JRC cooperates with the EEA in the context of the IRENA project (see Agriculture) and a third joint publication on the development of land-use indicators was prepared during

the year. A common vision for reporting on water was developed with the JRC and DG Environment to support the implementation of the water framework directive.

A major outcome of the cooperation with JRC in 2002 was a joint publication: *Towards an urban atlas: Assessment of spatial data on 25 European cities and urban areas*.

2.4.4.3. Organisation for Economic Cooperation and Development

The Agency participated in the drafting of a document released by OECD in June 2002 which thoroughly analysed the concept of decoupling the environmental burden from economic growth ([http://www.oelis.oecd.org/olis/2002doc.nsf/LinkTo/sg-sd\(2002\)1-final](http://www.oelis.oecd.org/olis/2002doc.nsf/LinkTo/sg-sd(2002)1-final)). OECD also exchanged work with the EEA on developing indicators for tourism and biodiversity, where the Agency was active during the year (see related sections). A similar exchange took place, at the time of the annual meeting of the OECD State-of-the Environment Group, on the topic of environmental data quality, including their relevance for policy-making. This has provided inputs to the EEA's work on the analysis of reporting obligations from countries.

The EEA and OECD have joined forces in building a new database for economic instruments for environmental protection and nature conservation management. In October 2002, the EEA added information on the use of environmental taxes and charges in 13 central and east European countries (<http://www.oecd.org/EN/document/0,,EN-document-8-nodirectorate-no-1-3016-8,FF.html>). After finalisation of the database, expected in 2003, information will be available about the use of environmental taxes, charges and other market-based incentives for 44 countries. The database will cover all EEA and OECD member countries, and the countries in the Balkans.



3. Making information accessible

3.1. Media relations

The EEA was again active in communicating to the print and audiovisual media the key findings of its major reports as well as important developments within the Agency. Eleven news releases were issued during the year and a number of announcements published on the EEA web site. Most of the news releases were made available in the 'major' European languages — English, French, German, Italian and Spanish — while that on *Environmental signals 2002* was issued in all 23 EEA languages.

The EEA held press conferences to launch *Environmental signals 2002* and the *Late lessons from early warnings* report, as well as in connection with the mid-May management board event celebrating the Agency's enlargement. A joint press conference with WHO was held to launch the WHO-EEA report *Children's health and environment: a review of evidence* during Green Week in Brussels in April. Media interviews with the Executive Director, Interim Executive Director and other staff took place throughout the year. These included a news feature about the Agency's enlargement made by the Franco-German TV channel Arte and broadcast in connection with the EU's Copenhagen summit in December.

Work continued on broadening the EEA's outreach to the media across Europe with the aid of new database resources. These enabled the Agency both to reach a wider number of journalists covering environmental issues and also, when appropriate, to target media focusing on business sectors whose progress in integrating environmental concerns is benchmarked by the Agency, notably transport and energy.

3.2. Web services

3.2.1. The new EEA web site

On 22 May the EEA launched a completely revamped web site, the second major revision since the Agency site was set up in 1995. The launch marks the beginning of a new era in the Agency's provision of information. The web site aims to become the main European channel for environmental information, with

updates of environmental indicators and fact sheets on the site whenever new data become available.

The new-look site contains a complete set of all reports produced by the Agency as well as the data underpinning them. One of the aims of the revised site is to better serve the needs of the increasing number of users whose mother tongue is not English. The site contains a multilingual glossary of terms frequently used in the Agency's publications, and will gradually include basic texts and navigation items in all EEA languages.

Users have appreciated the new style of the web site, which scored 3.5 on a scale from 1 to 5 in an on-line user survey. One of the visual changes introduced was to include the stars of the Community flag in the basic design in order to mark more clearly that the EEA is an EU body.

In September, an e-mail notification service was launched. Web site users may now receive an automatic e-mail notification whenever a new report is published on the web site. By the end of the year, about 3 500 users had subscribed to this service.

Traffic on the web site is steadily increasing. By the end of the year about 25 000 pages were served every day to about 1 600 daily visitors. October was an all-time-high in terms of traffic where we for the first time reached more than 100 000 users on the homepage only.

About 35 new titles were published on the web in 2002, many of them in several languages.

Launching an open-source software package for setting up interoperable web sites with environmental information in EEA member countries completed the national portal project. The package is now ready to be used by interested countries and is already used in the so-called 'country portal' on the new EEA web site.

3.2.2. EnviroWindows

As a web service for sharing information on best practices and facilitating communication, EnviroWindows ([http:](http://)

//ewindows.eu.org) has grown in content, spectrum of topics covered, and involvement of businesses, local authorities and environmental professionals as direct contributors and users of information.

EnviroWindows is used by enterprises to facilitate consumer access to information on products, best practices, use of natural resources and corporate environmental performance. Local authorities have increasingly discovered that the technologies adopted by the EEA to connect with our network — found in EnviroWindows as well — are also very powerful to communicate with concerned citizens, professionals, policy-makers and companies.

With limited resources it has been possible to achieve some significant results in terms of generating information content from various remote sources using CIRCA and Zope technologies. Additional ad hoc products such as PubliKit®, SD Online, and EnviroExperts have also proved valuable in terms of facilitating informal information exchange for finding rapid solutions to environmental performance challenges — an approach that seems in some cases appropriate at early stages in the policy process.

Relevant new interest groups — collaborative work environments for document management, discussion, event planning, using CIRCA software — that were created in 2002 include two fifth framework programme (5FP) sponsored projects and one financed by the Commission Life programme. The first two deal with agrofood waste minimisation and recycling (Awarenet) and environmental data exchanges for inland waters (EDEN). The third aims to demonstrate whether companies and organisations that implement environmental management systems show improved environmental performance (REMAS).

New web portals — web publishing platforms to enable remote users to create and manage content on EnviroWindows — were also created. Topics covered included cleaner production, organic farming, environmental scenarios, research result communication and tourism. Often the issue of keeping the content updated in the portals revolves around the possibilities of establishing voluntary long-term partnerships with a number of government and private partners.

3.2.3. European Community biodiversity clearing house mechanism

The biodiversity clearing house mechanism is accessible via the EEA web site at <http://biodiversity-chm.eea.eu.int/>. See the relevant section of this report.

3.2.4. Data service

Data used in EEA assessments and reports are stored and made accessible via the web-based EEA data service. Data are stored in the data service after the country deliveries are validated, analysed and aggregated. Furthermore, the data service also contains data used by the EEA that originate from other international organisations and the basic geographic datasets needed for spatial assessments.

At the end of 2002 the data service contained 163 tabular datasets and 153 applications (calculations on top of one or several datasets). It provided access to 153 maps and graphs based on these datasets. Fifteen basic geographic datasets are now maintained in the data service, plus 204 GISCO datasets for internal use. Altogether the data service therefore contained 382 datasets at the end of the year.

The EEA has a policy of open and easy access to data, provided that there are no restrictions on access from the data owner. Of the 163 tabular datasets 40 are now accessible on the public web site. Web access to the remaining data is restricted, for copyright reasons only, to Eionet institutions and to consultants working on specific projects within the EEA. Metadata describing these datasets, including where they can be accessed, is however freely available.

The download statistics for the data service show an intensive use of the available datasets during the year.

Access to data sources not maintained within the service itself was introduced to the data service in 2002. There are links to two categories of data sources that differ in terms of accessibility of data: protected sources and public sources.

A third category of data available via the data service is in form of links to the databases managed by the topic centres. During the year, all topic centres made a combined effort to improve access to their databases through a common interface of the data service. This is mainly done by making use of the technical developments of the data

service team, especially the so-called map service.

The map service is an innovative web-based tool for dynamic presentation of data on maps. Briefly, the concept is that data can be kept distributed (at topic centres for example) and picked up by the central map server and presented as maps on the web site of the data provider. By developing this tool the EEA can avoid becoming engaged in isolated map presentation projects for every topic centre database. All topic centres are now involved in putting the map tool into practice on their web sites.

For the first time the EEA now has an operational geographic information system in-house which is capable of providing analysis and creating maps. A new EEA standard style for maps was developed and adopted to improve corporate identity and the quality of map presentations in reports and web applications. Maps following the new style were produced for several reports and indicator fact sheets during the year.

After introducing version control in 2002 the data service can now handle several versions of the same dataset. This is a major improvement as it allows explicit links between reports, indicator fact sheets and datasets. In this way the data service can be seen as historical data storage where one always can trace back the data used for the information products on the web site.

3.2.5. Eionet portal

The Eionet portal has taken a backseat in 2002, as the focus has mainly been on the Reportnet web sites and the European data warehouses. But even though it looks much the same on the surface, it is being actively used for the day-to-day business of collaboration between Eionet partners. It is used as a directory of Eionet sites, for announcements and to collaborate on Eionet's open source software. Recently a central calendar, which gathers event information from other sources, has been added and to accompany this a web-based tool for the administration of meetings and conferences has been developed. A tool to manage bug reports and feature requests for Eionet services and software has been developed and will be introduced in early 2003.

3.3. Information services

3.3.1. Publishing

In 2002 the EEA published in English one environmental assessment report, six issue reports, eight topic reports, 20 technical reports, 10 promotional brochures and 11 other documents.

For the first time in 2002 the EEA produced material in all 23 languages of the enlarged Agency. Summaries of *Environmental signals 2002*, *Energy and environment 2002* and the *EEA annual report 2001* were published both as printed publications and on the web in all language versions. A full list of reports published in this period can be found in Annex 1.

Following a call for tender for printing services run in autumn 2001 a contract was concluded in April 2002 with a printing house that has both a quality management system (ISO 9001) and is certified in environmental management systems (ISO 14001 and the EU eco-management and audit scheme EMAS). The new contractor has already demonstrated ability to provide shorter turnaround times, good printing quality and certainty that publications are printed in an environmentally friendly way.

3.3.2. Translations

The EEA translated more than 3 000 pages through the Translations Centre for the Bodies of the European Union during 2002. Most of the translated pages were related to publication work, but some of them were administrative documents, correspondence, press releases and so on.

The bottleneck in the translation process is still the quality-checking of translations that are to be published. NFPs on the whole put in a considerable amount of work here, though recent experience shows that the time and commitment they dedicate to this task vary considerably. The Agency is particularly dependent on the contribution of NFPs for the languages where there is no in-house staff. Proper implementation of adopted procedures for all languages is needed in order to reach a satisfactory quality level.

3.3.3. EEA glossary

To help readers and translators of EEA's texts better understand what is meant by various terms, and to make sure that translators use the same terms consistently in all translations, the EEA has continued to



extend and improve its glossary service on the web. Some 143 environmental terms have been translated into all 23 languages.

3.3.4. Dissemination

An update of the regular mailing list was undertaken with a view to expanding dissemination in the new member countries. Also, the mailing list for journalists was expanded and further refined to enable more targeted mailings. Access to Gescom, the online ordering system of the Office for Official Publications of the European Communities, was established for the Information Centre and RNC unit.

3.3.5. Information centre

The information centre (IC) prepared a development plan clarifying its role and responsibilities for the following years. It launched an electronic policy for books and periodicals giving preference to procurement and subscription of electronic versions of documents whenever possible. In line with this policy, the IC established online access to the UN Treaty Collection and OECD documents through OdisNet. Lastly, the IC developed and implemented an intranet-based library indexing/search system and reclassified the stock accordingly.

3.3.6. Visiting groups

The Agency continues to be a popular place to include in the programme for groups with an environmental affiliation visiting Copenhagen. During 2002 presentations were made for 51 visiting groups with close to 1 000 participants. This is an increase by 70 % compared to 2001, when we received 30 groups over the whole year. Most groups are either university students or from public bodies in EEA member countries.

3.3.7. Exhibitions

The Agency participated with its own stand during Green Week in Brussels in April, with displays highlighting conclusions from the joint WHO/EEA children and environmental health report. A project making use of subtle light effects and Flash animations to enhance the visibility of the EEA premises was launched on 16 May. The Agency also showed face locally with a stand during the Copenhagen environment festival in late May/early June and an exhibition in the main pedestrian area during the European Council meeting in December focusing on the environment in the accession countries.

During the summer a joint exhibition put on by the EEA and the Royal Award Foundation

Information centre requests Figure 4

Total number of requests in each year					
	1998	1999	2000	2001	2002
Total	2 144	3 047	3 107	3 843	3 735

on children, environment and health was held in front of the Agency's premises on Kongens Nytorv in Copenhagen. The Royal Award Foundation displayed the results of a children's illustration contest on our future environment, with contributions from most EEA member countries. It is planned to use some of the many remarkable illustrations in the Kiev report.

3.3.8. Information material

The EEA general brochure was rewritten and updated taking into account organisational changes, the revised strategy and the Agency's enlargement. The brochure was printed in an English language version only in late 2002 with a version in all languages and a foreword by the new EEA director planned for 2003. Preparations started for an update of the EEA presentation video, and the update will be completed in 2003 with the inclusion of an interview with the new director. An overhead presentation on *Environmental signals 2002* was produced, made available electronically and disseminated to national focal points and topic centres. Sales flyers were produced and disseminated on five new reports.

3.3.9. Advertising

During the first half of 2002 standing press contact advertisements were run in



The Agency's well-visited stand in the Charlemagne building during Green Week in Brussels in mid-April

The Spanish national focal point has published a substantial number of EEA reports in Spanish.



the periodical of the Danish journalists' association, and profile advertisements run in the Brussels-based weeklies *European Voice* and *Rapporteur*. Web banner adverts (visible to European visitors only) to market *Environmental signals 2002* were run on the New York Times web site in the autumn. Some select profile adverts were run in Denmark during the Danish presidency.

3.3.10. Co-publishing

Licence agreements for reproduction of recent EEA reports were concluded and signed with a wide range of public bodies, organisations and private publishers. These included Germanwatch, the Irish Energy Centre, Wageningen University, Earthscan Publishing, the Italian Society of Doctors for the Environment and the Czech, Slovenian, Latvian and Spanish national focal points (the latter for no less than nine reports).

4. Developments at the EEA

4.1. Enlargement

On 1 January 2002, Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Romania, Slovenia and the Slovak Republic joined the EEA, bringing total membership up to 29. Poland ratified the agreement with the European Community later in the year, and joined the Agency at the beginning of 2003, while Turkey has recently ratified and is expected to join on 1 April 2003.

Negotiations on EEA membership are also under way between the European Commission and Switzerland.

On 16 May a meeting with high-level participation from the EU and the new EEA member countries 'From Dobris to Kiev and beyond: enlargement of the EEA' celebrated the enlargement of the Agency with the 13 new member countries. The environment commissioner underlined the pioneering role of the Agency, and stressed that in the eight years of its existence, the EEA has become a vital source of information and analysis, providing information that allows policy-makers to make a good case when proposing new policies. The less visible, but no less important long-term investment the Agency makes in establishing networks of data providers and experts in the Member States was also highlighted. This helps to ensure the quality of the information that will be provided in the years to come.

4.2. Reform process

Preparing for financial reform was a major challenge in the year 2002. With the recasting of the EU financial rules, the Agency opted to move further towards a decentralised financial model. The financial responsibilities of the EEA programme managers have been strengthened accordingly, and fully aligned to operational responsibilities. In 2002 the EEA also recruited an internal auditor, strengthened internal financial control capabilities and gave emphasis to improving financial reporting capabilities.

Reform was carried out in the area of personnel, following Commission initiatives that should lead to a new staff regulation. Ensuring staff mobility between agencies and between agencies and the European institutions was recognised as an issue of particular concern.

4.3. EEA strategy

As part of the reorganisation process completed in 2001, a new EEA strategy was developed and agreed upon in 2002. The strategy sets out concisely the mandate, objectives, main clients and outputs of the Agency, and was used during the year to help guide EEA activities and support prioritisation.

Three strategic, core lines of action are being followed to implement EEA's new strategy. These focus on building the core work of EEA and address:

- the development of the whole reporting system (including the production-side development of indicators, the supply-side streamlining the delivery of information, and the network/ infrastructure-side to support this)
- building the expertise to do the job of 'integrated' assessments (building and improving the needed in-house and networked expertise)
- developing further the Reference Centre, exposing information and improving accessibility.

The strategy is implemented through the work programmes and is a main reference for developing the third multi-annual work programme (2004–2008).

4.4. Development of the third multiannual work programme

The Agency began the development of its third multiannual work programme (2004–08). Guidance for this work came inter alia from two management board seminars held last year.



EEA management board

A seminar held on 15 May 'Towards a knowledge-based sustainable society', outlined and discussed the process and the role of EEA in its eight years of existence and in particular in developing the indicators for sustainable development in Europe.

This theme was further developed in another seminar on 26 November 2002 'Indicators for environment and sustainable development'. The focus of this seminar was the need for information on sustainable development and the use of structural indicators and sustainable development indicators in policy processes. In particular the role of EEA in the international development of indicators for sustainable development was stressed.

Among the conclusions were the following:

- The main focus of the EEA should be on environmental reporting and the integration of environmental information with other dimensions of sustainable development. Working increasingly with sectors and with decoupling indicators, and providing information on the environmental consequences of the European lifestyle on the rest of the world, sustainable production and consumption patterns and Europe's share in global resource depletion, is also serving sustainable development.
- The EEA should continue its development of a core set of environmental indicators and improve further the links between indicators policy objectives and issues of concern, and where possible reduce the number of indicators in the set.

- The EEA should continue to use its core set of indicators and the dataflow model to support the Commission on the reporting directive.
- The EEA should actively develop further cooperation with organisations dealing with other aspects of sustainability, in particular Eurostat, and produce an analysis of the indicators in its core set versus indicators included in sets of other organisations.

The outcome of the World Summit on Sustainable Development (see the relevant section of this report) and the implementation plan adopted at the summit also provided conceptual input into the development of the next multiannual work programme. They demonstrated clearly the importance of developing consistent information and knowledge across the different aspects of sustainable development, including future trends, to allow 'fair' and transparent trade-offs between environment and socio-economic concerns. This requires integrated assessment and integrated policy-making. The following areas in particular have been identified for special attention:

- Economic evaluation, including cost-benefit analysis, costs of impacts and the assessment of secondary benefits. This is especially important in the context of the recent Commission decision on (sustainability) impact assessment of policies.
- An ecosystem-based approach including health assessment.
- Multi-scale assessment to support the assessment of impacts at global and regional levels outside Europe.
- Scenario analysis.

4.5. Environmental management

The Agency's management team endorsed proposals to seek EEA registration under the EU eco-management and audit scheme (EMAS) in the medium term. A team was set up to oversee implementation of the project, for which it is expected that consultants will be contracted in the first half of 2003.

4.6. Change of EEA Executive Director in 2002-03

After eight years of intensive work in building the EEA from scratch, the Executive Director, Domingo Jiménez-Beltrán, left the Agency as

planned on 31 May 2002 for an appointment in the European Commission.

Gordon McInnes, the most senior manager at the EEA, was appointed Interim Executive Director of the Agency from 1 June 2002.

On 25 February 2003, the management board appointed Professor Jacqueline McGlade, an environmental scientist active across a broad spectrum of the life sciences, as the successor to Domingo Jiménez-Beltrán. She is expected to take up the post by 1 June.

4.7. Scientific committee

Major changes occurred in the Agency's scientific committee during the year as many members came to the end of their maximum of two terms (8 years).

Several of the new members of the committee, including the new chairman, Bedrich Moldan, come from new EEA member countries.

To reflect enlargement of the Agency, the management board decided to increase the size of the committee to 13 members with the possibility to expand to a maximum of 20.

Current activities include the implications of scientific complexity for the EEA's work, long term ecological and health monitoring, and children & environmental health indicators.

Glossary and links

<i>5FP</i>	Fifth Framework Programme
<i>6EAP</i>	Sixth environment action programme http://europa.eu.int/comm/environment/newprg/index.htm
<i>accession countries</i>	Countries preparing for accession to the European Union
<i>Agency (the)</i>	European Environment Agency (URL: http://www.eea.eu.int/)
<i>AidCo</i>	EuropeAid Cooperation Office (URL: http://www.europa.eu.int/comm/europeaid/)
<i>Airbase</i>	European air quality information system (URL: http://www.etc-acc.eionet.eu.int/databases/airbase.html)
<i>ATEAM</i>	Advanced terrestrial ecosystem analysis and modelling (URL: www.pik-potsdam.de/ateam)
<i>Awarenet</i>	Agrofood waste minimisation and recycling
<i>BIO-IMPS</i>	Biodiversity implementation indicators
<i>CAFE</i>	Clean Air for Europe Programme (URL: www.europa.eu.int/comm/environment/air/cafef/)
<i>CARDS programme</i>	Community Assistance for Reconstruction, Development and Stabilisation (URL: http://europa.eu.int/comm/europeaid/projects/cards/index_en.htm).
<i>CDDA</i>	Common database on designated areas
<i>CFC</i>	Chlorofluorocarbon
<i>CIRCA</i>	Collaborative software used within Eionet and by Eurostat and several DGs.
<i>Clean Air for Europe</i>	Programme of technical analysis and policy development leading to the adoption of a thematic strategy under the sixth environmental action programme in 2004 (to be launched in March 2004). (URL: http://www.europa.eu.int/comm/environment/air/cafef.htm)
<i>CLRTAP</i>	Convention on Long-Range Transboundary Air Pollution (URL: www.unece.org/ebvl/clrtap/)
<i>Commission</i>	European Commission (URL: http://www.europa.eu.int/comm/index_en.htm).
<i>Community</i>	European Community (URL: http://www.europa.eu.int)
<i>Connect</i>	European conservation institutes research network
<i>Corine</i>	Coordination of the information on the environment (work started under Decision 85/338/EEC; environment information pilot project continued in EEA)
<i>COST action</i>	A concerted European research action organised by the European cooperation in the field of scientific and technical research
<i>Council</i>	EU Council of Ministers (URL: http://ue.eu.int/en/summ.htm)
<i>Corinair</i>	CORe Inventories AIR (URL: http://air-climate.eionet.eu.int/databases)
<i>Destinet</i>	Service part of the Envirowindows web site (URL: http://destinet.envirowindows.eu.org/) focusing on experiences, best practices, and information sharing for the tourist industry
<i>DG</i>	Directorate General
<i>DG Personnel and Administration</i>	URL: http://europa.eu.int/comm/dgs/personnel_administration/index_en.htm
<i>DG Agriculture</i>	URL: http://europa.eu.int/comm/dgs/agriculture/index_en.htm
<i>DG Budget</i>	URL: http://europa.eu.int/comm/budget/index_en.htm
<i>DG Fisheries</i>	URL: http://europa.eu.int/comm/fisheries/policy_en.htm
<i>DG Enlargement</i>	URL: http://europa.eu.int/comm/enlargement/index.htm
<i>DG Environment</i>	URL: http://www.europa.eu.int/comm/environment/index_en.htm
<i>DG Energy and Transport (TREN)</i>	Directorate General Energy and Transport (URL: http://europa.eu.int/comm/dgs/energy_transport/index_en.html)

<i>DG External Relations</i>	URL: http://europa.eu.int/comm/world/
<i>DG Regional policy</i>	URL: http://europa.eu.int/comm/regional_policy/index_en.htm
<i>DG Research</i>	URL: http://www.europa.eu.int/comm/research/index_en.html
<i>DIR</i>	Directory of information resources. Replaced by Reportnet module content registry (CR) (URL: http://cr.eionet.eu.int)
<i>DIS-MED</i>	Desertification information system to support national action programmes in the Mediterranean (URL: http://dismed.eionet.eu.int)
<i>DPSIR</i>	Concept of the chain of casual links for environment adopted by the EEA: driving forces, pressures, states, impacts, responses (first developed by OECD)
<i>DublinCore</i>	A core set of elements used to describe information resources
<i>EBMI-F</i>	European biodiversity monitoring and indicator framework
<i>EC</i>	European Community
<i>EDEN</i>	Environmental data exchanges for inland waters
<i>EEA</i>	European Environment Agency (URL: http://www.eea.eu.int/)
<i>EEA member countries</i>	Member countries of the EEA — the EU 15 Member States + Iceland, Liechtenstein, Norway, Bulgaria, Slovak Republic, Slovenia, Latvia, Czech Republic, Hungary, Estonia, Lithuania, Romania, Malta and Cyprus.
<i>e-EIONET</i>	The electronic network that supports the functioning of the organisational Eionet
<i>EEIS</i>	European environment information system
<i>E-ESDI</i>	Environmental European spatial data infrastructure initiative, now Inspire
<i>EFIEA</i>	European forum on integrated environmental assessment. A concerted action supported by the RTD Programme Environment and Climate, human dimensions of environmental change of the European Commission, DG Environment (contract no. ENV4-CT97-0450. In order to have integrated environmental assessment bear its best possible fruits, cross-fertilisation of the various approaches practiced in this field and community building are needed. The network of EFIEA serves such a goal (URL: http://www.efiea.org/)
<i>EFTA</i>	European Free Trade Association
<i>EIONET</i>	European environment information and observation network (URL: http://www.eionet.eu.int/)
<i>EMAS</i>	EU eco-management and audit scheme
<i>EMEP</i>	Cooperative programme for monitoring and evaluation of long-range transmission of air pollutants in Europe (URL: http://www.unece.org/env/emep_h.htm)
<i>Emerald</i>	EMERALD network related Bern Convention. It will complement Natura2000 in non-EU countries, on the European Landscape Convention (adopted 2000) and on the pan-European biological and landscape strategy (PEBLDS).
<i>EnviroExpert</i>	A web-based service part of the Envirowindows web site (URL: http://experts.ewindows.eu.org/enviro) designed to elicit communication between environmental experts and the public Envirowindows EIONET's interface to external partners such as NGOs and companies. It is a combination of web-based networks and an information clearinghouse. (URL: http://ewindows.eu.org)
<i>EPER</i>	European pollutant emission register
<i>ETC</i>	European topic centre — contracted by the EEA to lead the development in European environmental information on a given topic. (URL: http://www.eionet.eu.int/)
<i>ETC/ACC</i>	European Topic Centre on Air and Climate Change (URL: http://air-climate.eionet.eu.int/)
<i>ETC/Nature Protection and Biodiversity</i>	European Topic Centre on Nature Protection and Biodiversity (URL: http://nature.eionet.eu.int/)
<i>ETC/NPB</i>	European Topic Centre on Nature Protection and Biodiversity
<i>ETC/TE</i>	European Topic Centre on Terrestrial Environment (URL: http://www.terrestrial.eionet.eu.int/)

<i>ETC/WMF</i>	European Topic Centre on Waste and Material Flows http://waste.eionet.eu.int/
<i>ETC/Water</i>	European Topic Centre on Water (URL: http://water.eionet.eu.int/)
<i>ETC/WTR</i>	European Topic Centre on Water
<i>EU</i>	European Union (URL: http://www.europa.eu.int)
<i>EUFORES</i>	European Forum for Renewable Energy Sources
<i>EUNIS</i>	European nature information system: the ETC/NC managed system of databases containing the information on species, habitats and sites which is being used for assistance to the Commission on Natura2000 specifically and for EEA reporting needs in general.
<i>EUR</i>	European Union currency (euro)
<i>Euroairnet</i>	European air quality monitoring network
<i>Euromed</i>	The Euro-Mediterranean partnership develops and finances programmes in the audio-visual and cultural field through the MEDA mechanism (URL http://www.euromed.net/)
<i>European Parliament</i>	URL: http://www.europarl.eu.int/
<i>Eurostat</i>	Statistical Office of the European Community (URL: http://www.europa.eu.int/en/comm/eurostat/serven/home.htm)
<i>Eurowaternet</i>	Monitoring network designed to collect data on the status and trends of Europe's inland water resources in terms of quality and quantity and to analyse how this reflects pressures on the environment
<i>Flash animations</i>	Macromedia Flash is a programming tool for creating and deploying multimedia content. Flash is much used to design and deliver animation effects for the web. It requires comparatively low-bandwidth speeds.
<i>GEMET</i>	General european multilingual environmental thesaurus
<i>GEO-3</i>	Third global environmental outlook project by UNDP
<i>Gescom</i>	Online ordering system of the publications office.
<i>Gisco</i>	Geographic information system of the European Union
<i>GMES</i>	Global monitoring environment and security (URL: http://www.gmes.jrc.it)
<i>GMO</i>	Genetically modified organism
<i>HTTP</i>	Hyper text transport protocol
<i>ICIS</i>	International Centre for Integrative Studies, University of Maastricht, The Netherlands (URL: www.icis.unimaas.nl)
<i>IDA</i>	Interchange of data between administrations — operated by DG Enterprise of the European Commission
<i>IEA</i>	International Energy Agency (URL: http://www.ispo.cec.be/ida/ida.html)
<i>Inspire</i>	Infrastructure for spatial information in Europe (to provide relevant, harmonised and quality geographic information)
<i>Interest groups</i>	Collective collaboration areas for projects protected by user names and passwords
<i>IRENA</i>	Indicator report on the integration of environmental concerns into agricultural policy
<i>ISO</i>	International Organisation for Standardisation (URL: http://www.iso.ch)
<i>ITTAG group</i>	Information technology and telematics advisory group
<i>JRC</i>	Joint Research Centre of the European Communities — composed of 8 research institutes. They are located in Belgium, Germany, Italy, Spain and the Netherlands. (URL: http://www.jrc.org/jrc/index.asp)
<i>Kassel</i>	Centre for Environmental System Research, University of Kassel, Germany (URL: www.usf.uni-kassel.de)
<i>Kyoto Protocol</i>	The Kyoto Protocol was adopted in December 1997 by the 3rd Conference of the Parties to the UNFCCC. It set limits on the greenhouse gas emissions of industrialised countries and introduced mechanisms to facilitate the cost-effective implementation of the Protocol itself
<i>LIFE</i>	Financial instrument for the environment. It is a financial instrument for three major areas of action: environment, nature and third countries. While all three areas aim to improve the environment, each has its specific priorities

<i>MAP</i>	UNEP's Mediterranean action plan
<i>MEDA programme</i>	The MEDA programme is the principal financial instrument of the European Union (EU) for the implementation of the Euro-Mediterranean partnership (Algeria, Egypt, Jordan, Lebanon, Morocco, Syria, Tunisia, Turkey and the Palestinian Authority (URL: http://europa.eu.int/comm/external_relations/med_mideast/intro/)
<i>Medstat</i>	Regional programme for cooperation of Euro-Mediterranean statistical institutes (URL: www.euromed.net/economic-chapter/MEDSTAT/default.htm)
<i>Member States</i>	Countries of the European Union
<i>Natura 2000</i>	European ecological network of special areas of conservation, called to integrate nature protection requirements into other EU policies such as agriculture, regional development and transport (URL: http://europa.eu.int/comm/environment/nature/home.htm).
<i>NFP</i>	National focal point (URL: http://www.eionet.eu.int/)
<i>NIS</i>	Newly independent states
<i>OECD</i>	Organisation for Economic Cooperation and Development (URL: http://www.oecd.org/)
<i>OlisNet</i>	The OECD online information services. OLISnet is an online information and interaction facility for Member country administrations and other authorised organisations/agencies. It provides access to documents, publications, statistical products, committee discussion groups, other key information and to public information on the OECD web site
<i>Pan-European</i>	Europe from the Atlantic to the Ural Mountains and from the Arctic to the Mediterranean Sea.
<i>PCPs</i>	Primary contact points
<i>Phare</i>	An EU initiative for economic integration with central and eastern European countries. The 13 countries are: Albania, Bosnia-Herzegovina, Bulgaria, Czech Republic, Estonia, FYROM, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia. (URL: http://www.europa.eu.int/comm/dg1a/PHARE/index.htm)
<i>Publikit®</i>	Software specifically designed by Ugland IT Group AS, comprises tools and modules to allow complete report publishing on the web. Users can compile reports on their local computers and then publish them on the web at the simple click of a button
<i>REM</i>	Reporting on environmental policies and measures. The project focuses on developing guidance and new frameworks to help countries provide information on policy effectiveness where required under EU legislation
<i>Remas</i>	3-year old project designed to examine environmental management systems (EMS's) currently in place in business and industry across EU Member States. Remas aims to demonstrate that companies and organisations that implement EMS's show better environmental performance overall
<i>RNC</i>	The EEA's reporting and networking coordination department
<i>ROD</i>	Reporting obligations database
<i>SD online</i>	Access to significant sustainable development online web sites — part of the Envirowindows (URL: http://sd-online.ewindows.eu.org/)
<i>ShAir scenario</i>	A scenario study analysing and evaluating a common framework for assessing regional and local air pollution and EU-wide emission of greenhouse gases
<i>sixth environment action programme</i>	'Environment 2010: our Future, our choice programme (URL: http://europa.eu.int/comm/environment/newprg/index.htm)
<i>TACIS</i>	Technical assistance to the commonwealth of Independent States, a European Union initiative. The 13 partner countries are: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Mongolia, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.
<i>TERM</i>	Transport and environment reporting mechanism
<i>TERRIS</i>	Geographic information system on terrestrial environment

<i>Tremove</i>	Environment and transport simulation model (URL: http://europa.eu.int/comm/environment/air/tremove/tremove_model_dev.htm)
<i>TFEIP</i>	UNECE task force on emission inventories and projections
<i>UN</i>	United Nations (URL: http://www.un.org/)
<i>UNECE</i>	United Nations Economic Commission for Europe (URL: http://www.unece.org/)
<i>UNEP</i>	United Nations Environment Programme (URL: http://www.unep.org/)
<i>UNEP/MAP</i>	UN Environment Programme's Mediterranean action plan
<i>UNEP-WCMC</i>	The UNEP World Conservation Monitoring Centre provides information for policy and action to conserve the living world (URL: http://www.unep-wcmc.org)
<i>URL</i>	Uniform resource locators are short address strings that identify resources in the web documents, images, downloadable files, services, electronic mailboxes, etc. For example: www.eea.eu.int/documents
<i>VISIT</i>	EU-funded project on destination indicators in support of eco-labelling policies
<i>Wastebase</i>	Electronic catalogue of waste management facilities, plans, competent authorities etc
<i>Water Framework</i>	Directive 2000/60/EC of the European Parliament and of the Council
<i>Waterbase</i>	Electronic catalogue of water management facilities, plans, competent authorities, etc
<i>WEEE</i>	waste from electric/electronic equipment
<i>WFD</i>	Water framework directive
<i>WGEM</i>	Working group on environmental monitoring
<i>WHO</i>	World Health Organization (URL: http://www.who.int/)
<i>XML</i>	Extensible markup language
<i>XML-RPC</i>	Remote procedure calling using HTTP as the transport and XML as the encoding
<i>Zope</i>	Z object publishing environment. Zope is a framework for building web applications. A web application is a computer program that users access with a web site that provides not only static information to users but lets them use dynamic tools to work with an application.

Annex 1: Printed publications, 2002

Environmental assessment reports

Environmental signals 2002, assessment report No 9

Environmental issues reports

Europe's biodiversity — biogeographical regions and seas (part I), issue report — web only

Genetically modified organisms (GMOs): the significance of gene flow through pollen transfer, issue report No 28

Children's health and environment — A review of evidence, issue report No 29

Towards an urban atlas: Assessment of spatial data on 25 European cities and urban areas, issue report No 30

Energy and environment in the European Union, issue report No 31

Paving the way for EU enlargement (TERM 2002), issue report No 32

Greenhouse gas emission trends and projections in Europe, issue report No 33

Topic reports

The ShAIR scenario, topic report No 12/2001

Analysis and comparison of national and EU-wide projections of greenhouse gas emissions, topic report No 1/2002

Hazardous waste generation in EEA member countries, topic report No 14/2001

Biodegradable municipal waste management in Europe, Part 1: Strategies and instruments, topic report No 15/2001

Air pollution by ozone in Europe in summer 2002, topic report No 6/2002

Air Quality in the Phare countries 1997, topic report No 16/2001

Annual Topic Update — Nature conservation 2000, topic report No 3/2002

Technical reports

Update of the EMEP Atmospheric Emission Inventory Guidebook, technical report No 30

Annual European Community CLRTAP emission inventory 1990–2000, technical report No 91

Annual European Community CLRTAP emission inventory 1990–99, technical report No 73

National and central estimates for air emissions from road transport, technical report No 74

Annual European Community Greenhouse Gas Inventory 1990–2000, technical report No 75

Testing of Indicators for the Marine and Coastal Environment in Europe Part 2, technical report No 84

Remote sensing's contribution to evaluating eutrophication in marine and coastal waters, technical report No 79

The rivers of the Black Sea, technical report No 71

Testing of Indicators for the Marine and Coastal Environment in Europe Part 1, technical report No 84

Assessment of data needs and data availability for the development of indicators on soil contamination, technical report No 81

Proceedings of the Technical Workshop on Indicators for Soil Sealing, technical report No 80

Eionet technical workshop on indicators on soil contamination, technical report No 78

Second technical workshop on contaminated sites — Workshop proceedings and follow-up, technical report No 76

Land and commerce registry as an instrument for sustainability, technical report No 88

Corine land cover update, technical report No 89

Eionet workshop on waste and material flows — fourth annual workshop, Bratislava, Slovak Republic 11 and 12 October 2001, technical report No 63

Review of selected waste streams. Sewage sludge, construction and demolition waste, waste

oils, waste from coal-fired power plants and biodegradable municipal waste, technical report No 69

Towards a global biological information structure, technical report No 70

Development of common tools and an information structure for the shared European environment information system, technical report No 83

DAFIA - Tool for dataflow analysis for integrated assessment, technical report No 72

Implications of EEA/EU Enlargement for state-of-the-environment reporting in the EU and EEA Member States, technical report No 82

General products

EEA strategy paper (web only)

EEA annual work programme 2002

EEA annual report 2001

Information for improving Europe's environment (update, EN only)

EEA publication catalogue 2001



Annex 2: Key figures for budgetary and staff resources

Income 1999–2003

Table 1

(million EUR)

	1999	2000	2001	2002	2003
EU	18.0	17.9	18.6	19.4	21.4
EFTA	0.3	0.3	0.4	0.4	0.4
New member countries				2.3	5.8
Miscellaneous revenues	0.1	0.4	2.3	3.2	0.0
<i>Total</i>	18.4	18.6	21.3	25.3	27.6

Expenditure (E) 1999–2001, budget (B), 2002 and 2003

Table 2

(million EUR)

	1999	2000	2001	2002	2003
	E	E	E	B	B
Staff & administration (titles 1 and 2)	9.25	9.9	10.8	13.1	14.8
Operational expenditure (title 3)	9.25	8.7	10.5	12.2	12.8
<i>Total</i>	18.5	18.6	21.3	25.3	27.6

Table 3

Operational expenditure (Title 3) and related staff allocations (staff months) for 2001–2003 by programme area and project group

Programme area and project group	2001		2002		2003	
	1 000 EUR ¹	Months	1 000 EUR	Months	1 000 EUR	Months
1. Topic databases and reporting	2 390	62.5	2 712	84	3 590	83
1.1. Socio-economic data	0	5.5	0	0	30	1
1.2. Pressures	780	20.0	800	21	1 140	26
1.3. State and quality	1 610	37.01	912	63	2 420	56
2. Integrated assessments	1 800	113.0	2 862	1563	450	151
2.1. Environmental Issues	1 100	50.5	1 770	36	1 890	55
2.2. Regional assessments	150	16.5	240	9	250	6
2.3. Sectors and instruments	450	36.0	729	102	1 110	73
2.4. Research dissemination etc	100	10.0	123	9	200	17
3. Periodical reporting	750	52.0	835	7	430	72
3.1. The five year report	50	8.0	0	3	180	29
3.2. Regular indicator-based report	700	44.0	835	76	250	43
4. Reporting system support	1 170	171.0	1 221	222	2 095	252
4.1. Scenarios, methodologies, guidelines	510	34.5	418	46	1 130	61
4.2. Data and information management	120	39.0	270	50	300	62
4.3. Public access to information	540	52.0	533	49	650	61
4.4. Institutional networking	0	45.5	0	77	15	68
5. Service and network infrastructure	1 720	98.5	1 979	159	2 150	168
5.1. Information and networking technology	780	38.0	981	61	1 200	56
5.2. Information capacities and services	940	60.5	998	98	950	112
Total allocated to projects	7 830	497.0	9 609	621	11 715	629
Expert meetings. translations	832	—	583	0	1 050	0
Total	8 662	497.0	10 192	621	12 765	629

Footnotes:

1the figures for 2001 and 2002 are based on commitments (budget).

2only grades A and B

Staff development, 1997–2002 (December), by category

Table 4

Category	1997	1998	1999	2000	2001	2002
A (academic staff)	25	27	30	28	33	37
B (technical assistants)	12	16	16	17	17	24
C (secretarial staff)	19	20	22	20	18	20
D (service staff)	2	2	3	3	3	4
National experts	5	8	8	8	9	10
Total	63	73	79	76	80	95

Staff by category and gender on 31 December 2002

Table 5

Category	Female	Male
A	10	27
B	9	15
C	20	0
D	1	3
National experts	1	9
Total	41	54

Staff by category and nationality on 31 December 2002

Table 6

	Austria	Belgium	Bulgaria	Denmark	Estonia	Finland	France	Germany	Greece	Iceland	Ireland	Italy	Norway	Poland	Portugal	Romania	Slovenia	Spain	Sweden	Switzerland	the Netherlands	United Kingdom	Total
Nat. exp.					1		2	2					1				1			1	2		10
A		3		5		1	3	2	1	1	1	2		1	1	1		1	5		3	6	37
B		1	2	1	8		1	2				1			1			1	2		1	3	24
C				8			2	1				2			3			3	1				20
D				4																			4
Total	1	5	1	25	1	2	7	7	1	1	1	5	1	1	5	1	1	5	8	1	6	9	95

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