

Annual report 1999

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Preface by EEA Executive Director, Domingo Jiménez-Beltrán

In 1999 I reported to the European Parliament on the first five years of the Agency. My proud conclusion was that the Agency had done well.

The external conditions have been favourable. The Agency came into being at the right time and out of need, it got the right legal mandate, it got the continuous support of the European Parliament, it has been progressively recognized and used by the European Commission, and has been considered a rewarding project by Member States.

The Agency has made good use of this favourable climate. We have carefully built a new organisation specifically adapted to the task in hand: a small (less than 70) and flexible outward-looking unit networking closely with the best capacities in the Member States and European Commission.

In 1999 there were clear signs of the Agency coming of age:

- The European Environmental Information and Observation Network EIONET, which uses and builds up national monitoring and information capacities and expertise, is a reality and could justify by itself the Agency project.
- The Agency and EIONET are delivering quality products and services on time. The second reporting cycle was completed with the publication of the *Environment in the European Union at the turn of the century* report last year, and the basis was established for carrying out a yearly benchmarking of environmental progress (or lack thereof), in the form of Environmental Signals reports.
- Finally, the Agency has guaranteed better public access to information and more public participation, by opening in 1999 a completely overhauled Reference Centre on the Internet with relevant data and information.



So after five years, both policy makers and the civil society are better informed and better empowered to make the necessary changes in production and consumption patterns in order to reach environmental and sustainable goals.

Looking ahead, the coming years will be no less challenging. Much has still to be done to fulfil the mandate set out in the Regulation. The information system and capacities must be reinforced and updated to produce not the Best Available Information, but the Best Needed Information: information that is fully relevant for policy making and easily accessible to the general public.

The next 5 years will thus require further effort for the improvement of the efficiency and effectiveness of the Agency's work and of the quality and scientific soundness of its products for it to remain a credible independent source of information. It will also require institutional support to get the necessary budgetary resources consistent with the mandate, to clarify the policy agenda to be served, and to reinforce the Community strategy for information and communication to channel Agency results.

At the same time, the Agency faces the challenge of enlargement. The Agency is the first EU body open for membership to the countries that have applied for EU membership. Negotiations have already started and the first new members are expected to join the Agency next year.

The recognition and support that the Agency work has received from the European institutions, and the inspiration and push from many individuals, scientists, industry federations and NGOs will therefore be as necessary and welcome in the coming five years as they have been in the past.

The progress during the first five years was possible thanks to the extremely motivated

staff of the Agency, the competence and flexibility of our national partners of the EIONET, the expertise and dedication of the European Topic Centres, and the support from the Joint Research Centre and Eurostat.

Furthermore, we would not have got very far without the guidance of our Scientific Committee, allowing the Agency to keep its unique added-value as an interface between science, policy makers and the public.

My final personal recognition should go to the Members of the Management Board and of the Bureau and, in particular, to Derek Osborn, the Chairman of the Board for the last 5 years. His inspired, result-seeking and softly-efficient chairmanship has made the difference.

Domingo Jiménez-Beltrán
Executive Director, EEA



Foreword by the outgoing Chairman of the Management Board, Derek Osborn

The European Environment Agency has made enormous progress during the past six years from its first beginnings in 1994 to the confident player on the European environment scene that we know today.



The progress has been punctuated and marked by some of its major reports. The Dobbris assessment played a major part in illustrating the problems facing the whole of Europe in the pan-European Environment Ministerial Conference in Sofia in 1995. By the time of the Aarhus conference in June 1998 the analysis had got much deeper. For that occasion the Agency had prepared its major Dobbris + 3 report showing the changes in the state of the environment and the changing pressures on it. By common consent that was the Agency's best report until then. It illuminated the progress and the continuing problems in Europe's environment in a vivid and compelling way.

In 1999 that report was surpassed in its turn by the report on Environment in the European Union at the turn of the century, which was presented with great success to the Finnish Informal Council, to the Parliament and in all the capitals of Europe. More importantly still, it is being used by the Commission and others as one of the corner stones for the Commission's new global assessment, for the sixth action programme and for the sustainable development strategy for Europe.

As I hand over the chair of the Management Board to Kees Zoeteman after five years in office I believe that I leave an Agency that is in good heart and steadily and rightly growing in authority and influence. The key to continuing success is the close professional working relations which are steadily being forged between the Agency on the one hand, and the Commission, Member States and the Parliament on the other. Supported by the vital work of the Topic Centres the Agency plays a key role in setting out the facts about the environment, and how it is

changing. Increasingly its assessment and scenario work also illuminates the underlying driving forces and pressures and prospects for future changes, whether favourable or unfavourable.

The Agency has to work closely with the countries of Central and Eastern Europe, particularly the accession countries, as well as with the countries already in the Union. For the Global Assessment review, it has been necessary for the report to go beyond the boundaries of the existing Union to give a complete picture of the situation and the problems ahead, especially anticipating enlargement. Now at last the Commission has obtained a mandate to negotiate full membership of the Agency for the accession countries. I hope that rapid progress on this may be possible during 2000.

As I look to the future I permit myself three personal observations about future directions.

Now that the Agency has completed its first task of establishing itself as an indispensable element at the European level I believe that over time it will need to be somewhat braver in drawing attention to differences between and within member states. Some countries have much more or better quality information than others on some subjects. The Agency must find ways of saying this – not in a critical or hostile spirit, but as a body committed to transparency and openness. It is only when we all face up to deficiencies in information openly and bravely that we can move on to consider how they might be remedied. There is work to be done here in following through from the Bridging the Gap conference in 1998, and in highlighting the very differing performance of countries under the requirements of the various Reporting Directives.

If comparisons on the state of information are needed, how much more are



comparisons of the state of the environment and of the pressure and change in it? Here too the Agency will in my opinion need to become braver over time. The state of the environment and progress in improving it does vary considerable between and within countries. We need to face up to this much more openly so as to encourage those who are doing less well to improve their efforts and to seek out ways of helping them where necessary. Of course there are many good reasons why the environment differs, and many constraints to improving things. But none of these are reasons for hiding the differences or failing to bring them out clearly in the EEA's reports as a spur to action and improvement.

My third point arises from the very success of the Agency. As the tasks of the Agency have increased so have the pressures on its limited resources. The provision made by the budgetary authorities has unfortunately not kept pace with the flood of requests for new work. The system is close to breaking point in this respect. All concerned with

the Agency will have to exert themselves to secure proper provision for its work in the years ahead if it is to deliver what we all want it to.

The success of the Agency is the success of all those who work for it and with it. I cannot leave the Agency without paying tribute to the quality, enthusiasm and dedication of all its staff in Copenhagen, of all who support it in the Topic Centres and in the EIONET network, of the Scientific Committee and the Focal Points. I salute the hard work and commitment of my colleagues in the Management Board. Above all I honour the vision and illustrious leadership of the Executive Director, Domingo Jimenez-Beltran, who has inspired and shaped the achievement of the whole enterprise.

May you all carry the work forward to new heights in the new century!

Foreword by the Chairman of the Management Board Kees Zoeteman

As incoming chairman of the Management Board, I congratulate the Agency on its achievements during the last years of the twentieth century. At the threshold to the new millennium, the EEA is a central organisation in Europe for the management of environmental information. It has a key role to play in the preparation of policy decisions by the European Commission, the European Council and the European Parliament. Not only on the basis of information gathered through the EIONET – the European Environmental Information and Observation Network – and made available in Agency reports and in the European Reference Centre for Environmental Information, but also as an Agency capable of projecting the impact of future developments on the quality of the environment, it will expand its role in the coming years.

The task ahead is not a simple one. The future holds a number of challenges that will require the support of all stakeholders in order to be successfully met.

A first priority is the expansion of the Agency to include the candidate countries of Central and Eastern Europe and the Mediterranean area. The EEA is one of the first institutions of the EU where the process of enlargement takes shape. It is expected that within a year many of the accession countries can formally join the Agency, resulting in a total of 32 members. This requires a restructuring of the work of the Management Board and related activities during the year 2000. Maintaining and further improving the quality of environmental information provided by the Agency, while expanding geographically, is the primary focus of the Management Board and the Executive Director. Also the Scientific Committee has an important role to play in safeguarding the quality of the work.

The establishment of the EEA is not finished. In certain areas, the minimum critical mass for reliable execution of the present tasks has not yet been reached. Extra financial means related to



enlargement will help to secure this minimum capacity.

Obtaining this minimum critical mass while geographical expansion takes place is not the only priority. The second is to reach the public at large with the products of the Agency. The Internet will play a key role in this respect.

A third priority is a deepening of the expertise profile of the Agency. This will only materialise when further growth of the Agency's budget takes place.

Furthermore, the structure of Topic Centres will be revised in 2000. Topic Centres provide the Agency with an essential network of expertise. The aim of the restructuring exercise is to improve efficiency and integration capacity. The result will be improved reporting on the implementation of EU legislation as well as an improved capability to help the Commission to initiate new policies.

Our strategy is to seek extra funding, not only from DG Environment but also from other potential partners, such as other General Directorates of the Commission and the member countries, for activities that are compatible with our core activities and provide operational synergy.

The activities of the Agency will continue to be closely linked to the priorities of the European Commission. Environment Commissioner Margot Wallström has indicated that information on the work plan of DG Environment will be provided early enough to allow the annual work programme of the Agency to be aligned.

Although growth has been restricted in the recent past, the Management Board sees opportunities for continuing the expansion of the Agency to its anticipated size during the next five years. The partners, the staff and the Management Board of the Agency are committed to providing reliable information to support the governments and citizens of Europe in achieving and safeguarding sustainable development and improving the quality of life.

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1999 in brief

A stronger mandate

1999 was a milestone in the development of the mandate of the Agency. A thorough review and renewal of the institutional framework clarified and refined the mission of the Agency and defined the main challenges for the coming years, thus giving fresh impetus to the Agency's work.

The legal basis for the Agency is Council Regulation (EEC) No 1210/90. A revision of this regulation was adopted in April 1999 in the form of Council Regulation (EC) No 933/1999, covering the period until the end of 2003, when the situation will be reviewed again. The mandate is set out in detail in Articles 1-3 of the amended regulation.

The new mandate re-enforces the Agency's tasks of reporting progress towards sustainable development, providing support for reporting in accordance with the obligations of EC legislation and international conventions, co-ordinating and supporting the development of monitoring systems, and assuring public access to environmental information. A new task is to support the Commission in the diffusion of relevant research results.

The mandate now also enables the Agency to take a longer-term management vision, whilst requiring regular evaluations of the Agency's activities and progress.

The evaluation of the Agency's performance started in 1999 and will be finished in July 2000. The evaluation covers the Agency and EIONET, and will analyse the extent to which the Agency's objectives have been achieved in an efficient and effective way in the period 1994-1999, with a view to improving performance in the future.

1999 was also the first year of the second multiannual work programme 1999-2003. Within the overall framework of the regulation, this programme clarifies the mission of the Agency, defines seven main challenges for the years to come and includes an indicative multiannual budget.

During 1999 it became clear that the Agency is facing a major expansion in the immediate future in anticipation of the on-going enlargement of the European Union. Applicant countries are thus planning to join the Agency before they attain membership of the European Union. This development is expected to almost double the number of member countries of the Agency in 2001 or soon after.



The Agency's mission statement for 1999-2003

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

The seven challenges

1. Further develop and maintain EIONET in Europe;
2. Build the European Reference Centre for Environmental Information;
3. Develop an integrated monitoring to reporting process;
4. Identify emerging issues of environmental importance;
5. Support directly the framing and development of environmental policies;
6. Support implementation and evaluation of environmental policies;
7. Support the environment chapter of the enlargement.

New publications

1999 was a very productive year for the Agency. The number of distinct publications (i.e. excluding summaries and similar) was:

4 assessment reports, 4 issues reports, 12 topic reports and 27 technical reports. A full list is given in Annex 1, while reports of general interest are described below.

Substantial support for policy action

As defined in the institutional framework, the role of the European Environment Agency is to support policy action in the environmental field in Europe.

'Turn of the century' report

The publication of *Environment in the European Union at the turn of the century* was the main event of 1999. The report provides comprehensive information to policy-makers and the general public on the present state of Europe's environment and, equally important, on the outlook for the coming years. The report was a major

contribution to the Global Assessment of the Fifth Environmental Action Programme, which the European Commission prepared for presentation at the Helsinki Summit in December.

The picture was that, in general, environmental quality is not improving significantly. There has been real progress in some areas, such as acidification and water quality in rivers, but the opposite in others, such as waste. The report documents the current and future unsustainable

development of some economic sectors - transport, energy, agriculture, household consumption and tourism.

It is now defined in the mandate of the Agency, that a 'state and outlook' report will be produced every five years.

Environmental signals

The foundation was laid for the regular publication of indicator-based assessments of progress in implementing environmental policies and in integrating environmental concerns in other policy areas. A draft of the first report was presented at the Helsinki Summit and the final version will be published in 2000.

Together with the future 'state and outlook' reports, these regular 'Environmental signals' reports will form the backbone of the Agency's policy support publications. Together, they will help policy makers to develop strategic long-term environmental policies for Europe, to follow their implementation and to evaluate their effectiveness.

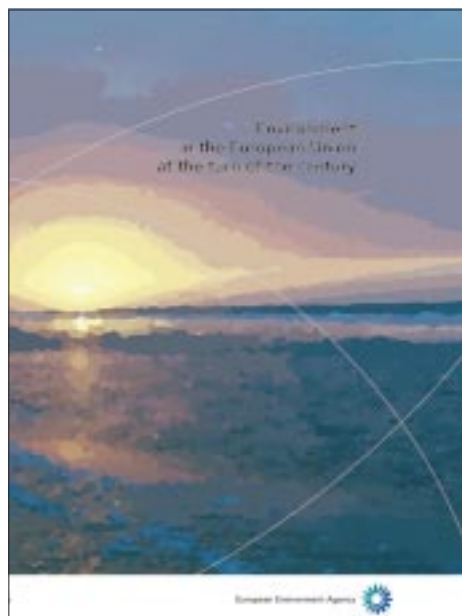
Headline indicators

The purpose of this work is to provide policy makers and the general public with a simple overview of environmental trends, drawing together complex socio-economic and environmental factors into a small number of headline indicators. The Agency is cooperating closely with the Environment Policy Review Group (a group of top civil servants in the environment field in the national administrations of the Member States) the Environment General Directorate of the Commission and Eurostat to define such indicators.

Sectoral indicator-based reporting mechanisms

The Agency cooperated closely with DG Environment, DG Transport and Eurostat on the development of a sectoral indicator-based reporting mechanism for the transport sector. A first draft report *Are we moving in the right direction?* Indicators on transport and environment integration in the EU featured on the agenda of the Transport Council in December and was presented at the Helsinki Summit. The final version will be published in 2000.

Possibilities for similar cooperation in other relevant sectors, such as agriculture and energy, are being explored. However, the future of this work depends on





additional funding outside the Agency budget.

Monitoring progress towards integration

The Commission presented a report on progress with integration to the Helsinki Summit. To complement this work, the Agency has compiled an inventory of measures related to the integration of environmental concerns into key economic sectors. The report covers energy, transport, industry and agriculture. The report will be published in 2000.

The Agency's work on sectoral indicator-based reporting mechanisms is aimed at supporting the integration exercise in the coming years.

Other important policy support activities in 1999:

- Support to National and EU Parliamentarians: Project Conventions Watch has the objective of informing parliamentarians about the content, development and implementation of international environmental conventions.
- Support to the Implementation of the Convention on Biological Diversity: Consolidation and further development of the European Community Clearing

House Mechanism to promote information exchange for technical and scientific cooperation.

- Mapping Europe: proposals for Corine land cover 2000, with good support from the Commission and member countries.
- Preparing a set of urban environment indicators in close cooperation with DG Environment.

Continued support for enlargement, though not without difficulties

The cooperation established in 1996 between the Agency and PHARE (The EU Programme for Central and Eastern Europe) countries has been dogged in 1999 by funding and continuity issues. The reasons are on the one hand the phasing out of PHARE multi-country programme support and on the other hand the application by eleven candidate countries to become full members of the Agency.

Progress was made on starting negotiations for candidate country membership of the Agency and in longer term funding strategies. However, it became increasingly apparent during 1999 that interim funding mechanisms would have to be found to enable continuity and avoid relapse in achievements made to date. With no new funds available, over 50 projects stopped during the course of 1999 and only a few will carry over to 2000.

As a result of the joint efforts of various Commission Services, the Agency and PHARE countries, a solution was adopted in order to preserve and continue some activities over the year 2000 until PHARE country membership of the Agency falls gradually into place (starting in 2001). In this respect, additional PHARE funding amounting to EUR 3 million was made available for the continuation of current work areas. However, the Agency has not received funding for the co-ordination and support work by Agency staff for the PHARE projects.

Figure 1

PHARE countries



Two calls for tender were launched in June by the PHARE Programme to cover the continuation of the work of PHARE Topic Links, further contributions to the Agency reporting and EIONET telematic development, information dissemination, and the work of the PHARE expert team in the Agency. To ensure a normal continuation of work and to bridge the gap until the tenders were in place, the Agency provided the PHARE expert team with four-month auxiliary contracts to cover the period until the end of 1999.

Despite this uncertainty, substantial progress was made in cooperation with PHARE countries. The EIONET is now fully in place for all ten PHARE accession countries and further extension to Bosnia-Herzegovina and the former Yugoslav

Republic of Macedonia has been completed. The telematics networks are already bringing benefits in the form of strengthened cooperation and the delivery of data and information for Agency reporting activities, such as *Environment in the European Union at the turn of the century*.

Cooperation between PHARE partners, Eurostat and the Agency is assisting in the preparation of the Joint Eurostat-OECD questionnaire to member countries in 2000.

Better tools

In order to provide this support for policy action, the work of the Agency builds on three main pillars:

- w networking with national administrations and international organisations and programmes;
- developing a cohesive, simple, low-cost monitoring-to-reporting system to provide timely, comparable and harmonised data and integrated assessments, and
- acting as a Reference Centre for information on the environment.

These pillars and their interactions and role as support for policy action are illustrated in Figure 2 below.

Networking: The EIONET takes shape

In order to produce its reports and services, the Agency relies on input from a wide range of sources in member countries and PHARE countries, organised in the European Environment Information and

Observation Network, EIONET. The Agency acts as the main node of this network. The overall picture with progress on EIONET implementation is a positive one.

The European Environment Information and Observation Network

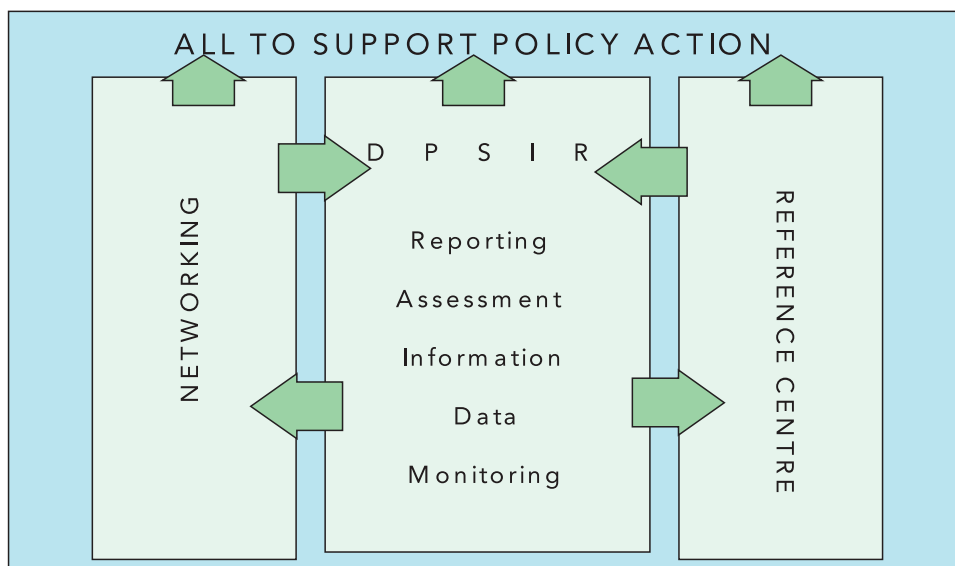
EIONET is a network of national environmental institutions and bodies set up and co-ordinated by the Agency. The network consists of European Topic Centres (ETCs), under contract to the Agency and covering key environmental topics; National Focal Points (NFPs), as national co-ordinating institutes, and National Reference Centres (NRCs), as centres of expertise in participating countries.

EIONET is also an Internet-based telematics network, which connects the various organisational elements electronically and provides tools (hardware and software) to facilitate efficient electronic communication, data flows and document exchange.

The EIONET national networks are taking shape and communication between EIONET partners is being helped

EEA's three instrumental pillars

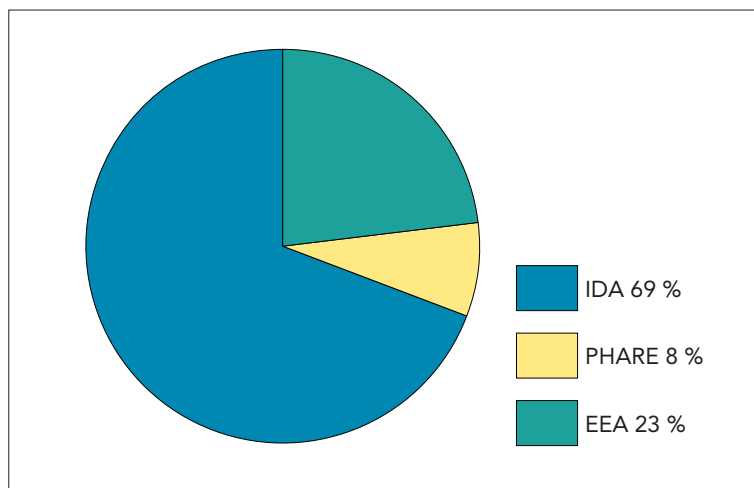
Figure 2



April 1998

Figure 3

Funding sources for the EIONET telematics network in 1999



enormously by the EIONET telematics network, which is now fully in place for most of the Agency member countries and PHARE countries.

The support received from the DG Enterprise Interchange of Data between Administrations Programme (IDA) continued in 1999 with further agreements to support the management of the network and develop applications to improve the services offered for the upcoming years. PHARE also continued to make a contribution, though less than in previous years.

Enhancements foreseen include better integration of the EIONET servers and new search tools. In addition agreement was reached to develop 'data exchange models' to facilitate dataflow between EIONET partners and to link EIONET with the development of the European Community Clearing House Mechanism for the Convention on Biological Diversity (see above)

New basis for cooperation with EC services

Statistical Office of the European Community (Eurostat)

In October a new Memorandum of Understanding, elaborating on the

original agreement from 1995, was signed by the two organisations. The new agreement is based on the principles of reciprocity and work sharing with the objectives of:

- assuring a regular flow of information between the two organisations;
- improving the quality and compatibility of the data;
- improving access to this data for clients, partners and the general public;
- streamlining data demands to countries so as to reduce the burden on respondents.

In parallel to these developments, cooperation in 1999 focused on requirements for indicator based reports and identification priorities for the Joint Eurostat – OECD questionnaire to member countries in 2000.

Joint Research Centre of the European Community (JRC)

The Memorandum of Understanding of 1995 was expanded upon in 1999 with the signing of a new memorandum and the development of a new joint work plan. The new work plan emphasises the importance of providing support to policy making through dedicated joint activities related to issues such as climate change, chemicals of concern and protection of natural resources.

Increased international networking

Helsinki Commission for the Protection of the Marine Environment in the Baltic Sea (HELCOM)

A joint work plan was agreed towards the end of 1999 following the visit of HELCOM's new Secretary General to the Agency.

Oslo-Paris Commission for the Protection of the Marine Environment in the Northeast Atlantic (OSPAR)

Following the signing of a Memorandum of Understanding in 1998 work is now underway to harmonise and streamline the collection of data from member countries for the Agency and OSPAR.

Organisation for Economic Cooperation and Development (OECD)

The Agency is a member of the OECD expert advisory panel for its environmental outlook and strategy project. Using economic models, this project will generate an economy based vision of environmental conditions in 2020 based on a 'business as usual' scenario.

United Nations Environment Program (UNEP)

In 1999, UNEP and the Agency prepared a joint report on the state of the Mediterranean Sea, which will appear in 2000. The messages of the report were presented by the Agency at the ministerial meeting of signatories to the UNEP Mediterranean Action Programme (MAP) in Malta. A proposal for a follow-up report based on indicators was made. Within this context, the Agency will sign a supplementary Memorandum of Understanding with the MAP to prepare a joint work plan on Mediterranean issues.

The Agency became signatory to Project Conventions Watch and provided considerable support for the implementation of the European Community Clearing-House Mechanism for the UN Convention on Biological Diversity (both mentioned earlier).

Finally, the Agency and UNEP have been preparing the third joint annual message on soils, which will be published in 2000,

and have started work on UNEP's next Global Environmental Outlook (GEO-3), due for publication in 2002.

World Health Organisation (WHO)

WHO made an important contribution to the *Environment in the European Union at the turn of the century* report. Joint work on specific issues such as water resources and health, transport and health and children and environmental health was also carried out in 1999. These have in particular been focused on the preparations towards the 1999 London Ministerial Conference on Environment and Health. Support to this conference and to its immediate follow-up remained the focus of the Agency's support to WHO during 1999.

Environmental Protection Agency of the United States of America (USEPA)

Joint work in 1999 focused on the possibility of making use of each other's Internet tools for accessing information. Information has in particular been exchanged on the Agency's Catalogue of Data Sources (CDS) and General Multilingual Environmental Thesaurus and the USEPA's Environmental Data Registry.

Monitoring-to-reporting: improved data flows

The European Topic Centres for air quality, air emissions, inland waters and nature conservation have made notable progress in support of DG Environment's reporting activities. The European Topic Centre for Marine and Coastal Environment is working closely with the regional seas conventions to improve harmonisation of data collection and reporting. The current review of the European Topic Centre for Land Cover has highlighted the need to update the land cover database and to exploit more spatial data to provide integrated spatial analysis needed for Agency reporting. The Agency is also working with other European institutions, in particular Eurostat, to streamline environmental reporting activities and increase cooperation.

Figure 4 EEA website

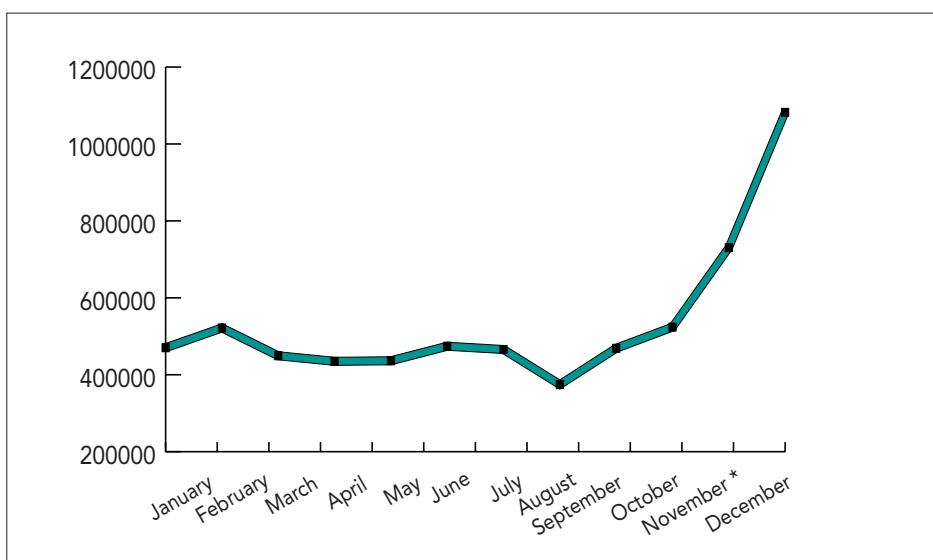


Five areas have been identified as priority for data flows from the national level to ETCs and EEA using the EIONET telematics network. These are:

1. the Exchange of Information Decision for air quality;
2. the United Nations' Framework Convention on Climate Change (UNFCCC) and the United Nations' Economic Commission for Europe Convention on Long-Range Transboundary Air Pollution (UNECE CLRTAP);
3. implementation of Eurowaternet;
4. development of a joint strategy with the marine conventions;
5. designated areas for nature conservation.

These priorities were discussed with member countries during the course of 1999 and ideas formulated on how to take them forward towards full implementation.

Figure 5 Hits at the website 1999





A complete overhaul for the Agency website: www.eea.eu.int

Work on redesigning and reorganising the website for the Agency to meet the new mandate to be a reference centre for environmental information started at the beginning of 1999.

The redesigned website was launched in October. It gives users access to a wide range of environmental information produced by the Agency and its partners, as well as to information from other national and international sources. The website contains most of the reports produced during the five years of existence of the EEA, comprising information of interest for scientific and technical users as well as for policy makers and the general public.

The website also gives users access to the environmental data used by Agency to draw the conclusions in its own environmental reports.

A series of tools assist users to find the information that they are looking for and then to manipulate and extract the data needed for their own uses.

The popularity of the website has been constantly on the increase. In December 1999 the milestone figure of 1 million 'hits' (individual actions on the website) during one month was passed for the first time. The number of visitors in the same month was over 55 000.

Raising public awareness: the Princes' Award

The Princes' Award aims to increase the public's awareness of environmental issues in Europe by recognising and promoting film and multimedia publications on environmental themes.

This year the award ceremony took place during the Copenhagen Green Mermaid Festival, the annual environment week in Copenhagen which provides governments, local authorities and businesses with a show-case in which they can present their environmental activities to the public.

A total of 87 applications from 20 nations, with most entries from Germany and UK followed by Spain, Ireland and Denmark, were received in 1999.

This year's winners in the three categories were as follows:

- Documentary and Factual: Poul-Erik Heilbuth from Danish DR TV for a documentary on the scrapping of ferries in India
- Fiction: John Coates of VARGA TVC Ltd. England for an animation on wildlife preservation
- Multimedia: Svein Tveitdal of UNEP/ GRID-Arendal, Norway for a CD-ROM of reports on the state of the environment from 16 countries in Central and Eastern Europe.

The prize-giving ceremony was broadcast to over 70 million people around the world.

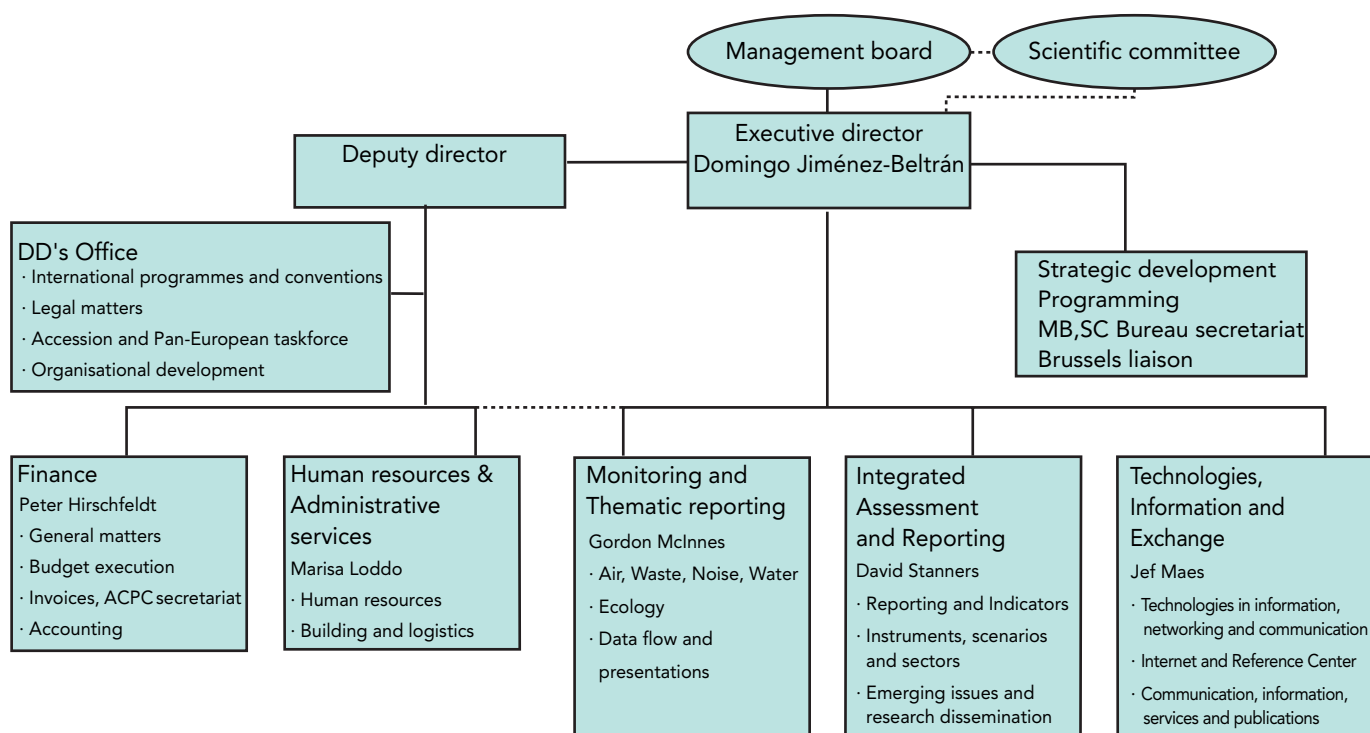
Figure 6

Windmill wings outside Copenhagen City Hall during the Green Mermaid Festival



EEA organigramme

Figure 7



New names and faces

In September, a new European Commission was appointed for the next 5 years; Ms Margot Wallström of Sweden replaced Ms Ritt Bjerregaard as Commissioner for Environment. The new Commissioner visited the Agency for the first time on December 9, when



various ways of reinforcing Agency input into the work of the European Institutions were discussed. Ms Wallström emphasised the important role of the Agency in presenting and analysing data on the state of the environment and underlying trends as input into the policy process. She also stressed the need to reach out to citizens with information.

In November, Kees Zoeteman was elected Chair of the Management Board. He replaces Derek Osborn, who has guided Agency development during its first five years of existence.

Mr Zoeteman is Deputy-Director General for the Environment at the Ministry for Housing, Spatial Planning and Environment in The Netherlands. In 1991 and 1997 he was in charge of the preparation of the Dutch Presidencies of the EU Environment Council and from 1984 until 1988 he was Director of Environment Research at the Dutch

National Institute for Public Health and Environmental Protection in Bilthoven. He is the author of several books on how to cope with the present competition between unguided economic growth and long-term harmony between man, technology and nature.

At the beginning of 1999, the Management Board renewed the appointment of Domingo Jiménez-Beltrán as Executive Director, limiting the contract on his request to a final three-year period. Mr Beltrán, who has been head of the Agency from the very beginning in 1994, could thus continue developing and consolidating the Agency.

Increased resources in 1999 – but not in 2000!

Budget resources

The indicative multiannual budget for the period 1999-2003 foresees a continuing growth in the available resources, reflecting the needs of an organisation still in the process of growing to maturity.

In 1999, the actual budget allocation of EUR 18.5 million was higher than the figure in the MAB mainly due to a contribution from the European Parliament's specific reserve for agencies. The increase compared to 1998 matched the growth in workload in a young

organisation so that the growing pains referred to in the 1998 annual report remained about the same (Table 2).

The Agency gets most of its income from the European Union budget. There is also a contribution from EFTA as Norway, Iceland and Liechtenstein are members of the Agency (Table 1).

Operational expenditure (title 3) is expenditure on external contracts to support the implementation of the programmes and projects defined in the multiannual work programme. A major restructuring of these activities was carried out in connection with the adoption of the second multiannual work programme, and it is therefore difficult to make meaningful comparisons with earlier years (Table 3).

A significant part of the operational expenditure is used to fund the European Topic Centres. In 1999, the proportion of the total going to the topic centres was 51%. This figure has been fairly stable throughout the lifetime of the Agency.

In 2000, for the first time, the Agency is facing zero growth in real terms compared to the year before. This will have consequences for the level of activity in certain areas in 2000.

Outside the budget, the Agency can access valuable funds that are earmarked for specific activities such as the support to accession countries. In 1999, the Agency had at its disposition an extra EUR 3 million from PHARE and EUR 0.9 million from the DG Enterprise Interchange of Data between Administrations Programme (IDA).

Table 1

Income 1998 to 2000

Million euro	1998	1999	2000
EU	16.5	18.0	18.0
EFTA	.3	0.3	0.3
Miscellaneous revenues	.1	0.1	pm
Total	16.9	18.5	18.3

Table 2

Multiannual budget (MAB) 1999-2003 and actual budget allocations (B) 1999 and 2000.

Million euro	1998		1999		2000	2001	2002	2003
	MAB	B	MAB	B	B	MAB	MAB	MAB
Staff & administration (titles 1 & 2)	9.1	9.3	9.25	10.1	10.1	10.2	10.4	10.5
Operational expenditure (title 3)	7.8	8.8	9.25	9.4	8.2	10.6	11.6	12.5
Total	16.9	18.1	18.5	19.5	18.3	20.8	22.0	23.0

Operational expenditure (title 3) and related staff allocations for budget and provisional outturn 1999 and budget 2000 by programme area and project group Table 3

Programme area and project group	1999		2000		
	Budget KEUR	Staff mths ¹	Outturn KEUR	Budget KEUR	Staff mths
1. Topic databases and reporting	2 755	48	3 005	2 415	64,5
1.1. Socio-economic data	30	5	13	40	5,5
1.2. Pressures	820	12	820	755	17
1.3. State and quality	1 905	31	2 173	1 620	42
2. Integrated assessments	1 335	78	1 759	1 280	107
2.1. Environmental Issues	765	24	765	915	36,5
2.2. Regional assessments	180	24	161	120	19,5
2.3. Sectors and instruments	330	28	544	200	40
2.4. Research dissemination and emerging issues	60	2	290	45	11
3. Periodical reporting	620	63	560	365	44,5
3.1. The five year report	120	22	41	50	11
3.2. Regular indicator-based report	500	41	519	315	33,5
4. Reporting system support	1 190	116	1 371	1 090	160
4.1. Scenarios, methodologies, guidelines	410	24	463	420	26,5
4.2. Data and information management	260	37	389	190	48,5
4.3. Public access to information – reference centre	520	22	520	480	37,5
4.4. Institutional networking	0	35	0	0	47,5
5. Service and network infrastructure	1 900	83	1 949	1 750	112
5.1. Information and networking technology	910	40	960	830	41
5.2. Information capacities and services	990	43	989	920	71
Total allocated to projects	7 800	388	8 644	6 900	488
Expert meetings, translations	1 000	-	516	1 100	-
Performance evaluation	-	-	47	200	10
Total	8 800	388	9 207	8 200	498

¹only grades A and B

Personnel

In 1999, the Agency had 3 staff on indefinite contracts, 58 staff on temporary contracts of up to 5 years and 8 national experts, detached from their national administrations for a maximum of 3 years (Table 4).

On top of the medium- and long-term posts, there are a number of short-term auxiliary staff and in-house consultants working on specific projects.

Staff development 1994-1999 (December) by category Table 4

Category	1994	1995	1996	1997	1998	1999
A (Academic staff)	1	16	20	24	27	27
B (technical assistants)		4	10	12	12	14
C (secretarial staff)		9	14	17	13	18
D (service staff)		1	2	2	2	2
National Experts	2	4	7	5	8	8
Total	3	34	53	60	62	69

Table 5 Temporary contracts due for renewal, by category and year.

Category	2000	2001	2002	2003
A	14	5	2	4
B	4	1	3	2
C	6	4	3	
D	1	1		
Total	25	11	8	6

As can be seen from table 4, recruitment to the Agency started in earnest in 1995, and there are therefore many temporary contracts that expire in the coming years (Table 5). This provides an opportunity to ensure that the competence profile of the staff continues to reflect the developing tasks and priorities of the Agency.

Table 6 Staff by category and sex on 1 December 1999

Category	Female	Male
A	9	18
B	4	10
C	17	1
D	1	1
National Experts	2	6
Total	33	36

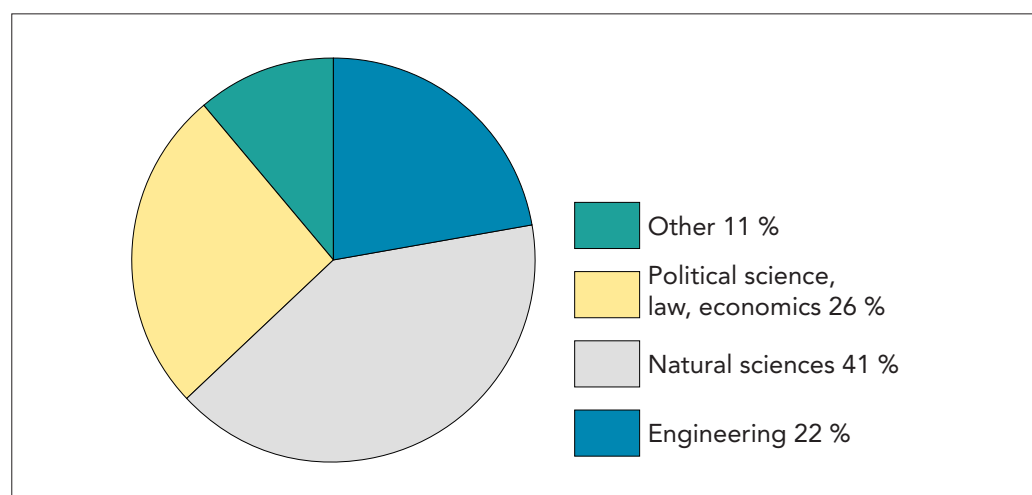
Approximately half of the staff has an academic background (Category A and national experts). Figure 8 illustrates the distribution of category A staff according to type of higher education.

Nearly half of the staff are women, but there are significant variations between the different categories (Table 6). 14 different countries are represented (Table 7).

Table 7 Staff by category and nationality on 1 December 1999

Category	B	DK	D	EL	E	F	I	NL	A	P	FIN	S	UK	IS
A	3	3	3		2	2	3	3		1	2	1	3	1
B	3	3	1			1		2	1	1		1	1	
C		5		1	3	1	1	1		2	1		3	
D		2												
Nat. exp.			2	2				2		1			1	
Total	6	13	6	3	5	4	4	8	1	5	3	2	8	1

Figure 8 Academic (Category A) staff by educational background



1. Bringing people and data together

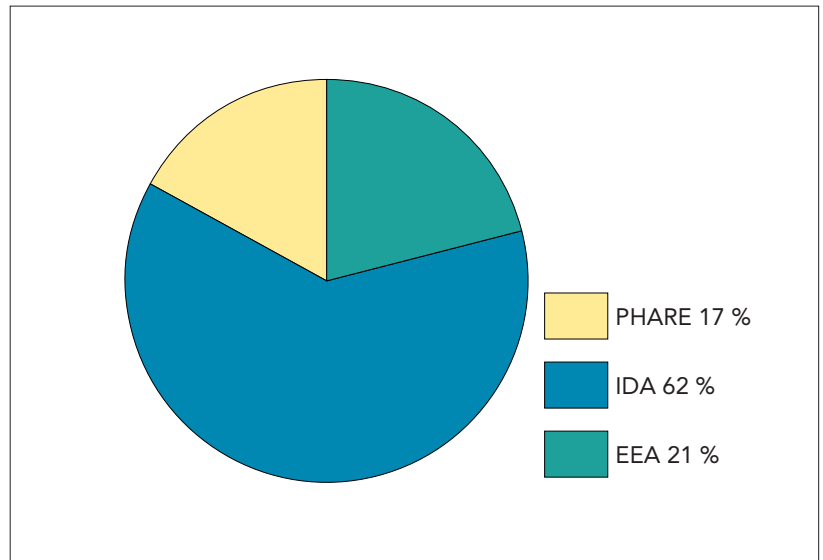
EIONET progress

The overall picture with progress on EIONET implementation is a positive one. The EIONET national networks are taking shape and communication between EIONET partners is being helped enormously by the EIONET telematics network which is now fully in place for most of the Agency and PHARE countries. The European Topic Centres for air quality, air emissions, inland waters and nature conservation have made notable progress in support of DG Environment's reporting activities. The European Topic Centre for Marine and Coastal Environment is working closely with the Sea Conventions to improve harmonisation of data collection and reporting. The current review of European Topic Centre for Land cover has highlighted the need to update the land cover databases and to exploit more spatial data to provide integrated spatial analysis needed for Agency reporting and policy assessment. The Agency is also working with other international institutions, in particular, Eurostat to streamline environmental reporting activities and increase cooperation. Five areas have been identified as priority for data flows from the national level to ETCs and EEA using the EIONET telematics network. These are the Exchange of Information Decision for air quality, UNFCCC and CLRTAP data on air emissions, implementation of Eurowaternet, data from the marine conventions and designated sites for nature conservation. These priorities were discussed with member states during the course of 1999 and ideas formulated on how to take them forward towards full implementation.

Building up the EIONET telematics network consumed around half the Agency's computing budget in 1995-1997. Seven of the European Topic Centres have been furnished with the Agency's resources. The build-up phase of the telematics network is now over and the support needed is now much reduced. It consists mainly of the EIONET help-desk

Funding sources for the EIONET telematics network 1994-1998

Figure 9



and enhancements to the CIRCLE software that runs on all 34 EIONET servers. During the period 1994-1998, only approximately 21 % of the total spending on creating the network came from Agency budgets, as the figure below illustrates. The majority of the funding came from the DG Enterprise Interchange of Data between Administrations programme (IDA) and the remainder from the DG Enlargement PHARE programme.

The support received from the IDA programme continued in 1999 with the signing of agreements to support the management of the network and develop applications to improve the services offered for the upcoming years. Enhancements foreseen include better integration of the EIONET servers and new search tools. In addition agreement was reached to link the EIONET with the development of the European Community Clearing House Mechanism for the Convention on Biological Diversity (see section 3 of this report for more details). Much effort during the first part of 1999 was given to preparation of the Agency's flagship report *Environment in the European Union at the turn of the century* and for the *Environmental signals 2000* report. All



elements of EIONET contributed either directly or indirectly to the development of indicators and the preparation of *Environment in the European Union at the turn of the century* report. Alongside this, most EIONET components have seen their technical competence increasingly called upon to assist Commission Services with data collection and reporting but also with requests for direct support to policy development. The European Topic Centres have continued to make progress in collecting and marshalling data within their topic areas and making their databases accessible through the Internet. As the data collection process becomes more routine, more attention is being focused on increasing efficiency by harmonising procedures with other organisations. The following sections focus on specific progress for various thematic work areas:

Air Emissions

Work in this topic is increasingly focused on providing information and technical expertise to assist climate change policies. In this context, the Agency prepared the EC greenhouse gas inventory in European Community's second communication to the United Nation's Framework Convention on Climate Change and participated in the EU delegation at the conference of the parties to the Convention. The Agency also prepared a report with an overview of national programmes to reduce greenhouse gas emissions under the EU greenhouse gas monitoring mechanism, and contributed to two working groups under this monitoring mechanism.

Air Quality

Work on the development of Euroairnet, a pan-European network of air quality monitoring stations, continued along with the development of the air quality data exchange module. This module is used by member countries to submit monitoring data for reporting to the Commission and the Agency and for inclusion in the databases. The goal of Euroairnet is to establish a network with sufficient spatial coverage, representativity and quality to

fulfil the Agency's information requirements.

A total of 1219 Euroairnet monitoring stations in 357 cities and agglomerations have been selected by the 29 countries participating in the network. There are 1017 stations in cities and industrial areas and 202 in rural areas. Site selection for Euroairnet monitoring stations, particularly for PHARE countries, continued during the course of 1999 and quality assessment documentation and procedures for Euroairnet were developed.

A key success story is the involvement in the Auto-oil II programme. Both the Air Quality and Air Emissions Topic Centres contributed to this with predictions of air quality in over 200 cities for various transport scenarios.

Inland Waters

The Topic Centre has made progress on further developing and implementing Eurowaternet and supported the Agency extensively in the preparation of publications.

Eurowaternet is a monitoring network designed to collect data on the status and trends of Europe's inland water resources in terms of quality and quantity and analyse how this reflects pressures on the environment. Progress with Eurowaternet has been good with member countries submitting candidate water monitoring stations for the network. For groundwater monitoring stations the situation is generally less well developed than for surface water stations. Several meetings have been held with DG Environment to examine how to develop Eurowaternet in line with the emerging requirements of the draft water framework directive. In addition negotiations have started with the Oslo-Paris Commission for the protection of the marine environment in the Northeast Atlantic (OSPAR) to examine whether requirements of the Agency and OSPAR for water quality data might be harmonised and data exchanged. The

discussions focused in particular on the characterisation and modelling of European watersheds.

Support was also given to the World Health Organisation London Ministerial Conference on Environment and Health.

Marine and Coastal Environment

Much of the work of this Topic Centre has concentrated on the collection of data on marine quality for about 90 parameters from marine conventions. These aggregated data have been used to produce

1. thematic maps on coastal water quality in Europe
2. indicators for eutrophication, and
3. a topic report on marine eutrophication.

The third meeting of the Inter-regional Forum has led to improved working relations and task-sharing between marine conventions, especially concerning data flow, indicators and GIS.

A workshop on marine biodiversity was held with marine conventions in order to prepare the content of the marine chapters of the report on Europe's biodiversity.

Nature Conservation

Collection of data to support Natura 2000, contributions to Agency reporting activities and developing and updating EUNIS (European Union Nature Information System) continued to be the cornerstones of nature conservation work. EUNIS contains sets of databases on species, designated areas and habitats. It will share communality with the European clearing-house mechanism for the Convention on Biological Diversity and is intended to be accessible on the Agency's website. The Clearing-House Mechanism of the Convention promotes cooperation between the contracting parties and facilitates access to and exchange of information on biodiversity around the World.

Work also started on preparation of the report *Europe's Biological Diversity*, due for

publication late 2000 and on the presentation package NATLAN. This will make land cover, nature data and map applications available via the website.

Waste

The work of this topic centre has been focused on some basic tasks such as data availability and compatibility, projections/scenarios, dangerous substances, and development and updating of the Wastebase electronic catalogue of waste management facilities, plans, competent authorities etc.

Considerable effort was devoted to the compilation of harmonised sets of data on municipal, household and hazardous waste with reports prepared for publication in early 2000.

Contributions by the Topic Centre to Agency publications included a chapter of *Environment in the European Union at the turn of the century*.

Noise

In 1998, DG Environment created technical working groups to assist preparation of a new EU noise policy. Under an overall steering committee on noise policy, presided over by the Commission, seven working groups have been created covering the perception, description and abatement of noise. The Agency and interested experts from NGO's, industry, international organisations and local authorities were invited to participate in the working groups. Outputs from the groups include progress towards harmonisation of indicators. An EIONET noise newsletter has been established and the Agency is now working together with the Commission and the working groups to ensure the exchange of reliable and comparable European information on noise issues so as to provide a sound basis for reference and decision-making.

Soil

Work on this topic was divided into two parts in 1999. One group worked on information and reporting on European



List of workshops in 1999

- Third EIONET land cover workshop, Brussels, January
- First EIONET soil workshop, Austria
- Workshop on modelling impacts on biodiversity of Environmental Change, UK, February
- EEA/NFP/Green spider workshop (EU98 launch preparation), Lisbon, March
- Workshop on CDS for the PHARE countries, Hannover, March
- Workshop 'Indicators of transportation, activity, energy and CO2 emissions' Stockholm, May
- EEA clearing house workshop and task force meeting 2, EEA, May
- Workshop precautionary principle, EEA, May
- EMEP Task Force on Emission Inventories workshop, Roskilde, May
- EIONET air emissions workshop, Roskilde, May
- Urban environment indicators, EEA, June
- EIONET CDS workshop, Oslo, September
- Third inter-regional forum, Venice, September
- Second EIONET waste workshop, Vienna, September
- Fourth EIONET air quality workshop, Santorini, September
- International workshop on harmonisation of air quality, UK, September
- Workshop on Europe's marine biodiversity, October, EEA
- Second EIONET marine and coastal workshop, Santa Teresa, November

environmental issues related to soil, namely the regular indicator report and the annual joint Agency - United Nations Environment Programme publication, which will be published in 2000.

The second group worked on a soil assessment and monitoring framework, continuation of the contaminated sites project and completion of the report on Boreal soil.

Cooperation with other organisations

Cooperation with Eurostat – The Statistical Office of the European Community

Building on the substantial progress made in 1998 towards improved cooperation between Eurostat and the Agency, a series of meetings were held at the beginning of 1999 to review activities and develop plans for joint work. In October a new memorandum of understanding, elaborating on the original agreement from 1995, was signed by the two organisations. The new agreement is based on the principles of reciprocity and work sharing with the objectives of:

- assuring a regular flow of information between the two organisations
- improving the quality and compatibility of the data
- improving access to this data for clients, partners and the general public
- streamlining data demands to countries so as to reduce the burden on respondents.

In parallel to these developments, cooperation in 1999 focused on requirements for indicator based reports and identification priorities for the Joint Eurostat - OECD questionnaire to member countries in 2000. Agency contribution to the questionnaire avoids duplication of data gathering and makes more use of the data best collected by Eurostat and OECD through the questionnaires.

Reciprocal participation in meetings held by the two organisations will ensure that the longer-term needs of the organisations are recognised and planned for.

Cooperation with the Joint Research Centre (JRC)

Since the establishment of the Agency, the JRC has provided scientific and technical support to the Agency's work. A memorandum of understanding and joint work programme was developed and entered into operation in 1995. This agreement was expanded upon in 1999 with the signing of a new memorandum and the development of a new joint work plan. The new work plan emphasises the importance of providing support to policy making through dedicated joint activities related to issues such as climate change, chemicals of concern and protection of natural resources.

Besides enhancing monitoring capacities, cooperation with the JRC will help bring to light and test developments in research and technology to face the increasing challenge of reducing greenhouse gas emissions including the required changes in production and consumption patterns.

In the area of chemicals of concern to the environment, the focus is on building up more appropriate monitoring and assessments of chemical pathways and exposures for humans and the environment.

Concerning spatial issues and those related to land, the JRC and the Agency are developing and updating mapping systems to reflect the changes in the uses of land and its main features.

JRC is contributing to the Agency's work on marine eutrophication using remote sensing techniques.

Under the new agreement, the JRC and the Agency will work on concrete projects in these and other areas to support sustainable development and environmental policies. The joint work plan includes the development of a special dissemination programme for progress in research, technology and outlooks.

Some cooperation was already developed in 1999 on the dissemination of land-use

information at city and urban level.

Cooperation with the Organisation for Economic Cooperation and Development (OECD)

Cooperation with the OECD was established in 1996 by an exchange of letters. In 1998 the Agency involved the OECD in preparation for the Agency's report *Environment in the European Union at the turn of the century* and in indicator work. As a follow-up to this cooperation, the OECD invited the Agency to participate on its expert advisory panel for its environmental outlook and strategy project. Using economic models, this project will generate an economy-based vision of environmental conditions in 2020 based on a 'business as usual' scenario. The strategy aspect of the project will analyse and recommend policy options to move the outlook in a more environmentally friendly direction. The OECD envisages substantial participation from its member countries in this second phase of the project, which will culminate in 2001 with a ministerial meeting to agree on a strategy for the OECD.

Cooperation with the Oslo Paris Commission for the Protection of the Marine Environment in the Northeast Atlantic (OSPAR)

The Agency and the OSPAR Commission signed a memorandum of understanding in 1998 and are exploring ways in which



the two organisations can work together. Several subject areas already feature collaborative efforts, including participation in the Inter-regional forum and work on harmonising catchment area databases. In addition to this, the feasibility of streamlining the collection of data from member countries for the Agency and OSPAR was assessed. The Agency is currently implementing Eurowaternet to provide information on the status of Europe's inland water resources whilst the OSPAR Commission annually collects data on total land-based discharges to the marine environment. Harmonisation of the two data collection processes should follow and exchange of data between the relevant databases will be facilitated.

Cooperation with PHARE

The cooperation established in 1996 between the Agency and PHARE countries in Central and Eastern Europe has been dogged in 1999 by funding and continuity issues. The reasons are on one hand the phasing out of PHARE multi-country programme support and on the other hand the application initiated by eleven PHARE countries to become full members of the Agency. Whilst progress was made on starting negotiations for candidate country membership of the Agency and in longer term funding strategies, it became increasingly apparent during 1999, that interim funding mechanisms would have to be found to enable continuity and avoid relapse in achievements made to-date. With no new funds available, over 50 projects coming to the end of their PHARE funding stopped, during the course of 1999 and only a few will carry over to 2000.

As a result of the joint efforts of various Commission Services and the Agency, a solution was adopted in order to preserve and continue the present activities over the year 2000 until PHARE country membership of the Agency will be gradually in place (starting with 2001). In this respect, additional PHARE funding amounting to three million Euro was made available for the continuation of current work areas. Two calls for tender were

launched in June by the PHARE Programme to cover the continuation of the work of PHARE Topic Links; further contributions to the Agency reporting and EIONET telematic development; information dissemination and the work of the PHARE expert team in the Agency. To ensure a normal continuation of work and to bridge the gap until the tenders were in place, the Agency provided the PHARE expert team with six month auxiliary contracts to cover until the new projects are in place.

Alongside this uncertainty substantial progress was however made in cooperation with PHARE countries. The EIONET telematic network is now fully in place for all ten PHARE accession countries and further extension to Bosnia-Herzegovina and the former Yugoslav Republic of Macedonia will be completed in 2000. The telematics networks are already bringing benefits in the form of strengthened cooperation and the delivery of data and information for Agency reporting activities, such as for *Environment in the European Union at the turn of the century*. Cooperation between PHARE partners, Eurostat and the Agency is assisting in the preparation of the Joint Eurostat -OECD questionnaire for the candidate countries in 2000.

Cooperation with TACIS/ Pan-European Cooperation

Following the Aarhus Ministerial Conference in June 1998, the co-operation between the Agency and the Newly Independent States (NIS) is focused on:

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

In order to intensify the cooperation between the NIS countries and the Agency and to extend the already existing network of contacts, two seminars (on air emissions and water quality) were held in 1999. The seminars were supported by TACIS, the EU support programme for the Newly Independent States. They focused on the introduction of methodologies used in international cooperation to facilitate participation in ongoing projects in the Agency and PHARE countries.

A workshop was held in November 1999 with the Russian Federation's State Committee for Environmental Protection on the harmonisation of biological data from Russian protected areas. Two Based on the outcome of the workshop, two concrete cooperation projects are now underway.

In December 1999 the Agency participated in the Pan-European governmental meeting "Development of environmental monitoring systems in the European region" in Moscow. The meeting recommended that the UNECE establish an ad-hoc working group on environmental monitoring with the main aim of supporting the preparation of the report for the Kiev conference in 2002.

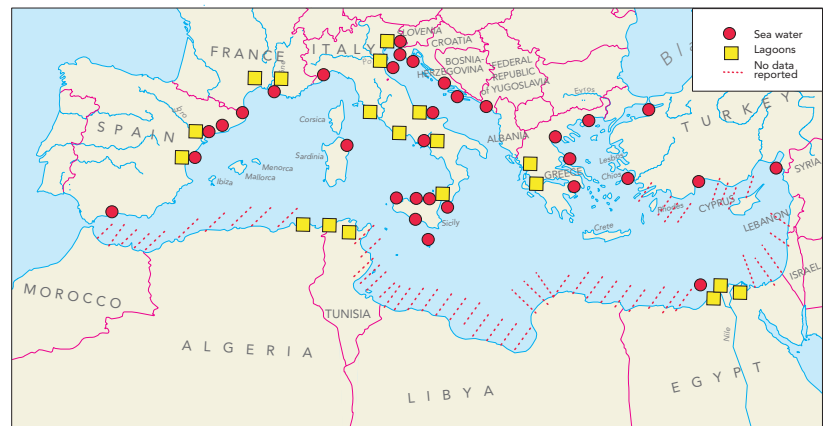
Cooperation with the United Nations Environment Program (UNEP)

Cooperation with UNEP is fundamental to a well-organised and comprehensive coverage of environmental information matters on the European continent. The aims of the organisations are mutually compatible and complimentary in terms of activities and geographical coverage. The cornerstones of the cooperation are avoidance of duplication, sharing of resources and the development of joint projects. This has successfully resulted in a working method which focuses on the complementary aspects of the organisations. UNEP contributes in particular from their activities in Eastern Europe and the Mediterranean.

Five specific areas of cooperation were

Illustration from *State and pressures of the marine and coastal Mediterranean environment* showing Mediterranean areas where eutrophication phenomena were reported

Figure 10



focused on in 1999. Foremost was the preparation of a joint report on the state of the Mediterranean Sea. The messages of the report were presented by the Agency at the ministerial meeting of MAP signatories in Malta. A proposal for a follow-up report based on indicators was made. Within this context, the Agency signed a supplementary memorandum of understanding with the UNEP Mediterranean Action Programme (MAP) to prepare a joint work plan on Mediterranean issues. This work started in 99 with Agency participation in the working group of the Mediterranean Commission for Sustainable Development that deals with indicators, as well as in the network of national environment/development observatories, both coordinated by MAP/Blue Plan. The Agency involvement in these activities, though yet modest, aims to synchronise and render compatible indicator-based reporting for Euro-Mediterranean issues, in support of the EU-MEDA programme.

In parallel to these activities, the Agency has maintained contact with CEDARE (Centre for Environment and Development in the Arab and European region). As an observer to the Board of CEDARE, the Agency was invited to propose synergies between the respective work programmes.

Secondly, following the publication in September of the Second UNEP Global Environmental Outlook (GEO-2), cooperation began on the preparation of GEO-3, which is scheduled for publication in 2002.

Thirdly, the Agency became signatory to project Conventions Watch, a joint project between UNEP, Globe and the Stockholm Environment Institute to provide information on international conventions to national and international parliamentarians (see section 3).

The Agency also provided considerable support for the implementation of the European Community Clearing-House Mechanism (EC-CHM) for the UN Convention on Biological Diversity.

Finally, the Agency and UNEP prepared the joint annual message on soils, which will be published in 2000. Within this work area, the Agency is also supporting the UN desertification convention by preparing to establish a database of expertise within Europe.

Preparations were also made to extend cooperation with UNEP to go beyond monitoring and reporting activities at a

regional level and to develop and disseminate information resources on best environmental practices, reporting and benchmarking at corporate and city level. Cooperation with the United States Environmental Protection Agency (USEPA)

The Agency and USEPA are both working to improve international access to sound environmental information for a wide audience; from policy makers, to sectoral and industry groups and, to the public. Emerging Internet technologies can play an important role in achieving this objective. The Agencies are expanding their efforts to make useful documents available online and to provide better tools to facilitate access. Work in 1999 focused on the possibility of making use of each other's Internet tools for accessing information. Information has in particular been exchanged on the Agency's CDS and GEMET and the USEPA's Environmental Data Registry.

Cooperation with the World Health Organisation (WHO)

The long-standing cooperation with WHO is based on the need to ensure that the health implications of environmental problems are fully taken into account and assessed. Furthermore, it is now recognised that to improve such assessments, the respective monitoring systems of the two organisations have to be better integrated and co-ordinated. A memorandum of understanding ensures a free flow and exchange of information and forms the basis for joint activities. While WHO contributes to the Agency's regular comprehensive reporting exercises, joint work on specific issues such as water resources and health, transport and health and children and environmental health were also carried out in 1999. These have in particular been focused on the preparations towards the 1999 London Ministerial Conference on Environment and Health. Support to this conference and to its immediate follow-up remained the focus of the Agency's support to WHO during 1999.

London Ministerial Conference on Environment and Health June 1999

The Agency followed WHO preparations for the conference through participation in the European Environment and Health Committee. The Agency supported both WHO preparations for the conference with joint publications and also took part in the conference itself. At the conference, the Agency gave keynote speeches, presenting results of reports and ran an Agency display stand in the conference exhibition.

Agency inputs included a joint publication on water and health and support for the item on the conference agenda on children's health. For the latter, the Agency set up a children's health network, called INCHES, using EnviroWindows, and prepared a conference document – *Children in their environment, vulnerable, valuable and at risk*. In the follow-up to the conference, the Agency and WHO are considering publishing a monograph on transport and health and, how to develop a unified environment and health monitoring-to-reporting system.

2. Reports

Environment in Europe at the turn of the century

On 24 June 1999 the Agency issued its second state outlook report on Europe's environment, *Environment in the European Union at the turn of the century*. The report provides, for the first time, an assessment of the development of environmental quality in the EU in the near future, i.e. to 2010. *Environment in Europe at the turn of the century* is the key product of the Agency in 1999.

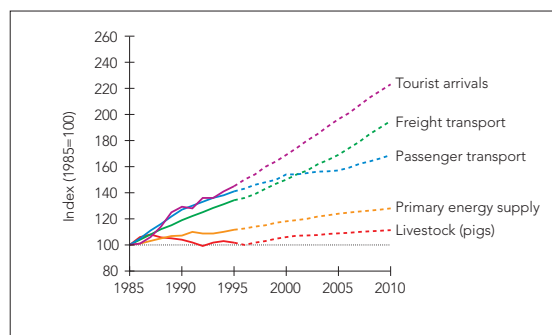
This fourth major state of the environment report follows the earlier reports from the Agency: Europe's Environment: The Second Assessment (1998); Europe's Environment: The Dobris Assessment (1995) and Environment in the European Union (1995). *Environment in the European Union at the turn of the century* is the first time a comprehensive assessment of the EU environment has been combined with a ten-year outlook.

The launch of *Environment in the European Union at the turn of the century* was kicked off by a presentation from the executive director of the Agency to the EU Environment ministers on 24 June in Luxembourg (EU Environment Council) – see box page 34.

The main findings of the report indicate that despite more than 25 years of Community environmental policy – successful, on its own terms – general environmental quality in the EU is not recovering significantly. However, there has been real progress in some areas, e.g. river quality and acidification but it is getting worse in others, e.g. waste. Environmental policy alone cannot provide the sustainable development defined as one of the main goals in the Amsterdam Treaty. Economic sectors will have to change and carry their part of the responsibility for bringing about sustainability. The present report analyses the situation and documents the current

Illustration from *Environment in the European Union at the turn of the century* showing primary energy supply and major driving forces trends in EU (1985-2010)

Figure 11



and future unsustainable development of some economic sectors – transport, energy, agriculture, household consumption and tourism. This is the major barrier to environmental improvement, even when considering policies in place or in the pipeline in 1997.

If no additional action is taken, the EU environment will remain under serious pressure from a range of activities – transport, industrial production, leisure activities and even from individual lifestyle – many of which are forecast to increase the pressure. Because they are interconnected, they will have a knock-on effect on each other.

The main conclusions of the report are:

- EU economic growth: We have seen some progress in eco-efficiency – less pollution per GDP. But production and consumption will increase more, and in general, demand more natural resources and generate more pollution and waste. We can expect the increase in waste – 10 % from 1990 to 1996 – to continue. This development has started eroding gains from environmental policy initiatives e.g. air quality directives. Economic growth therefore necessitates speeding up efforts towards better integration of environment into all policy areas.

- Despite a growth in energy efficiency, EU's energy consumption (1995-2010) will increase by 15 % from 1995 to 2010. With more households, more mobility and more transport, 30 % increase is foreseen in passenger car transport and 50 % in freight transport. This causes in particular a rise in emissions of carbon dioxide, the main greenhouse gas, making climate change issues even more difficult to tackle. The EU target to reduce greenhouse gases emissions by 8 % between 1990 and 2008-2012 will not be met under pre-Kyoto action. Instead a 6 % increase of emissions is expected. The share of renewable energy, now 6 %, is increasing, though only modestly; it is unlikely that the target of 12 % by 2010 will be met.
- Tourism is growing rapidly and significantly. A 50 % increase in international tourist arrivals is expected between 1996 and 2010, causing a rise in transport and energy demand. There is also an on-going increase in urban sprawl, with up to 120 ha/day in land-use changes in some countries. Together this means a serious challenge to rural assets and sensitive areas such as coastal zones, 85 % of which are already at high or moderate risk from various pressures.
- Total chemicals production is on a rising trend while minimal risk-assessment analysis is not carried out for 75 % of the large-volume chemicals on the market. Emissions or discharges of some

Figure 12

What has been achieved in what areas and what is the outlook?

Pressures		Environmental Issues	State & Impact	
Present	Future		Present	Future
☹	☹	Greenhouse Gases and Climate Change	☹	☹
😊	☹	Ozone Depletion	☹	☹
☹	☹	Hazardous Substances	☹	?
☹	☹	Transboundary Air Pollution	☹	☹
☹	☹	Water Stress	☹	☹
☹	☹	Soil Degradation	☹	?
☹	☹	Waste	☹	☹
☹	?	Natural and Technological Hazards	☹	?
☹	?	Genetically Modified Organisms	?	—
☹	☹	Biodiversity	☹	?
☹	☹	Human Health	☹	?
☹	☹	Urban Areas	☹	☹
☹	☹	Coastal and Marine Areas	☹	?
☹	?	Rural Areas	☹	—
☹	?	Mountain Areas	☹	—

Legend: 😊 positive development 😐 some positive development but insufficient ☹ unfavourable development
 — no quantitative data available ? uncertain (partial quantitative/expert analysis available)

heavy metals, like cadmium and copper, and of hazardous chemicals from industry, road transport and agriculture – like some pesticides – are expected to rise. Other emissions, like lead and dioxins, re forecast to decrease.

w Progress in the integration of the environment into sectoral decision-making and policies is real, but with a long way still to go. Major progress is seen in industry, using environmental management and audit schemes. Economic instruments such as eco-taxes are still being applied on a small scale. There is great potential for expanding integration policies and instruments into other economic sectors.

From the summary table, we can see significant and positive cuts in ozone-depleting substances.

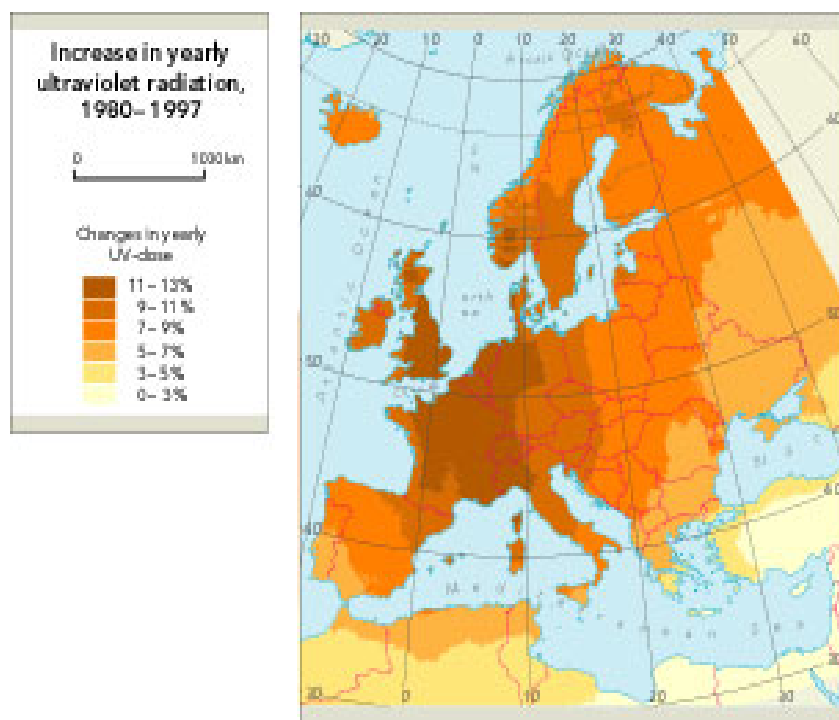
There has also been a reduction of emissions contributing to acidification and of phosphorus discharges to rivers. Progress in reducing other pressures on the environment has remained largely insufficient. Only air polluting emissions have shown a significant de-coupling from GDP since 1990. By contrast, there has only been a relatively small de-coupling of carbon dioxide and waste. The outlook foresees these trends to continue to 2010 with future emissions increasing in problem areas that have appeared difficult to tackle: greenhouse gas emissions, chemicals and waste.

In the main economic sectors, polluting emissions have declined significantly in energy, transport and industry sectors, and less so in agriculture. But for transport and agriculture, energy use and carbon dioxide have continued to grow in step with output. There is no indication of significant eco-efficiency gains in these two critical sectors up to 2010.

These pressures feed through into an equally troubling story about the state of the environment foreseen in 2010. In particular, impacts from climate change

Illustration from Environment in the *European Union at the turn of the century* showing the increase (%) from 1980 to 1997 in erythemal UV radiation (causing the skin to turn red) is calculated using observed total ozone values from the TOMS satellite instruments and assuming clear sky conditions

Figure 13



and waste generation are expected to worsen. Positive developments are anticipated for the impacts of transboundary air pollution, where ecosystems with acid deposition levels above their critical loads will fall from 25 % in 1990 to 7 % in 2010, water quality, where further reduction of phosphorus and organic matter discharges is expected, and air quality in cities.

There remain, however, considerable uncertainties. Due either to a lack of data in some areas, such as soil, biodiversity, or pesticides in groundwater, or to uncertainties about future socio-economic developments, it is difficult to clearly evaluate the direction in which we are heading. It is particularly difficult to assess the importance of emerging issues, which are also of rising public concern: e.g. human health issues, where particulate air

pollutants are involved in perhaps 40 000-150 000 extra adult deaths per year; the effect of chemicals such as dioxin and GMOs in food.

There are, however, small but rapidly growing positive signals in various countries. Cycling is taking higher percentages of some cities' traffic; pesticide-free areas or municipalities are being declared; a significant growth is seen in organic agriculture; many companies are embracing sustainability as a feasible and profitable process and many municipalities are developing their own local Agenda 21 programmes.

Finally, the report documents the challenge and opportunities of the EU Enlargement. Some accession countries

have more environmentally sustainable economic activities, and also more extensive areas of natural habitats. However, in the transition to EU membership, there is a danger that their environment will suffer if they follow the same development path of the EU. When convergence with the present EU implies accelerated economic growth in the accession countries their challenge is to ensure that they do not repeat the two decades of environmental neglect that occurred in western Europe – which eventually, in the 1970s, prompted a crash programme of remedial action at European and national level.

Launch of *Environment in the European Union at the turn of the century*

The launch of *Environment in the European Union at the turn of the century* was kicked off by a presentation from the executive director of the Agency to the EU Environment ministers on 24 June in Luxembourg (EU Environment Council). The launch was supported by an initial dissemination to key clients in 17 Agency member countries in the period 22 June-1 July, as well as in the PHARE countries. Launches took place in the member countries with the support of the Green Spider Network and National Focal Points and were generally well attended (including representatives of national media) and well received. The media coverage following the launch was apparent through the number of press clippings in each of the Member States.

Press clippings immediately after the launch

EU press	5
Belgium	1
Denmark	3
France	5
Germany	3
Greece	14
Ireland	3
Italy	2
Luxembourg	1
The Netherlands	5
Norway	3
Portugal	5
Spain	6
Sweden	7
United Kingdom	2

A launch package was prepared by the Agency consisting of:

- w The report itself
- w Executive summary in two parts (in all Agency languages)
- w Overheads (general set in all Agency languages)
- w Press release (in all Agency languages)
- w Video news release (with transcript all Agency languages)
- w Poster
- w Sales flyer

The report, the summaries, press releases and overheads were all put on the Agency website for immediate access to information.

Monitoring progress towards integration

This report was produced by the Agency to supplement its contribution to the Commission's global assessment of the Fifth Environmental Action Programme. The report gathers and analyses information on progress towards integration of environmental concerns into economic sectors in EU Member States. It focuses on criteria for integration and broadening the range of policy instruments. This report is a specific assessment of progress towards integration in four of the five priority economic sectors of the Fifth Environmental Action Programme, namely energy, transport, industry and agriculture.

The Agency has developed criteria to monitor progress towards integration. The report presents the results of applying the criteria to four of the priority economic sectors at Member State level, between 1992 and 1999. It also briefly summarises progress towards integration at an EU level.

The report concludes that progress in the four sectors has been slow. However, environmental improvements will probably be accelerated from 1999, due to the recent involvement of the economic sectors in reporting their own progress, and in implementing the environmental integration clause of the Amsterdam Treaty.

This initial assessment provides a common framework that may help all stakeholders to agree a comparable approach to the task of monitoring progress towards integration.

Tourism and environment at the European level

This report was produced in cooperation with Commission services and discussed at a workshop with stakeholders and tour-operators. It proposes a framework for

analysis of the interaction between tourism and the environment. Such a framework has led to the identification of revised and new statistical and data needs and proposals for indicators in the context of the post-Cardiff process for sectoral integration. The present information base for assessing this interaction is very poor, in spite of its importance for cross-sectoral issues (impacts of more tourism on transport, energy, waste) and environmental impacts (biodiversity, water stress, etc.). A subproject, in cooperation with Lund University, developed first proposals for performance indicators for tour-operators.



Children in their environment: vulnerable, valuable and at risk

This background briefing report to the children and environmental health World Health Organisation Ministerial Conference Environment and Health, London, 16-18 June 1999, gives a partial illustrative summary of what is known and not known about children's vulnerability to a selection of key environmental hazards. It makes the case that children are potentially at greater risk to certain environmental hazards compared to adults. In the absence of comprehensive information for risk assessment, a precautionary approach to ensure the protection of children's health is needed.



Groundwater quality and quantity in Europe (Environmental assessment report No 3)

This Environmental Assessment Report provides an overview of important groundwater quality and quantity issues largely in the form of maps and other geographical applications. It is the first pan-European report based on measured groundwater quality indicators: nitrate, pesticides, chloride, alkalinity, pH-value and electrical conductivity. Emphasis is placed on nitrate and pesticides.

Quantitative aspects include groundwater over-exploitation, saltwater intrusion and wetlands endangered by groundwater over-exploitation.

Evaluations and interpretations are mainly based on the responses to a questionnaire with supplementary information taken from literature, other reports and the World Wide Web.



Sustainable water use in Europe part 1: Sectoral use of water (Environmental assessment report No 1)

This Environmental assessment report is the first in a series of reports which aim to improve the state of information and to prepare the way for future research and policy making towards a sustainable water use in Europe. Undertaken as an assessment by the Agency and its Topic Centre on Inland Waters this first part looks in particular at the sectoral use of water across Europe.

The D-P-S-I-R approach underlies the structure of the report. The driving forces discussed in this report include agriculture, population growth and urbanisation, industry and tourism. The pressures on water use include water abstraction and climate change. Water resource and quality of use constitute the chapter on state.

Impacts looks at drought, desertification, over-abstraction and the ecological status. The responses include policies and measures and looks at the groundwater action

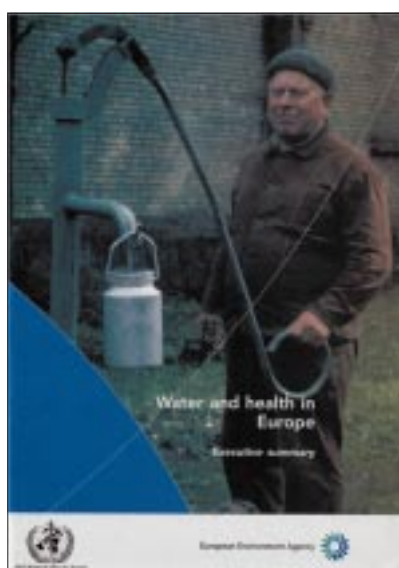
programme, framework water directive, international conventions and agreements, social policy and environmental ethics as well as demand side management and infrastructure responses.

Water and health in Europe

Water and health in Europe is part of a planned series of joint reports by the Agency and the World Health Organisation Regional Office for Europe concerned with



the environment and health. This report forms the main substantiation document for the new protocol to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes. The new protocol requires signatories to take account of human health, water resources and sustainable development and was adopted



at the Environment and Health London Ministerial Conference in June 1999. The report gives an overview of the pressures on water resources and the impacts on human health. It covers the issues still remaining to be resolved in order to achieve the World Health Organisation 1984 Health for All policy, which includes a target stating that: 'By the year 2000, all people should have access to adequate supplies of safe drinking water'.

A new model of environmental communications for Europe: from consumption to use of information

This report outlines a new model of environmental communication. Based on an innovative, more interactive model of environmental communication, information can become a real tool in understanding environmental problems

and can be used as a means to orient decision-making.

Nutrients in Europe's ecosystems

This report (published in January 2000) provides an overview of the geographical distribution and severity of adverse biological effects of excessive inputs of nutrients into rivers, lakes and reservoirs, estuaries and coastal waters, as well as into sensitive terrestrial ecosystems.



Topic report: 1/1999 Lakes and reservoirs in the EEA area

This report was carried out at the request of the Agency, in order to improve current knowledge on the largest lakes and reservoirs in Europe. An overview of the physical, chemical and ecological conditions of lakes and reservoirs in 15 Agency member countries is presented. Additionally, a description of the uses of these lakes and reservoirs is given and the evaluation of their environmental state and trends.

Eutrophication is a common problem in many countries making the water unsuitable or very expensive for use. Phosphorous is highlighted as the key nutrient in this process and its contribution to eutrophication of Europe's lakes, both in the past and as projected in the future, is discussed.

Topic report: 8/1999 Overview of National Programmes to reduce Greenhouse Gas Emissions

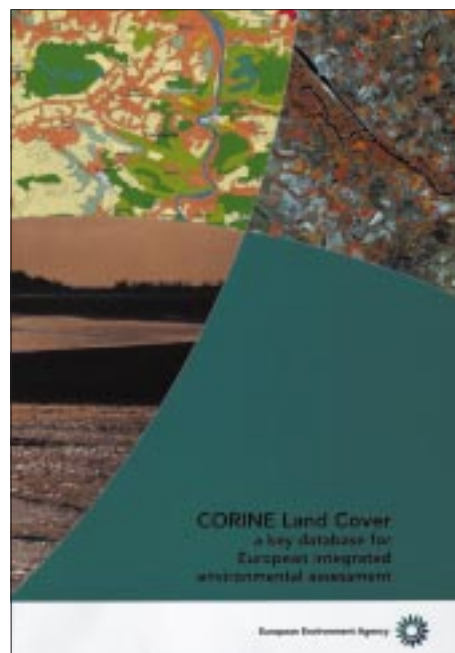
This report, prepared by the Agency at the request of the European Commission (DG Environment), will contribute to the forthcoming third evaluation report required under Decision 93/389/EEC that

the Commission will prepare and present to Council and Parliament. The report is based on data provided by the Member States.

After an initial description of the applicable emission targets and the data basis for this report, the EU inventory of emissions for carbon dioxide, methane and nitrous oxide are presented, together with reported removals of carbon dioxide, for the years 1990 and 1996. Later in the report an evaluation of progress towards the Community carbon dioxide stabilisation target is given. It reviews the content of national programmes, national emission projections (for the year 2000) and the effect of national measures.

Corine land cover – a key database for European integrated environmental assessments

This brochure provides an overview of the latest developments and update of the Corine database for environmental policy development at different levels. The publication responds to the needs at national and European level for up-to-date consistent land use and land cover information for spatial assessments.



For a list of technical reports published in 1999 see Annex.

3. Other policy support activities

The Fifth Environmental Action Programme, introduced in 1992, advocated an integrated approach to EU policies for sustainable development. This was reinforced in the Treaty of Amsterdam, which came into force on 1 May 1999 and explicitly states that sustainable development is an objective of the European Union. In addition, Article 6 of the EC Treaty lays down the obligation to integrate the environment into Community policies. The integration of environmental considerations into Community policy development rose in importance to become key in 1998 at the Cardiff Council where the Heads of State endorsed the principle that major Commission policy proposals should be accompanied by an appraisal of their environmental impact. Councils for sectors, such as transport, subsequently required various policy sectors to develop methods to assess and benchmark the effects of their policies on the environment and develop a more holistic approach. To achieve this, indicators to measure progress are seen as key. The Agency has risen to the challenges presented by these policy developments with:

- the development of indicators for a regular indicator based report (described below);
- cooperation with DG Environment, Eurostat and the Environmental Policy Review Group on the continued development of headline indicators;
- cooperation with DGs Transport and Environment and Eurostat for the development of a sectoral reporting mechanism TERM (see below);
- cooperation with DG Environment on urban sustainability indicators (see below)
- communication of the Agency results and findings.

Developing indicators

The development of the first indicator based report, although an independent Agency product, was closely linked during 1999 to general work on indicator development. Cross-fertilisation of ideas and experience was, in particular, noticeable with joint Agency-Eurostat-Commission services work on the development of headline indicators. As the importance of indicators to support integration increased during 1998 and 1999, so sectors, Member States and European groups all elaborated headline indicator sets to report on progress in major environmental themes.

In the autumn of 1998 the European Policy Review Group (EPRG) set up an expert group on indicators to steer and advise work on indicators in the Community and in Member States. At the beginning of 1999 all countries agreed that the Community should draw up its own list of headline indicators and draw together national initiatives. The Group requested the Agency's input in the development of a set of headline indicators. A menu of headline indicators was agreed and the Agency is now cooperating with Eurostat to serve further discussions in the Group with overviews on the availability of statistics and fact sheets of elaborated headline indicators.

Efforts to develop indicators by the Agency have aimed to provide indicators that offer a comprehensive summary overview. Work has additionally focused on sectors considered to be priorities or of concern. These include agriculture, chemicals, energy and transport.

Global Assessment of the Fifth Environmental Action Programme

A global assessment of the Fifth Environmental Action Programme was initiated by the Commission in 1998 following the decision by the European Parliament and Council on the review of

the action programme. The purpose of the assessment was to gauge the success of European environment policies carried out under the Fifth Environment Action Programme. The results of the Commission's Global Assessment were presented at the Helsinki Summit in December and fed into discussions for strategies for the forthcoming Sixth Environment Action Programme.

The Agency contributed to the Global Assessment of the Fifth Environment Action Programme with two reports. The main findings of the Agency report *Environment in the European Union at the turn of the century* formed the baseline input for policy analysis and discussions in the preparatory phase of the Global Assessment. In addition the Agency also prepared the document *Monitoring progress towards integration*, which analysed integration within EU Member States (see section 2).

Developing the Transport and Environment Reporting Mechanism (TERM)

In June 1998, the joint Transport and Environment Council invited the European Commission and the European Environment Agency to set up a transport

and environment reporting mechanism (TERM) for the EU. One of the aims is to develop an annual indicator-based report through which the environmental performance of the transport sector and the progress made towards integration of transport and environment policies can be monitored. The indicator report will be complemented by technical studies and focus reports on specific policy issues.

In December 1999, the EEA submitted the first transport and environment indicator-based report to the Helsinki Summit and to the Transport and Environment Councils. The report uses a set of 31 indicators, and was developed in close co-operation with Eurostat, DG Transport and DG Environment. The report will be published during the first half of 2000.

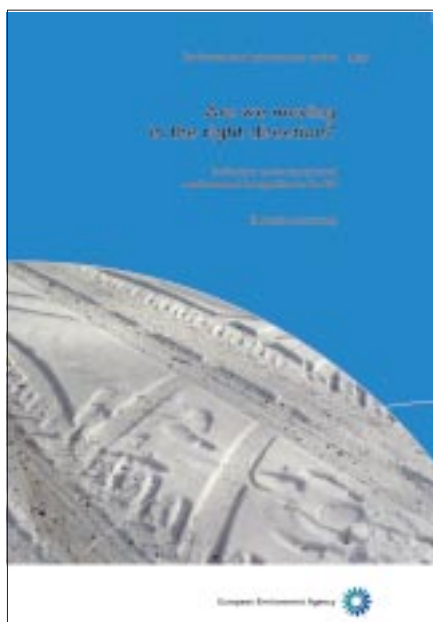
Developing 'Towards a Local Sustainability Profile – European Common Indicators'

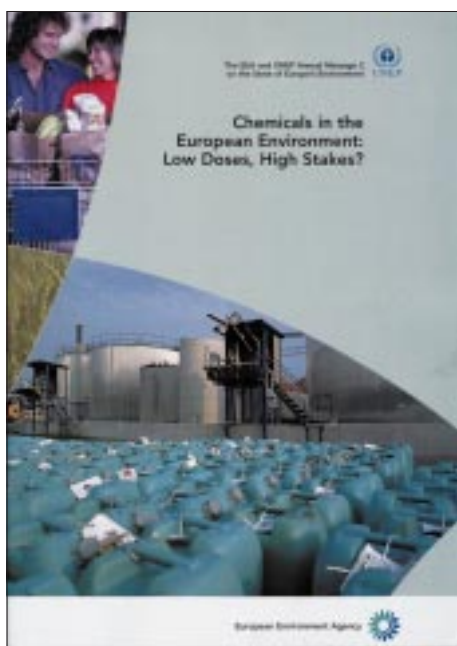
The Agency and DG Environment have worked together to develop indicators that reflect a spatial integration dimension in the *Towards a Local Sustainability Profile - European Common Indicators* initiative. A topic-oriented Working Group of the Expert Group on the Urban Environment has developed this initiative with support from local authorities.

This tool is based on a common set of integrated indicators, reflecting the interactions between environmental, economic and social aspects, and is designed to complement and to be integrated into existing municipal planning and management systems.

Development of a Chemicals Headline Indicator

The Agency worked together with the Commission to refine the original 'sales of chemicals' indicator published by the United Nations Environment Program and the Agency in *Chemicals in Europe: Low*





doses, High stakes? into a “dangerous chemicals intensity” indicator. Data limitations and representativity were at the forefront of discussions in this rapidly evolving area. Towards the end of 1999, there was agreement that the improved indicator could be used as an interim European headline indicator, representing a first step towards one that is more based on toxicity considerations.

Supporting national and EU parliamentarians: Project Conventions Watch

The signing of international conventions and treaties is only the start of a long process which subsequently requires signatories to ratify, implement, enforce, monitor, assess, revise and reinforce the agreements. The objective of the Conventions Watch project is to inform parliamentarians about the content, development and implementation of international environmental agreements. It intends to help parliamentarians have better access to information to enable them to better follow up what has been agreed to. Project Conventions Watch is a joint project between Globe, (Global Legislators Organisation for a Balanced Environment) the United Nations

Environment Program, the Stockholm Environment Institute and the Agency.

Components of the project include an Internet site with a chart of the status for implementation etc. of 41 international conventions in Europe and briefing sheets, a Conventions Watch news bulletin, training and a telephone helpline. The Agency input to the project is in the form of “in-kind” support and will derive from the Agency’s work on Member States reporting obligations.

Support to the Convention on Biological Diversity

The Community biodiversity strategy establishes a framework of actions, which include a clearing-house mechanism to promote technical and scientific cooperation between all the countries involved in the Convention. The strategy requests the Agency and EIONET to consolidate and further develop the European Community clearing-house mechanism for the Convention.

The European Community Clearing-House Mechanism is an Internet-based set of tools to promote and facilitate international information exchange for technical and scientific cooperation.

Work on the Clearing-House Mechanism is coordinated by the Agency and draws on the resources of the EIONET. A European steering committee and task force with representatives from Member States support the Agency’s work. The start-up phase of the project is expected to last for two years during which time the Internet infrastructure to contain the data will be developed and ultimately made available on the Agency website. In parallel to this, printed reports, maps and CD-Roms containing the data collected to support the biodiversity strategy will be produced by the Agency.



Mapping Europe: Corine land cover 2000

In response to increased demands for up-to-date geo-referenced information, the Agency is preparing a joint project with Commission services and Member States to update the land cover map of Europe. A mosaic of satellite images of the whole of the European territory will be taken to form the new map.

The map will be a snapshot of Europe in the year 2000. It can be compared to the first map, based on information from 10 years ago. Changes to land cover, in particular urban areas, wetlands and forested areas, will be able to be assessed.

Whilst the historical perspective can reveal interesting patterns, the Agency is also facing increasing demands for spatial information to support current Community policies and initiatives and Corine land cover 2000 is primarily intended to support these. The information collected is planned to support:

- European Spatial Development Perspective (ESDP)
- Integrated environment assessment
- Strategic environment assessment
- Natura 2000
- Nature conservation
- Urban issues
- The proposed Water Framework Directive
- Research

As well as contributing to the Agency's own work on future state of the environment reports and indicators.

- w Common Agricultural Policy (CAP)
- w Enlargement of the European Union

Policy areas supported in 1999

Air emissions estimation and reporting
 Air quality directives on carbon monoxide, benzene and ozone
 Auto-oil II programme
 Barcelona Convention on the Mediterranean
 Biodiversity conference
 Community Strategy on Climate Change
 EMEP WHO
 Environment Council 12/10/99
 Environmental policy integration – Cardiff to Helsinki process
 Environmental Policy Review Group (EPRG)
 EU Noise policy development
 EU demonstration programme on Integrated Coastal Zone Management
 EUROMED
 European Consultative Forum on the Environment and Sustainable Development
 European Spatial Development Perspective (ESDP)
 Global Assessment of 5th EAP
 Greenhouse Gas Monitoring Mechanism (GHG MM)
 Habitats Directive / Natura 2000
 Helsinki Commission (HELCOM)
 IPPC Directive (European Pollutant Emission Register)
 OSPAR Commission
 Pan-European Biodiversity Landscape Development Strategy (PEBLDS)
 The European Transport Research Conference
 Transport Council 6/7 Oct 99
 Helsinki Summit on the integration of environmental concerns into sectoral policies
 United Nations Convention on Biological Diversity (European Community Clearing-House Mechanism)
 United Nations Convention to Combat Desertification (UNCCD)
 United Nations Economic Commission of Europe Convention on Long Range Transboundary Air Pollution (UNECE/CLRTAP)
 United Nations Environment Program Mediterranean Action Program (UNEP - MAP)
 United Nations Framework Convention on Climate Change (UNFCCC)
 Urban Waste Water Treatment Directive
 Pan-European 'Environment for Europe' process (UNECE)
 Water Framework Directive

Princes' Award and Green Mermaid Festival

Founded by the European Environment Agency and City of Copenhagen, the Princes' Award is now in its fourth year. The Award aims to increase the public's awareness of environmental issues in Europe by recognising and promoting film and multimedia publications on environmental themes. The Award ceremony took place during the Copenhagen Green Mermaid Festival, the annual environment week in Copenhagen that provides governments, local authorities and businesses with a showcase in which they can display their environmental virtues to the public.

Copenhagen Town hall square during the Copenhagen Green Mermaid Festival

Figure 14



A total of 87 applicants from 20 nations, with most entries from Germany and UK followed by Spain, Ireland and Denmark, were received in 1999. The jury included amongst others, the former European Environment Commissioner Ritt Bjerregaard, Spanish ambassador to Denmark, Jose Luis Pardos and Executive Director of the Agency, Domingo Jimenez-Beltran.

This year's winners in the three categories were as follows:

Documentary and Factual: Poul-Erik Heilbuth from Danish DR TV won this category with a strong documentary following old Danish ferries, from the state-owned Scandlines, being exported to scrap yards in India to be stripped. The documentary shows Indian labourers working under extremely dangerous conditions manually dismantling the ships which contain tonnes of asbestos.

Fiction: John Coates of VARGA TVC Ltd. England won this category with an enchanting and characterful animation depicting Ben with his toy dog Jim Jam as they travel the world by train saving animals whose survival is threatened by man.

Multimedia: This category was won by Svein Tveitdal of UNEP/GRID-Arendal, Norway with a CD-Rom that contains easily accessible State-of-Environment reports from 16 countries in Central and Eastern Europe. The CD-Rom is designed to be used by journalists, students and the general public.

The winners received a trophy symbolising sustainability, a diploma signed by Ritt Bjerregaard and Domingo Jimenez-Beltran and finally a cash prize of 25 000 DKK. The prize-giving ceremony was broadcast to over 70 million people around the world.

The aim of the Princes' Award Foundation is to identify best performers and spread knowledge and awareness to others. The Princes Award was the first award for the Foundation and the Foundation is now planning to transfer the success of the award to other areas, encouraging cities, business and industry to compete for recognition for progress made towards becoming more sustainable.



Figure 15

Winners of the Princes' Award in 1999



4. Accessing environmental information

www.eea.eu.int: access to environmental information on the web

Work on redesigning and reorganising the web site for the Agency to meet the new mandate for the Agency to be a reference centre for environmental information started at the beginning of the year. The redesigned Agency website was launched in October. It integrates a number of features and tools together and gives users access to a wide range of environmental information produced by Agency and its partners as well as to information from other national and international sources. The website contains most of the reports produced during the five years of existence of the EEA. The website contains both information of interest for the scientific and technical users, as well as for policy-makers and the general public.

The website also gives users access to the environmental data used by Agency to draw the conclusions in its own environmental reports. A series of tools assist users to find the information that they are looking for and then to manipulate and extract the data for their own uses.

Thematic arrangement

The huge amount of information to be found on the site requires a good structure and good information retrieval tools. The main concept of the Reference Centres website is that the user can search and retrieve environmental information by simple search tools and by navigating through the site using around 25 environmental themes that span the contents of the website. The themes belong to the following groups:

1. What is happening? Environmental issues, such as climate change.
2. Why is it happening? Information about sectors and activities, such as agriculture and energy.
3. Information related to specific media (soil, water, nature, and air), mainly more technically oriented documents.
4. Environment in different regions and specific areas, such as Urban environment, environment in the mountain areas, etc.
5. Actions for improving the environment, such as policy measures and instruments and environmental management and practices.

Reference Centre webpage

Figure 16



Features on the new website:

The website separates organisational information about the Agency and EIONET from environmental information. Environmental information is accessed by

- w Navigating 25 environmental themes,
- w Using multilingual searching or by
- w Using by a number of specialist retrieval tools.

Services on the website include:

- w the Directory of Information Resources
- w Multilingual Search based on GEMET (General Multilingual Environmental Thesaurus)
- w SERIS (State of the Environment Reports Information System)
- w STAR (Sustainability Targets and Reference values database)
- w EnviroWindows
- w The Data Warehouse (access to 20 environmental datasets)

Forthcoming services will include:

- w GELOS (Global Environmental Information Locator Service)
- w ROD (Reporting Obligation Database)
- w The Convention on Biological Diversity Clearinghouse Mechanism

A multilingual site

Several of the Agency reports exist in 13 language versions, i.e. the official languages of the 18 Agency member countries. Some information has also been translated into some of the languages of the Eastern European countries.

The search and retrieval facilities of the new Agency website allow users to find information in all languages. Users can also use one language to search for information that may be available on the website in the users own or in other languages. The search facilities are based on GEMET, the General Multilingual Environmental Thesaurus (GEMET) which allows users to search for terms in a full-text index of the Agency's websites using one language to find and retrieve information in other languages. GEMET now includes most languages of the Agency member countries (only some Scandinavian languages missing). Through cooperation with the US-EPA, most of the terms now have a definition, and American English equivalents to British English have been added as well. Wider use of GEMET outside Europe is developing. A number of translations to Asian languages are underway by Asian countries and a Slovakian translation is also available.

The Data Warehouse

The Data Warehouse has been developed from a tool designed to support Agency needs for environmental data for its reporting activities to be a complementary product to the Agency's reports, putting, as much as possible, the data behind the Agency' reports on-line in the public domain. The Agency has always placed much emphasis on transparency of its environmental reporting. It has therefore developed a website service that allows the user to download the data and scrutinise it on their own computer, or use the service at the EEA website to produce customised graphs, comparing countries and/or demonstrating trends of environmental phenomena.

During the course of 1999 the Data Warehouse has not only supported the development of the first yearly indicator report and *Environment in the European Union at the turn of the century*, but also made the transition from internal tool to externally available product. Improving the interface so that users can easily extract the information they wish and work on standardising the descriptions of data held in the Data Warehouse has been at the forefront of the developments this year. Current work is geared towards increasing

What is the Data Warehouse?

The Data Warehouse is a storage and access point for data used by the Agency in its work. Data comes into the Data Warehouse from a wide range of sources. It can be collected by partners within the EIONET, from other Commission services, from Agency member countries or other organisations. Much of the data is socio-economic data, but increasingly emissions and state of the environment datasets can be found there too.

Some of the data within the Data Warehouse is owned by the Agency, other datasets are available from other organisations only for specific Agency uses. The Agency has made around 20 datasets, which it uses for its reporting work, available to the public on the website. Soon many more will be made available. The Data Warehouse is the foundation of a permanent electronic reporting system that will give public access to the aggregated data used at every point in the EEA reporting system.

the integration of geo-referenced environmental data with socio-economic data, streamlining the process of acquiring and updating data from sources, and publishing data within the publicly available part of the Data Warehouse on the Agency's website. Work on enabling the Data Warehouse to function as a partly automated reporting tool to support future yearly indicator reports is also underway.

Reporting obligations database (ROD)

The Reporting obligations database, which was created early in the year, is populated with information about reporting obligations in EU legislation for water, air and waste. All entries are indexed with terms from the GEMET thesaurus, thereby facilitating multilingual access.

State of the Environment Reports Information System (SERIS)

The State of the Environment Reports Information System includes documentation on state of the environment reports in European countries. It is regularly updated and is now fully integrated into the new Agency website.

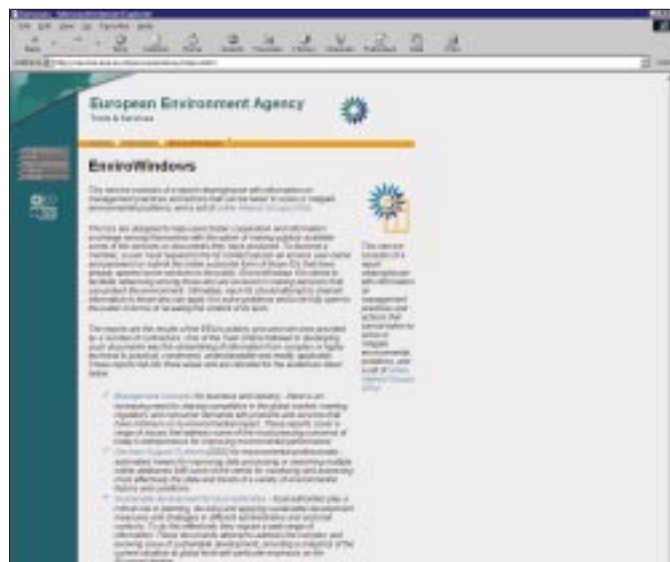
Sustainability Targets and Reference Database (STAR)

STAR is an inventory of current environmental policy requirements and targets in force in Europe, together with reference values for the long-term achievement and maintenance of sustainability. It is updated on a quarterly

basis. In 1999 STAR has become more integrated into the Agency's work, as policy targets in the database are now conceptually linked to indicators, which the Agency is working on. When more datasets are available for the development of indicators, it will be possible to link the two and ascertain whether targets are likely to be met. STAR has also been fully integrated into the Agency website with a new user-friendlier interface.

EnviroWindows

EnviroWindows (EW) is a combination of web-based networks and an information clearing-house. The networks consist of a number of Interest Groups where users collaborate using the Internet to support the implementation of environmental



policies, initiatives or voluntary actions at the local or business level. EW is the EIONET's interface to research centres, NGOs and industries. During 1999 there has been steady improvements and growth of information content as well as active external user participation in many Interest Groups.

Demand from many external users to be active providers of environmental information under the EW umbrella is overwhelming. The main constraints for expanding the services in this direction are the uncertainties in the availability of minimum adequate funds to extract and publish the documents generated by Interest Groups. In addition, the EIONET telematic infrastructure is not yet versatile enough to support the flow of data and text from remote external users, such as industry, to nodes of the network and allow at the same time full public access to



consumers. Discussions are underway to consider customisation alternatives for the CIRCLE software in order to better accommodate current and future EnviroWindow user needs.

EnviroWindows Interest Groups:

- w Agrifood wastes recycling network (AWARENET)
- w Cleaner Production Information Network (CPIN)
- w Corporate Environmental & Sustainability Performance Information Network (CESPIN)
- w EEA/USEPA Cooperation
- w Environmental Data Exchange Network for Inland Waters (EDEN - IW)
- w European Water Association
- w EnviroWindows Management
- w General Multilingual Environmental Thesaurus (GEMET)
- w Integrated Farming Information Network (IFIN)
- w International Network on Children's Health, Environment and Safety (INCHES)
- w Life Cycle Analysis Data Network (LICADA)
- w Pollution of HCH and other unwanted pesticides HCH & Pesticides Association)
- w Precautionary Principle Information Network
- w Research & Biodiversity
- w Riverine Risk Assessment Model Network (GREAT-ER)
- w SME Environmental Management Training
- w Soil Protection Information Network (SPIN)
- w Sustainable Development for Local Authorities (SDELA)
- w Transport and Environment Reporting Mechanism (TERM) Management
- w TERM2
- w Transport and Environment Forum on transport and environmental issues

Glossary

Accession countries	Countries preparing for accession to the European Union
Agency (the)	European Environment Agency (URL: http://www.eea.eu.int/)
Amsterdam Treaty	The European Council met on 17 June 1997 in Amsterdam and the Treaty was signed on 2 October 1999. The aim was to create the political and institutional conditions to enable the European Union to meet the challenges of the future.
Auto-oil II	Programme for the implementation of car technology with the aim of reducing sulphur and other polluting emissions within year 2005 on the basis of the new objectives for air quality and of the cost-efficiency criteria
AWARENET	Agrifood wastes recycling network
Århus Conference	Fourth Pan-European Environment Ministers' Conference, which was held in Århus, Denmark, on 23-25 June 1998 (URL: http://www.mem.dk/aarhus-conference/)
CAP	Common Agriculture Policy
Cardiff European Council	URL: http://presid.fco.gov.uk/meetings/cardiff/
Catalogue of Data Sources	A database containing description of authoritative EEA and EIONET information resources developed by the ETC/CDS (synonym to Directory of Information Resources)
CDS	Catalogue of Data Sources (URL: http://www.mu.niedersachsen.de/system/cds)
CEDARE	Centre for Environment and Development in the Arab and European region
CEEC	Central and Eastern European countries
CESPIN	Corporate Environmental & Sustainability Performance Information Network
CIRCA	Collaborative software used by EUROSTAT and several DGs.
CIRCLE	Centre of Information Resources for Collaboration on Environment. A customised version of the CIRCA software used on EIONET (URL: http://eea.eionet.eu.int:8980/eionet-circle/)
CLRTAP	Convention on Long-Range Transboundary Air Pollution
Commission	European Commission (URL: http://www.europa.eu.int/comm/dgs_en.htm)
Community	European Community
Conventions Watch	joint project between UNEP, Globe and the Stockholm Environment Institute to provide information on international conventions to national and international parliamentarians
CORINE	Coordination of the INformation on the Environment (work started under Decision 85/338/EEC; environment information pilot project continued in EEA)
Corinair	Core Inventory Air (former EC programme CORINEAIR) since 1995 an EEA/ETC-AEM project.
Council	EU Council of Ministers(URL: http://ue.eu.int/en/summ.htm)
CPIN	Cleaner Production Information Network
Data Warehouse	URL: http://www.eea.eu.int/frdb.htm
DG Enterprise	URL: http://www.europa.eu.int/comm/enterprise/index_en.htm
DG Environment	URL: http://www.europa.eu.int/comm/environment/index_en.htm
DIR	Directory of Information Resources (URL: http://www.mu.niedersachsen.de/system/cds)
DPSIR	Concept of the chain of causal links for environment adopted by the EEA: Driving forces, Pressures, States, Impacts, Responses (first developed as PSR by OECD)
Dobris Assessment (the)	EEA's first multiannual report on Europe's Environment produced in 1995: <i>Europe's Environment - the Dobris Assessment</i> (URL: http://www.eea.eu.int/frdocu.htm)
EC	European Commission
EC-CHM	the European Community Clearing-House Mechanism
ECE	Economic Commission for Europe (UN) (URL: http://www.unece.org/)
EC Treaty	With the entry into force of the Maastricht Treaty (1 November 1993) the EEC Treaty (European Economic Community Treaty entered into force on 1 st January 1958) was officially restyled as the EC Treaty. It enshrined the objective of the completion of economic and monetary union by 1999.
EDEN-IW	Environmental Data Exchange Network for Inland Waters
EEA	European Environment Agency (URL: http://www.eea.eu.int/)
EEA 18	The EEA member countries - the EU15 Member States + Iceland, Liechtenstein and Norway.
EEA Regulation	COUNCIL REGULATION (EC) No 933/1999 of 29 April 1999 amending Regulation (EEC) No 1210/90 on the establishment of the European Environment Agency and the EIONET
EFTA	European Free Trade Association
EIONET	European Environment Information and Observation Network (URL: http://www.eionet.eu.int/)
EMEP	Co-operative Programme for Monitoring and Evaluation of long range transmission of air pollutants in Europe (URL: http://www.unece.org/env/emep_h.htm)
ENRM	G7 Information Society project Environment and Natural Resource Management
ENVISION	EEA ENVISION - a framework for goals, priorities and ways of working supporting development and execution of Work Programmes

EPRG	European Policy Review Group
ESDP	European Spatial Development Perspective
ETC	European Topic Centre - Contracted by the EEA to lead the development in European Environmental Information in a given topic. (URL: http://www.eionet.eu.int/)
ETC/AEM	European Topic Centre on Air Emissions (URL: http://www.aeat.co.uk/netcen/corinair/corinair.html)
ETC/AQ	European Topic Centre on Air Quality (URL: http://www.etcq.rivm.nl/)
ETC/CDS	European Topic Centre on Catalogue of Data Sources (URL: http://etc-cds.eionet.eu.int/)
ETC/IW	European Topic Centre on Inland Waters (URL: http://www.eionet.eu.int/)
ETC/LC	European Topic Centre on Landcover (URL: http://www.mdc.kiruna.se/projects/etc/)
ETC/MC	European Topic Centre on Marine and Coastal Environment (URL: http://estaxp.santateresa.enea.it/www/etc/etc-mc.html)
ETC/NC	European Topic Centre on Nature Conservation (URL: http://www.mnhn.fr/ctn/)
ETC/S	European Topic Centre on Soil (URL: http://www.eionet.eu.int/)
ETC/W	European Topic Centre Waste (URL: http://www.eionet.eu.int/)
EnviroWindows	URL: http://www.eea.eu.int/frproj.htm
EU	European Union
EU 15	The fifteen Member States of the European Union: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Portugal, Spain, Sweden, the Netherlands, United Kingdom
EU 98	Working Title of the EEA's report on the State and Outlook of the Environment in Europe. This report is due to be published in June 1999 as <i>Environment in the European Union at the turn of the Century</i> .
EU-MEDA	The European Union (EU) MEDA Programme provides financial assistance for the reform of economic and social structures within the Euro-Mediterranean Partnership
EUNIS	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.
EUR	European Union Currency (EURO)
Euroairnet	a pan-European network of air quality monitoring stations, continued along with the development of the air quality data exchange module
EUROMED	The Euro-Mediterranean Partnership develops and finances programmes in the audio-visual and cultural field through the MEDA mechanism (URL: http://www.euromed.net/)
Eurostat	Statistical Office of the European Community (URL: http://www.europa.eu.int/en/comm/eurostat/_serven/home.htm)
Eurowaternet	Monitoring network designed to collect data on the status and trends of Europe's inland water resources in terms of quality and quantity and analyse how this reflects pressures on the environment
EW	EnviroWindows: EnviroWindows is the EIONET's interface to external partners such as NGO's, companies, and research groups.
FCCC	Framework Convention on Climate Change
F.Y.R.O.M	Former Yugoslavian Republic of Macedonia
Fifth Environmental Action Programme	'Towards Sustainability' – the Fifth Environmental Action Programme of the European Community, 1992 (URL: http://europa.eu.int/comm/dg11/actionpr.htm)
GDP	Gaseous Diffusion Plant
GEMET	General European Multilingual Thesaurus (URL: http://www.mu.niedersachsen.de/servlets/CatalogueServlet?page=CCDSFrameSet&language=ENG)
GELOS	Global Environmental Information Locator Service (URL: http://www.eea.eu.int/frdb.htm)
GEO-2	Second Global Environmental Outlook project by UNDP
GEO-3	Third Global Environmental Outlook project by UNDP
GHG-MM	Greenhouse Gas Monitoring Mechanism
GIS	Geopgraphic Information System

Globe	Global Legislators Organisation for a Balanced Environment
GREAT-ER	Riverine Risk Assessment Model Network
Green Spider network	Network of communication officers of EU environmental Ministries
HELCOM	Helsinki Commission
IDA	Interchange of Data between Administrations – operated by DG III of the European Commission (URL: http://www.ispo.cec.be/ida/ida.html)
IFIN	Integrated Farming Information Network
IGs	Interest Groups.
INCHES	International Network on Children's Health, Environment and Safety
Interest Groups	Collective collaboration areas for projects protected by user names and passwords.
IPPC Directive	European Pollutant Emission Register
JRC	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)
Kyoto Protocol	The Kyoto Protocol was adopted in December 1997 by the 3 rd 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
LICADA	Life Cycle Analysis Data Network
LRTAP	Long Range Transboundary Air Pollution
MAB	Multiannual Budget
Management Board	The EEA's management board.
MAP	UNEP's Mediterranean Action Plan
MAWP 1999-2003	EEA multiannual work programme for the period 1999-2003
MCE	Main Component Elements – national environment information bodies appointed as units in the EIONET by member countries.
MEDA Programme	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://www.euromed.net/MEDA)
Member countries	Member countries of the EEA – the EU 15 Member States + Iceland, Liechtenstein and Norway.
Member States	Countries of the European Union.
MoU	Memorandum of Understanding – the Agency has MoUs with several organisations to secure efficient cooperation.
NATLAN	NATure and LANdcover a frame for making widely public maps and analyses concerning nature and landcover, which have been produced or used for EEA work.
Natura 2000	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).
New CRONOS database	Eurostat database containing general statistical information.
NIS	Newly Independent States
NFP	National Focal Point (URL: http://www.eionet.eu.int/)
NGO	Non-governmental organisation
NRC	National Reference Centre – a national body appointed by a member country as its expert body on a certain topic, often as a national counterpart to a European Topic Centre.
OECD	Organisation for Economic Cooperation and Development (URL: http://www.oecd.org/)
OSPAR	Oslo-Paris Commission for the protection of the marine environment in the Northeast Atlantic
Pan-European	Europe from the Atlantic to the Ural mountains and from the Arctic to the Mediterranean Sea.
PEBLDS	Pan-European Biodiversity Landscape Development Strategy
PHARE	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)
POPs	Persistent Organic Pollutants
PTL	PHARE Topic Link
PTL/AEM	PTL on Air Emissions
ROD	Reporting obligations database
Schengen Agreements	By the Agreement signed at Schengen on 14 June 1985, Belgium, France, Germany, Luxembourg and the Netherlands agreed that they would gradually remove their common frontier controls and introduce freedom of movement for all individuals who were nationals of the signatory Member States, other Member States or third countries.
SDELA	Sustainable Development for Local Authorities
SEA	Strategic Environmental Assessment
Second assessment (the)	EEA's second multiannual report on Europe's Environment produced in 1998: Europe's Environment: The Second Assessment. (URL: http://www.eea.eu.int/frdocu.htm)
SERIS	State of the Environment Reports Information System
SME	Small and Medium sized Enterprise
SPIN	Soil Protection Information Network
STAR	Sustainability Targets And References database (URL: http://star.eea.eu.int)
State and Outlook Report	Abbreviated title for the EEA's comprehensive multiannual report series on the State and outlook of the Environment in Europe. This report is due to be published in June 1999 as <i>Environment in the European Union at the turn of the century</i> . The report is a follow-up of <i>Environment in the European Union 1995</i>
TACIS	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.
TEN	Trans-European Network
TERM	Transport and Environment Reporting Mechanism
TERM2	Transport and Environment Reporting Mechanism, second step
UN	United Nations (URL: http://www.un.org/)
UNCCD	UN Convention to Combat Desertification
UNECE	United Nations Economic Commission for Europe (URL: http://www.unece.org)
UNEP	United Nations Environment Programme (URL: http://www.unep.org/)
UNDP	United Nations Development Programme (URL: http://www.undp.org/)
UNFCCC	UN Framework Convention on Climate Change (URL: http://www.unfccc.de/)
US EPA	United States Environmental Protection Agency
Warehouse	Data Warehouse (URL: http://www.eea.eu.int/frdb.htm)
Wastebase	electronic catalogue of waste management facilities, plans, competent authorities etc
WHO	World Health Organization (URL: http://www.who.int/)
WBCSD	World Business Council for Sustainable Development (URL: http://www.wbcsd.ch/aboutus.htm)

Annex: Publications

Environmental assessment reports

Sustainable water use in Europe – Part 1: Sectorial use of water

Environmental assessment No 1

Prepared by W. Krinner, C. Lallana and T. Estrela, CEDEX; S. Nixon and T. Zabel, Water Research Centre; L. Laffon, Agences de l'Eau; G. Rees and G. Cole, Institute of Hydrology

Published by the European Environment Agency, Copenhagen, 1999

91 pp, ISBN: 92-9167-121-5, Catalogue No: GH-19-98-956-EN-C, Price: 7 EUR

Environment in the European Union at the turn of the century

Environmental assessment No 2

Prepared in collaboration with a large number of individuals in EEA, EIONET and other institutions.

Published by the European Environment Agency, Copenhagen, 1999

446 pp, ISBN: 92-9167-202-0, Catalogue No: GH-18-98-784-EN-C, Price: 21 EUR

<http://org.eea.eu.int/documents/3-yearly/toc.shtml>

Europe's environment at the turn of the century – Summary + Appendix to the summary

Published by the European Environment Agency, Copenhagen, 1999

44 pp + 44 pp, ISBN: 92-828-6783-8 and 92-9167-138-X, Catalogue No: GH-18-98-784-XX-C

and GH-22-98-466-XX-C, <http://org.eea.eu.int/documents/3-yearly/index.shtml>

Groundwater quality and quantity in Europe

Environmental assessment No 3

Prepared by: A. Scheidleder, J. Grath, G. Winkler, U. Stärk, C. Koreimann and C. Gmeiner, Austrian Working Group on Water S. Nixon and J. Casillas, Water Research Centre; P. Gravesen, Geological Survey of Denmark and Greenland; J. Leonard, International Office for Water; M. Elvira, Centro de Estudios y Experimentación de Obras Públicas, S. Nixon and ETC-IW Leader T. J. Lack

Published by the European Environment Agency, Copenhagen, 1999

123 pp, ISBN: 92-9167-146-0, Catalogue No: GH-18-98-607-EN-C, Price: 11 EUR

<http://org.eea.eu.int:80/documents/Issuerep/groundwater/>

Nutrients in European ecosystems

Environmental assessment report No 4

Prepared by P. Crouzet (IFEN, Task Leader) and J. Leonard, International Office for Water/ETC-IW; S. Nixon, Y. Rees and W. Parr, Water Research Centre/ETC-IW; L. Laffon, Agences de l'Eau/ETC-IW; J. Bøgestrand and P. Kristensen, National Environmental Research Institute/ETC-IW; C. Lallana, CEDEX/ETC-IW; G. Izzo and T. Bokn, ETC-MC; J. Bak, National Environmental Research Institute/ETC-NC

Published by the European Environment Agency, Copenhagen, 1999

23 pp, ISBN: 92-9167-163-0, Catalogue No: GH-24-99-865-EN-C, Price: 12 EUR

Environmental issues reports

Environment and European enlargement: Air emissions

Environmental issues series No 8 Prospects and scenarios No 1

Prepared by Janus Cofala, Rainer Kurz, Markus Amann, IIASA

Published by the European Environment Agency, Copenhagen, 1999

97 pp, ISBN: 92-9167-118-5, Catalogue No: GH-18-98-978-EN-C, Price: 7 EUR

Environmental management tools for SMEs: A handbook

Environmental issues No 10

Prepared by Richard Starkey (ed), Richard Welford, William Young, The Centre for Corporate Environmental Management, UK; Michael Brophy, EMA Ltd, Ireland; Pall Rikhardsson, Price Waterhouse, Denmark; Carrie Johnson, AEA Technology Ltd, UK

Published by the European Environment Agency, Copenhagen, 1998

190 pp, ISBN: 92-9167-106-1, Catalogue No: GH-14-98-065-EN-C, Price: EUR 9

<http://themes.eea.eu.int/showpage.php/improvement/management?pg=40491>

Water and health in Europe; Executive summary

Published by the European Environment Agency, Copenhagen, 1999

18 pp, Material Flow-based indicators in environmental reporting

Environmental issues No 14

Prepared by Joachim H Spangenberg, Aldo Femia, Friedrich Hinterberger and Helmut Schutz, with contributions from Stefan Bringezu, Christa Liedtke, Stephan Moll and Friedrich Schmidt-Bleek
Published by the European Environment Agency, Copenhagen, 1999
58 pp, ISBN: 92-9167-120-7, Catalogue No: GH-18-98-954-EN-C, Price: 7 EUR

A new model of environmental communication for Europe: from consumption to use of information**Environmental issue No 13**

Prepared by Centre d'Estudis d'Informació Ambiental Institut Català de Tecnologia, Barcelona
Published by the European Environment Agency, Copenhagen, 1999
Available in electronic version only from the EEA website:
<http://themes.eea.eu.int/toc.php/improvement/information?doc=38199&l=en>

A new model of environmental communication for Europe from consumption to use of information**- Summary**

Prepared by Centre d'Estudis d'Informació Ambiental Institut Català de Tecnologia, Barcelona
Published by the European Environment Agency, Copenhagen, 1999
19 pp, ISBN: 92-9167-125-8, Catalogue No: GH-19-98-899-EN-C

Topic reports***Lakes and reservoirs in the EEA area*****Topic report No 1/1999**

Prepared by J. Leonard, Office International de l'Eau; P. Crouzet, Institut Français de l'Environnement
Published by the European Environment Agency, Copenhagen, 1999
108 pp, ISBN: 92-9167-119-3, Catalogue No: GH-21-99-610-EN-C
<http://themes.eea.eu.int/showpage.php/state/water?pg=40462>

Annual topic update 1998 Inland Waters**Topic report No 2/1999**

By A-F. Boschet, W. Wahliss and T.J. Lack
Published by the European Environment Agency, Copenhagen, 1999
31 pp, ISBN: 92-9167-199-1, Catalogue No: GH-21-99-618-EN-C
<http://themes.eea.eu.int/showpage.php/state/water?pg=40465>

Air pollution by ozone in Europe in 1997 and summer 1998**Topic report No 3/1999 (part I and II)**

Prepared by Frank de Leeuw, Rob Sluyter and Tim de Paus (Part I); Rob Sluyter and Tim de Paus (Part II)
Published by the European Environment Agency, Copenhagen, 1999
80 pp, ISBN: 92-9167-123-1, Catalogue No: GH-22-99-038-EN-C
http://themes.eea.eu.int/showpage.php/issues/air_quality?pg=39109
http://themes.eea.eu.int/showpage.php/issues/air_quality?pg=39119

Annual topic update 1998 Marine and Coastal Environment**Topic report No 4/1999**

Prepared by M. Peronaci, ETC leader
Published by the European Environment Agency, Copenhagen, 1999
21 pp, ISBN: 92-9167-141-X, Catalogue No: GH-22-99-030-EN-C
http://themes.eea.eu.int/showpage.php/area/coast_sea?pg=40468

Annual topic update 1998 Catalogue of Data Sources**Topic report No 5/1999**

Prepared by Stefan Jensen, ETC leader
Published by the European Environment Agency, Copenhagen, 1999
22 pp, ISBN: 92-9167-144-4, Catalogue No: GH-22-99-595-EN-C
<http://themes.eea.eu.int/showpage.php/improvement/information?pg=40469>

Annual topic update 1998 Waste**Topic report No 6/1999**

Prepared by Kim Michael Christiansen, ETC leader

Published by the European Environment Agency, Copenhagen, 1999
42 pp, ISBN: 92-9167-140-1, Catalogue No: GH-22-99-692-EN-C
<http://themes.eea.eu.int/showpage.php/issues/waste?pg=40471>

Annual topic update 1998 Air Quality

Topic report No 7/1999
Prepared by Roel M. van Aalst, ETC leader
Published by the European Environment Agency, Copenhagen, 1999
29 pp, ISBN: 92-9167-139-8, Catalogue No: GH-22-99-701-EN-C
<http://themes.eea.eu.int/showpage.php/state/air?pg=40447>

Overview of national programmes to reduce greenhouse gas emissions

Topic report No 8/1999
Prepared by Jan Berdowski, Michael Gager, Bernhard Raberger, Manfred Ritter, Antoon Visschedijk,
European Topic Centre on Air Emission
Published by the European Environment Agency, Copenhagen, 1999
135 pp, ISBN: 92-9167-143-6, Catalogue No: GH-23-99-112-EN-C
<http://themes.eea.eu.int/showpage.php/issues/climate?pg=40473>

Annual topic update 1998 Land Cover

Topic report No 9/1999
Prepared by Martin Krynitz and Rolf Bergström, MDC, Sweden
Published by the European Environment Agency, Copenhagen, 1999
ISBN: 92-9167-147-9, Catalogue No: GH-23-99-645-EN-C
<http://themes.eea.eu.int/showpage.php/issues/natural?pg=40446>

Annual topic update 1998 Nature

Topic report No 10/1999
Prepared by Juan Manuel de Benito, ETC/NC leader
Published by the European Environment Agency, Copenhagen, 1999
31 pp, ISBN: 92-9167-162-2, Catalogue No: GH-24-99-930-EN-C
<http://themes-dev/showpage.php/state/nature?pg=40463>

Making sustainability accountable: Eco-efficiency, resource productivity and innovation

Topic report No 11/1999
Edited by Stephan Moll and David Gee, EEA
Published by the European Environment Agency, Copenhagen, 1999
39 pp, ISBN: 92-9167-168-1, Catalogue No: GH-25-99-366-EN-C

Annual topic update 1998 Air Emissions

Topic report No 12/1999
Prepared by Dietmar Koch, ETC leader
Published by the European Environment Agency, Copenhagen, 1999
12 pp, ISBN: 92-9167-167-3, Catalogue No: GH-25-99-827-EN-C

Technical reports

Inter-Regional Forum - Second Meeting Report of European Marine Conventions

Technical Report No 10
Prepared by Maria Dalla Costa, ENEA – International Programmes Unit, Environment Department
Published by the European Environment Agency, Copenhagen, 1999
56 pp, http://themes.eea.eu.int/showpage.php/area/coast_sea?pg=40486

Criteria for EUROAIRNET - The EEA air quality monitoring and information network

Technical report No 12
Prepared by Steinar Larssen, Norwegian Institute for Air Research; Rob Sluyter, RIVM, The Netherlands;
and Constantin Helmis, National Observatory of Athens
Published by the European Environment Agency, Copenhagen, 1999
56 pp, <http://themes.eea.eu.int/showpage.php/state/air?pg=40488>

Workshop proceedings - 2nd EIONET workshop on air quality monitoring and assessment 1997

Technical report No 13 (part 1 & 2)

Prepared by Steinar Larssen, Norwegian Institute for Air Research; Charlos Potma and Rob Sluyter, RIVM, The Netherlands; Ken Stevenson, AEA Technology, UK,

Terje Krognnes, Mike Petrakis, NOA, Patrick van Hooydonk, RIVM, The Netherlands

Published by the European Environment Agency, Copenhagen, 1999

36 pp, <http://themes.eea.eu.int/showpage.php/state/air?pg=40476>

<http://themes.eea.eu.int/showpage.php/state/air?pg=40489>

Computer-based models in integrated environmental assessment

Technical report no 14

Prepared by Martin Peirce, AEA Technology

Published by the European Environment Agency, Copenhagen, 1999

Available in electronic version only on the EEA web site:

<http://themes.eea.eu.int/showpage.php/improvement/reporting?pg=40490>

A checklist for state of the environment reporting

Technical report No 15

Prepared by Peter Kristensen, National Environmental Research Institute; Lloyd Anderson, Institute of Terrestrial Ecology; and Nickolai Denisov, UNEP/GRID Arendal, with support of EEA Expert Group on Guidelines and Reporting.

24 pp, <http://themes.eea.eu.int/showpage.php/improvement/reporting?pg=40461>

EUROAIRNET site selection 1998

Technical report No 16

Prepared by Steinar Larssen and Mihalis Lazaridis

Published by the European Environment Agency, Copenhagen, 1999

31 pp, <http://themes.eea.eu.int/showpage.php/state/air?pg=40460>

Integration of information on Europe's marine environment

Technical report No 17

Prepared by Tor Bokn (Norwegian Institute for Water Research) and Hein-Rune Skjoldal (Institute of Marine Research, Norway)

Published by the European Environment Agency, Copenhagen, 1999

41 pp, http://themes.eea.eu.int/showpage.php/area/coast_sea?pg=40459

Towards a transport and environment reporting mechanism (TERM) for the EU

Technical report No 18 (Part 1 and 2)

Prepared by the EEA in co-operation with Eurostat

Published by the European Environment Agency, Copenhagen, 1999

38 pp & 56 pp, <http://themes.eea.eu.int/showpage.php/improvement/reporting?pg=40457>

<http://themes.eea.eu.int/showpage.php/improvement/reporting?pg=40458>

Annual European Community Greenhouse Gas Inventory 1990-1996

Technical report No 19

Prepared by Manfred Ritter (ETC Air Emissions : UBA Vienna)

Published by the European Environment Agency, Copenhagen, 1999

80 pp, <http://themes.eea.eu.int/showpage.php/issues/climate?pg=40456>

Changes in business and the environment: metaphors, partnerships, tools

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Prepared by Penny Allen and Christophe Bonazzi, ECO 97 (Association for Colloquia on the Environment),

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Prepared by: David J. Briggs, Kees de Hoogh and John Wills (Nene Centre for Research, Nene College Northampton).

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