EEA ANNUAL REPORT 1995

European Environment Agency

EEA history in short

The European Council requested in December 1988 in the Rhodes Declaration a major effort in environmental matters and the Commission reacted immediately; President Delors himself announced in his speech at the European Parliament of January 1989 the "setting up of a European measurement and control Network comprised of public or private, regional or national facilities". With this declaration, that surprised even the EC Services, Jacques Delors was anticipating the need for a separate body dealing mainly with environment information, and for which reliability and credibility will be paramount.

While presenting the proposal for the creation of the European Environment Agency (EEA) in July 89, Mr. Ripa di Meana (Commissioner in charge of Environment at the time) stated that "...the main purpose of the Agency is to aid the Member States in meeting the environmental protection and restoration goals, as defined in the Treaty and in the different environmental programmes of the Community".

At this time, the Commission was responding to the pressure from the European Parliament's Environment Committee, and to the need, also recognised by the EU Environment Ministers, for improved information to face their growing and complex responsibilities. The Agency and the related European Environmental Information and Observation Network (EIONET) were conceived to deliver improved information on the environment and to contribute to a better, objective and reliable surveillance of adequacy and efficiency of EU environmental legislation.

The Agency and the EIONET were set up on the basis of Regulation 1210/90, adopted in May 1990 and brought into force on 30 November 1993, when the seat of the Agency was finally decided upon.

The foundations for the EEA's work were in fact already laid in the period 1985-1990, by the CORINE information system. Its databases were transferred to the EEA Task Force, set up by DG-XI in 1990, which took care of the EEA's activities in the interim period 1990-1994.

The EEA's Executive Director was appointed in June 1994. In August 1994, the premises on Kongens Nytorv were moved into and the Task Force disbanded. Beginning with a first skeleton staff of 6 people, recruitment of the main staff began in the second half of 1994. The open and extensive recruitment procedure adopted, elicited a large interest and more than 7000 applications were received for the initial 26 posts advertised. First staff arrived in the second half of 1995 and by mid 1996, 50-60 people will be working at the EEA's premises, situated in the centre of Copenhagen. The Agency 's 1996 budget is 14,5 million ECU (MECU).

The goal of the European Environment Agency is to screen, evaluate, validate, and process existing data and information on the environment and to transform this into efficient and reliable information at a European level both for the Community, the Member States and the public at large. This must be done using existing data and information, building on and improving existing capacities in Member States and other European institutions.

The work of the EEA is based on the activity of the European Environment Information and Observation Network (EIONET). The EIONET covers 7 European Topic Centres, 18 National Focal Points, and 458 National units which are appointed National Reference Centres on a certain topic, or main component elements. The Agency furthermore purchases expertise for projects from all over Europe, whenever necessary.

Supported by the EIONET, the Agency has to provide the necessary guidelines and technical specifications so that future information is reliable, consistent, comparable and efficient. The products must be targeted to be used directly, address priority questions, and they must be produced efficiently.

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Preface

Domingo Jiménez-Beltrán Executive Director, EEA

This second annual report of the Agency, that I hereby forward, as Executive Director of the EEA, to the European Parliament, the Council, the Commission and the Member States, in accordance with EC Regulation 1210/90 shows through the results achieved in '95, the role that the Agency can play by providing accessible information for policy makers and the public, as required by the Regulation.

1995 was the first operational year of the Agency at our new offices in Copenhagen, which were opened in November '94.

Creating a new organisation for Europe's environment is not easy, given the often conflicting priorities of building up the administration and infrastructures for efficient European level data monitoring and evaluation, whilst delivering reports in time for the EU policy process, such as the 1995 review of the Fifth Environmental Action Programme. However, thanks to the professional skills and dedication of the staff, most of whom only arrived in 1995, we can present some considerable achievements for this first operational year of the Agency.

Much environmental information resides at national and regional levels and a major objective of the Agency is to help establish and coordinate a European Environmental Information and Observation Network (EIONET). Thanks to the cooperation and hard work of the National Focal Points, the European Topic Centres and many sources of expertise within the Member States, the modest resources of the Agency are now being augmented by a network of partners that can add European value to their information systems. 1995 saw foundations being laid, 1996 will be a year of consolidation around a team and a work programme that is focused on the urgent priorities of improving Europe's environment. Information by itself counts for little. It is putting information to work for the environment that matters. We now have the basis for helping the Community Institutions and Member States to do just that.

Domingo Jiménez-Beltrán
Executive Director, EEA

Foreword by Derek Osborn, Chairman of the EEA Management Board

1995 has been the year in which the European Environment Agency has begun to put itself on the map. By the end of the year most of the staff were recruited. Publications were beginning to roll off the presses. The first European Topic Centres were well under way and beginning to produce results. The European Environment Information and Observation Network was beginning to take shape.

Of the publications, two in particular stand out - the Dobris Assessment on the State of Europe's Environment, a major and definitive report on the state of the environment and trends in the whole of Europe, west and east, which made an important contribution to the Conference of East and West Environment Ministers in Sofia; and a shorter, more focussed report on the Environment in the European Union, which was requested by the Commission as an input into its review of the Fifth Environmental Action Programme.

Both reports were highly regarded in terms of their technical range and expertise, and for the way in which they focused the information they contained so as to have direct relevance to the European policy-making processes which they fed into. I hope that these characteristics will be the hall-mark of the Agency's productions in the years ahead - technical excellence and policy relevance and timeliness.

The technical excellence of the Agency's work should be assured both by the quality of the staff the Agency has recruited, and by the quality and quantity of assistance the Agency has received from other sources. The Scientific Committee has played a key part in assuring the quality of the terms of reference of the various elements of the Work Programme, and of the products from the Topic Centres and elsewhere. The Topic Centres themselves are beginning to develop a strong European wide network of the best institutions and individuals to help them in their tasks of improving the quality and consistency of information about the environment. And the wider European Environment Information and Observation Network (EIONET) is also making a strong contribution; its development being also of direct benefit at national level.

As to policy relevance, the Agency has worked hard to ensure that it remains in close touch with all the EU institutions, and is responsive to their needs and requests. The European Commission has taken a close interest in the development of the Agency's Work Programme and has helped us to prioritise tasks that will assist the Agency's policy development. The European Parliament and the Council of Ministers have also kept an eye on the Agency's work, and have assisted us with guidance on issues that they want to see tackled.

The Agency was honoured to receive a visit from the President of the Commission, Mr Jacques Santer and the Environment Commissioner, Ms Ritt Bjerregaard, on the occasion of our second anniversary. We have also received visits from the President of the European Parliament and the European Parliament's Environment Committee.

The EU Environment Council held an informal discussion with the Chairman and Executive Director in which it provided valuable political guidance about future directions for the work of the Agency. In particular, the EU Environment Ministers indicated that in the discussions due to take place during 1996 on the Review of the Fifth Environmental Action Programme, they would wish to identify those elements of the programme that would benefit from an input of timely reports or analyses by the Agency as new policy proposals are being developed. The Agency will be very glad to receive such guidance so that it can aim to produce more policy-relevant reports at the right time.

Looking ahead to 1996, the Agency will concentrate on consolidating a routine environmental reporting system. Several series of reports are under development:

Annual reports on specific topics for the European Commission (i.e. on Tropospheric Ozone, where the EEA in 1995 began annual technical reporting delivered to the Commission);

Annual reports related to progress in every area covered by the ETCs (Air Emissions and Quality, Inland Water, Nature, Marine and Coastal environment, Land Cover, Soil and Catalogue of Data Sources);

Annual reports on progress and prospects for the environment using indicators (to be introduced in late '96), plus periodical reports on specific areas (The Arctic Environment) or problems (Urbain Air Quality, Environment and Health, and Transport).

F A (Derek) Osborn
Chairman
EEA Management Board

These series will be building blocks and deliver intermediate reference marks in between the broad tri-annual reports on Europe's Environment, the next ones, on the EU and the wider European environment, are to be delivered in 1998.

A further important task will be to take stock of the reports emerging from the Topic Centres, and their recommendations for development or modification of the existing monitoring networks in the Member States. Some difficult and potentially expensive issues may arise in this context, but we are encouraged by the spirit of co-operation between Community institutions and Member States on the way forward which the Agency, the National Focal Points and the Topic Centres are forging.

Partnerships are also being developed with NGO's, Industry and Trade Unions via projects on Public Access to Information, Pools and Clearinghouses of relevant information. Such partnerships will be strengthened in 1996.

At the end of 1997, Regulation (EEC) No 1210 of 7 May 1990 setting up the European Environment Agency and EIONET will be up for review. Article 20 of the founding Regulation, Regulation (EEC) No 1210 of 7 May 1990 setting up the European Agency and EIONET, provides for a decision on further tasks for the Agency, based on a Report from the European Commission, by 30 October 1995. However, both the Council and the Commission decided during 1995 that, "as the Agency started to operate only in mid-1994 with its full staff not in post until the end of 1995, it would be desirable to allow the Agency at least two fully operational years before a decision is made on the assignment of further tasks to it" (Conclusions of the EU Environment Council of 6 October 1995). The Commission report will therefore now only be due by 30 October 1997, with a possible review of the Regulation thereafter. The Agency is grateful for this additional period in which to consolidate its initial mission and begin to deliver substantive results. At the same time it will however, during 1996, be giving some thoughts to possible future developments of its role so that it can make a constructive contribution to the review process in 1997.

F A (Derek) Osborn
Chairman
EEA Management Board

1. Achievements, obstacles and developments in 1995

Achievements.....

1995 saw the Agency completing its basic structure and organisation. Staff numbers rose to 42, the Local Area Network (LAN) and Wide Area Network (WAN) were set up, and communication facilities at the Agency were enhanced with the establishment of the Library, the bi-monthly Newsletters and the EEA's homepage on the World Wide Web.

The EIONET structure became firmly grounded in the European Topic Centres, which began to produce scoping studies and other reports on their work, and the transfer of the CORINE data bases was completed. The contribution of National Focal Points and the Management Board helped to focus the Agency's work on client needs, whilst the support from the Joint Research Centre, Eurostat and other EU services such as the Office for Official Publications of the European Communities (OPOCE) and the Commission's Translation Service helped to strengthen our activities.

Following the pan-European Environment Ministers' Conference in Sofia, the expectations of an expanded geographical coverage of the Agency's work were firmly established, including proposals for projects with Central and Eastern European countries, aided by the PHARE and TACIS programmes. The Agency's links with international organisations such as UNECE, UNEP, OECD, and the European Investment Bank were advanced, and partnerships with socio-economic partners such as industry, trade-unions and NGO's, both at the European and the national level, began to be forged.

Main achievements during the year were:

- initiating the systematic development of the environmental information base;
- basic environmental information base through the transfer to the Agency and further development of the CORINE databases and launching of the European Topic Centres (ETCs) in co-operation with the EIONET;
- publishing "The Dobris Assessment", and starting the development of the assessment and reporting system, beginning with the first Monographs and the "Report for the Review of the 5th Environmental Action Programme" and the scoping study on integrated environmental assessment;
- building up the infrastructure of the information system through establishing the EIONET and the Catalogue of Data Sources' Topic Centre and the network of people, organisations and the associated hardware and software;
- exploiting and adding value to existing information, especially through establishing Memoranda of Understanding, followed by co-operation on selected projects;
- establishing the 1996 Work Programme as the main operational Management tool of the Agency;
- development of the organigramme and recruitment of staff.

Source: Michael St Maur Sheil

An example of co-operation established during the year was the memorandum of understanding signed with the Joint Research Centre in February, which has resulted in the Centre providing advice on research, helping the Agency to formulate scientific requirements and to utilise research results, and through the collaboration with the ETC's to harmonise measurement methods and data formats.

The Agency's Budget for the year was 12.158 MECU, including the contribution from the European Economic Area countries, an increase of 20% compared with 1994. Over 7MECU of this was spent on the Work Programme areas.

.... Obstacles...

The principal difficulties that the Agency was confronted with during the year involved grappling with the "variable geometry" of the Agency (the EU and pan-European dimension), which have been tackled by "ad hoc" projects and different financial configurations; the problems of establishing an effective public information and dissemination system, including relevant translations and associated organisational problems; which is being confronted by developing single projects for translations and publications and by a decentralised and self-financing system. Achieving adequate administrative, financial, and budgetary control during a time of rapid expansion has also been difficult, obliging the Agency to reinforce administrative capacities.

....and Developments

1995 was a year of growth and development for the Agency and the EIONET. Member Countries also began to develop and adapt their network to contribute to European environmental information. The aim was to install the operational capacity of the EEA and EIONET, and to strengthen dialogue with the users of environmental information, in order to target products for policy development.

The EEA is now establishing itself as an independent and recognised source of best available information concerning the environment in Europe. The Work Programmes are the main tool for the Agency in establishing independence, supported by the information strategy, the advice from the Scientific Committee, and the political agenda's from the Community and the Member States. The preparation and implementation of the Work Programme has been designed for developing products which are relevant and timely for political action.

It has been necessary to establish an EEA agenda which also allows for the forecasting of important environmental problems to be identified to contribute to policy development. The EEA is now in a good position to develop global and comprehensive assessments of the environmental situation and trends in Europe - for the benefit of policy makers and the public. In 1996, special attention will be given to consolidating the development of the EIONET and progressing key projects for the gathering and distribution of environmental information (Environment Council, October 1995).

2. Information on EEA - Organisation, Finance and Work Programme

The European Environment Agency and the related European Environmental Information and Observation Network (EIONET) were conceived to provide information - to screen, evaluate, validate, and process data and information pertinent to the environment to transform this into efficient information both for the Community institutions, the Member States and the public at large. The use of existing data and information, and the improvement of existing capacities in Member States and other European institutions to produce reliable and efficient data and information is, without doubt, the main goal of the European Environment Agency. Improved information, analyses and assessment on the environment results in improved surveillance of adequacy and efficiency of EU environmental legislation.

It is, however, important to stress that the Agency deals with EUROPEAN environmental information - and on the basis of the information which exists and which will be developed in the national systems in the years to come.

The European Environment Agency itself is a small, compact organisation situated in the centre of Copenhagen - by the beginning of January 1996 it had 42 persons working on the premises. The total budget for 1995 was 12.158 MECU. For 1996 the budget is 14.5 MECU, and during the year it is expected to add 15-20 persons to the working capacity in the EEA (including national experts, affiliated PHARE-funded experts etc.).

Despite the small size of the Agency, its full capacity includes the activities of the EIONET - the European Environment Information and Observation Network. This network covers 7 European Topic Centres, 18 National Focal Points, and 458 National units which have been appointed National Reference Centres on a certain topic, or main component elements. The European Topic Centres are funded from the EEA budget, and the Agency furthermore purchases expertise from all over Europe for projects. Approximately 50% of the budget is used for the European Topic Centres and the expertise purchased - 50% are costs for running the Agency in Copenhagen, including salaries and meetings, etc. Thus, the Agency and the EIONET are constructed to add value to existing information at the lowest possible cost.

The organisation of the EEA is project-oriented: to execute the projects as defined in the Work Programme. The EEA organigramme encompasses the Executive Director assisted by a small executive office, an administration department and three operational programmes: Monitoring & Databases, Analysis & Integrated Assessment, and the development of the Operational base, Infrastructure, Publications & Information. (see Annex 1).

The Management Board of the EEA is composed of one member from each of the 15 Member States of the EU, one member from Iceland, Liechtenstein and Norway respectively (members of the Agency since 1995). Two members from the European Commission and two members designated by the European Parliament. (see Annex 4). The Management Board met four times during 1995.

The Scientific Committee is the advisory body in scientific matters for the Management Board and advises the Executive Director on staff appointments. In 1995, the Committee was comprised of 9 members and 4 alternates. The Scientific Committee met three times during 1995 (see Annex 5).

The Work Programme is the main management tool of the Agency - it allows full transparency of the work of the Agency and the EIONET, thereby allowing Member States to participate fully in the work. This transparency also allows the users of the products and services delivered to make full use of the deliverables, and express their requests for the following years.

In addition to the formal relationship and exchange of information with the EU Institutions and Member States, a dialogue with other potential users, European industrial federations, trade-unions and NGO's, has begun. This is an ongoing process, feeding into the development of criteria for priority setting. Throughout 1995, the EEA received views and requests in letters and draft notes, and through formal and informal consultations with a wide variety of such potential users.

Source: CDanmark

Source:
Michael St Maur Sheil

The Work Programme covers to some extent the whole range of topics laid down in the Agency's founding Regulation. It is the basis to ensure links between projects and a fully integrated response to the requirements of the Regulation. The approach is to define projects as building blocks to serve the development and production of environmental information which is a synthesis of available information, and information which is comparable, problem oriented and policy relevant.

As a result, products and services will be relying on the mutually reinforcing results of projects across the spectrum of the Agency's activities. The integrated framework developed for the Multi Annual Work Programme (MAWP) constitutes - inter alia - the basis for developing capacities for environmental forecasting techniques, so that adequate preventive measures can be taken in good time.

The Multi Annual Work Programme (1994-1999) has 93 projects divided into 10 programme areas. This Multi Annual Work Programme is executed through Annual Work Programmes, adopted each year.

The framework for the MAWP and the first two Annual Work Programmes have proved to be effective tools in the development of the Agency's work. EEA and EIONET have been able to take on board a majority of the projects planned for 1994-95 and, as foreseen in the 1994-95 Work Programme, implementation of the selected 10 remaining projects are now scheduled to start in 1996 (G1-G4, MA4, SW1, SS1, IAP1, SC1 and IC1).

The 1994-95 Work Programme contained 64 projects. Six of these projects were finished in 1995: MW1-2, MA1, MN1, MS1, SA1 - mainly scoping subsequent work by ETCs. 52 of the 1995 projects are continued as such, and 6 are continued merged with other projects (IAG2, IAP4, IAR1, IAR3, IAS, CB9).

The 1996 Annual Work Programme was adopted by the Management Board at its twelfth meeting on 19 December 1995, following receipt of the opinions of the Scientific Committee and the European Commission. It presents a total of 57 projects. Four of these projects are introduced directly from the Multi Annual Work Programme to be started in 1996 - MW4-5 (partly initiated by the ETC on Inland Waters in 1995) plus G5 and MS2. An important part of these projects is executed with the assistance of the 7 European Topic Centres, established for priority areas: Inland Waters, Marine and Coastal Environment, Air Quality, Air Emissions, Nature Conservation, Land Cover and Catalogue of Data Sources. The EEA is planning to launch its 8th ETC (Soil) during 1996.

The main priorities in 1994-95 were

- to continue to develop basic environmental information through the continuation and further development of the CORINE Programme and especially through the launch of the European Topic Centres in co-operation with the EIONET;

- to publish the Dobris Assessment and to begin to develop a general reporting system starting with the first monographs and the report on progress and prospects of the 5th Environmental Action Programme, updating the report on the state of the environment in the European Union;

- to build up the infrastructure of the information system by establishing the EIONET both through the network of people and organisations, and through the electronic hardware/software to facilitate intercommunication;

- to exploit and add value to existing information, especially through establishing Memoranda of Understanding with various institutions and organisations followed by co-operation on projects.

3. Highlights of '95

3.1 Europe's Environment - The Dobris Assessment

"Europe's Environment: The Dobris Assessment" was published on 12 September 1995 and is the most detailed and comprehensive review available of the state of the environment in Europe. This EEA report, covering 46 countries - from Portugal in the west, to the Urals in the east, and from Iceland in the north to Malta in the south - is based on data from a wide range of sources, including UNECE, UNEP, OECD, Council of Europe, IUCN, WHO, and Eurostat. The report was prepared by the EEA Task Force (DG XI and Phare) in the period 1992 to 1994 in co-operation with these organisations and individual European countries.

The report :

- assesses the state of the environment in eight different fields, including air, water, soil, nature, wildlife and urban areas;
- describes the pressures, such as emissions and wastes, which affect the environment;
- examines the sources of environmental pressures arising from human activities in eight different sectors (such as energy, transport, agriculture and tourism);
- analyses the 12 most pressing environmental problems facing European countries; and
- presents a summary of main highlights and responses documented in the report.

KEY FINDINGS OF "THE DOBRIS ASSESSMENT", EEA, 1995

Problems	Response
Climate Change	
• Europe, with 13 per cent of the world's population, accounts for about 25 per cent of the carbon dioxide and 16 per cent of the methane global emissions from human activities. • An increase in these and other "greenhouse gases", equivalent to a doubling of the carbon dioxide concentration in the atmosphere, is expected sometime during the 21st century and is estimated to produce warming exceeding 4 to 5 times the limits of natural variability. • In the EU, transport accounts for about 25 per cent of energy-related carbon dioxide emissions, with road transport making up 80 per cent of the total. If current trends continue, carbon dioxide emissions from transport will increase by a further 25 per cent between 1990 and 2000. Relative increases will be even greater in Central and Eastern Europe.	• Promoting energy conservation, increased use of renewable energy resources, good housekeeping practices, reductions in road transport emissions, increased use of energy efficient technologies.
Stratospheric Ozone Depletion	
• Europe accounts for 35 to 40 per cent of the global emissions of chlorofluorocarbons (CFC's) and halons, which threaten the stratospheric ozone layer.	• Implementation by all countries of the Copenhagen Amendment to the Vienna Convention which aims to stop global emissions of CFC's, carbon tetrachloride and methyl chloroform by 1996. A faster reduction scheme has already been adopted in the EU.
Loss of Biodiversity	
• Many plant and animal species groups are currently declining and threatened with extinction: fish with 53 per cent under threat, reptiles 45 per cent, mammals 42 per cent, and amphibians 30 per cent. • 21 per cent of Europe's 12 500 higher plant species are threatened; 27 species have become extinct. Bogs, fens and marshes have disappeared in large numbers.	• Implementation of existing national and international protection schemes; monitoring threats and stresses in a systematic manner; providing adequate funds and management mechanisms in protected areas; developing strategies to integrate nationally protected areas into international nature conservation schemes.

Problems	Response
Major Accidents	
• The full consequences of the Chernobyl nuclear accident are unknown, but some unexpected effects have already emerged.	• Good planning, risk management, and implementation of legal and other standards such as the EU Seveso Directive and the UNECE Convention on Transboundary Effects of Industrial Accidents.
• Over the past 20 years, more than 1 million people have died in EU traffic accidents, and more than 30 million have been injured and/or permanently handicapped (over 350 people are killed and 6000 injured *daily* in Europe).	
• Major chemical accidents caused 1100 fatalities between 1980 and 1991.	
Acidification	
• Europe, with 13 per cent of the world's population, accounts for about 25 per cent of global sulphur dioxide and nitrogen oxides emissions. Emissions of these gases from power plants contribute most to total acid deposition (30 to 55 per cent). Nitrogen oxides are providing a growing contribution to environmental acidification. Agriculture is the main source of ammonia emissions to the atmosphere, which also contribute to acid deposition.	• Improving urban air quality through substitution of coal and heavy fuel oils and by controlling nitrogen oxides emissions from power plants and motor vehicles; and reducing emissions from diesel engines.
• Acidification of rivers and lakes is causing widespread fish-kills in large parts of the Nordic countries.	• Implementation by all countries of existing international conventions such as the Geneva Convention on long-range transboundary air pollution.
• In 60 per cent of Europe's area, critical loads for acidification are exceeded, e.g. in about 75 million ha of the forest soils of Europe. Reductions of about 90 per cent of sulphur dioxide and nitrogen oxides emissions and more than 50 per cent of ammonia emissions are needed to get below critical loads.	
Tropospheric Ozone and Other Photochemical Oxidants	
• Short-term peak levels of ozone during summer photochemical smog episodes are estimated to exceed WHO AQG values in 60 large European cities, affecting over 100 million people.	• Implementation of the recent volatile organic chemicals (VOCs) protocol under the Geneva Convention.
Management of Freshwater	
• Overexploitation of groundwater is a serious problem in nearly 60 per cent of European industrial and urban centres, threatening also 25 per cent of major wetlands. On the Mediterranean, Black and Baltic coasts, the intrusion of saltwater into groundwater reservoirs limits their use of groundwater.	• Preventing leakage from water distribution systems. Reducing water demand by water-saving and improvement of reuse/recycling techniques.
• Nitrate concentrations in soil water are estimated to exceed the EU guide level (25 mg NO_3/l) and the maximum admissible concentration (50 mg NO_3/l) in 85 per cent and 20 per cent, respectively, of agricultural land.	• Introducing or strengthening integrated water resource management.
• The EU standard for total pesticides (0.5 µg/l) is estimated to be exceeded in soil water in 75 per cent of agricultural land in EU-EFTA and in 60 per cent in Central and Eastern Europe.	• Reducing the application of fertilisers (especially nitrogen as required by the EC Nitrate Directive) and pesticides to the levels needed for optimal plant production and pest management.
• River and lake eutrophication caused by excess phosphorus and nitrogen from agriculture, domestic and industrial effluents is a pan-European problem of major concern.	
Forest Degradation	
• Forests cover 33 per cent of the total European land area; there has been a 10 per cent increase of forest cover over the last 30 years. However, atmospheric pollution and uncontrolled logging (Russian Federation) are causing forest loss and damage, and the composition of forests has changed, with the introduction of non-indigenous fast-growing species.	• Implementation of international agreements on acidic deposition (LRTAP convention and EC Directives).
• In 1993, it was estimated that 24 per cent of European trees were measurably affected by adverse weather conditions, insects and fungi, air pollution and forest fires. Fires are increasing in Southern Europe (about 60 000 fires are damaging an average of 700 000 ha of forest each year).	• Implementing the four Helsinki/UNCED Resolutions on the sustainable management of forests in Europe.

Problems	Response
Coastal Zone Threats and Management	
• Since 1900, 75 per cent of sand dunes have been lost in France, Italy and Spain. Most river ecosystems are threatened by river engineering, pollution and loss of ecosystem functions.	• To achieve improvements in the environmental quality of coastal zones, there is a clear need for international collaboration and agreement between the riparian states around a particular sea and those within catchment areas and upwind. Conventions covering several of Europe's seas (e.g., the Barcelona, Paris and Helsinki Conventions) provide the basis for such collaboration.
• Coastal zone pollution and conflicting uses of the coastal zone are issues of growing concern in all areas.	
• Most seas suffer from eutrophication and related algae blooms. Nitrate has increased by two to four times, and phosphorus by up to eight times in some coastal areas of the Black Sea, the Sea of Azov, and the Baltic.	
• Large amounts of radioactive waste dumped by the former USSR are of particular concern in the Barents Sea, although so far there have been no signs of radioactive contamination of water and biota.	
Waste Reduction and Management	
• About 350 kg of municipal waste are produced per capita per year, but there are large differences between countries. The rate of increase in OECD Europe was 3 per cent per year between 1989 and 1990. Waste composition varies considerably among countries.	• Waste reduction through product re-design, process reformulation, substitution of raw materials, restrictions on products and packaging.
• Industrial waste production per year in the late 1980s reached 330 million tonnes in Central and Eastern Europe. An increasing amount of industrial waste is considered hazardous.	• Materials reuse, recovery and recycling; closing material cycles; requirement of best available technologies for production processes; restrictions on products and packaging; separate collection.
Urban Stress	
• Traffic flows have increased in all European cities, but the share of public transport has fallen in most cities by 20 per cent. However, some important initiatives have been taken in some cities to reverse this trend.	• Reducing demand for travel through landuse planning, improved access and public transport, and mixed use of economic development.
• Most cities exceed short-term WHO Air Quality Guideline (AQG) levels (24-h) for sulphur dioxide and/or particulate matter/black smoke (winter smog), and many exceed ozone levels.	• Reducing air and noise pollution.
• Noise levels in most cities are above 65 dB (A), affecting between 10 and 20 per cent of inhabitants in Western Europe and up to 50 per cent in some cases in Central and Eastern Europe.	• Designing urban renewal projects which improve the quality of urban life and reduce the use of water, energy and materials.
• Urban water supply is not allocated and managed efficiently. Only 5 per cent of all piped water used in houses is for drinking. Leakages from the distribution system of 30 to 50 per cent are frequently reported.	
Chemical Risks	
• About 100 000 chemicals are marketed in the EU, and between 200 and 300 new ones appear each year, but knowledge of the toxicity and ecotoxicity of chemicals in use and circulation is unsatisfactory.	• Implementation and co-ordination of international programmes for the data collection, risk assessment and risk management of new and existing chemicals (e.g., EC Directives, IRPTC/UNEP, OECD, ECETOC, ECDIN, IARC, FAO).
	• Notification schemes for new chemicals; and the classification and labelling of chemicals.

Source: PhotoDisc

The Dobris Assessment was written in response to the first Pan-European Environment Ministers' Conference held at Dobris Castle near Prague in June 1991. The report fully vindicated the concerns expressed during that conference, identifying a number of serious threats and confirming the poor quality of the environment in many parts of Europe.

While there are some environmental improvements, such as with emission controls, the report concluded that these actions are often insufficient on their own to achieve recovery and improvement of natural resources and environmental quality. This is due to the level of degradation and the sensitivity and the often limited carrying capacity of the environment.

The report noted that increases in domestic, agricultural and industrial wastes, and of energy and transport intensity, follow - with some notable exceptions - the level of economic activity, while the reduction of final environmental pressures was still being mostly achieved by end-of-pipe measures.

It also observed, that the pollution problems in many parts of Central and Eastern Europe were largely related to poor industrial performance and to old and decaying installations and that it should be considered a common challenge for Europe to renew its production system.

Environmental data appropriate to a full appraisal of European environmental problems were found to be widely scattered.

In many cases appropriate data were found to be unavailable.

Furthermore, much information that is available is often inadequate to provide the basis for a rigorous assessment and accurate reporting on the state of Europe's environment. One major constraint at the European level is the lack of comparable, compatible and verifiable data across European countries due to existing differences in the methods of collection, the terminologies used and the degree of transparency. Improving the state of environmental information is a high priority in order to ensure that actions and decisions being taken by policy makers, the public and all sectors of society respond to the actual needs.

The report has been widely distributed. The Dobris Assessment is becoming a best seller for the Office for Official Publications of the European Communities and has won the European Information Association's 1995 Award for Best Official Publication. The Dobris Assessment is being used to:

- develop a comprehensive Environment for Europe Programme, addressing in particular transboundary environmental problems;
- provide a sound basis for more effective measures, strategies and policies on environmental problems - both national and regional; and
- to inform the public and raise awareness about our common responsibility for the environment.

Additional publications summarising the Dobris Assessment are required to inform the public adequately and other products are planned, including a popular version, CD-ROM and specially designed educational material.

Non-governmental organisations were involved in many aspects of the project: preparing the report, sometimes acting as alternative suppliers of information, being involved in the review process, and as sources of an independent constructive critique to the whole process. One such NGO was the Czech Society for Sustainable Living, which was founded by Josef Vavrousek, who was also the first Minister of the Environment for Czechoslovakia when the Dobris Assessment was commissioned. Josef Vavrousek, the "grandfather" of the Dobris Assessment, tragically died in Spring 1995.

The Sofia Conference 23-25 October 1995

The Third UN/ECE Conference of Environment Ministers, held in Sofia under the theme "Environment for Europe", confirmed the pan-European mandate of the Agency. The Agency delivered to the Conference the pan-European State of the Environment report, "Europe's Environment: The Dobris Assessment".

Leading up to the Sofia Conference, many demands and expectations had been made of the European Environment Agency, and questions raised concerning its role in the follow-up of the Dobris report and in the wider pan-European "Environment for Europe" process following the Sofia Conference.

EEA's Executive Director, Domingo Jiménez-Beltrán, asked for clarifications of these issues in his presentation to the Sofia Conference. In particular, he has asked for the demands on the Agency to be formalised in concrete terms in the Sofia follow-up process, so that the Agency would be able to respond to them in a responsible and efficient manner without deceiving expectations.

The "Environmental Programme for Europe" (EPE) recommended, that the role and work of the European Environment Agency and its network be promoted to establish and improve a pan-European network for environmental data-collection, analysis and dissemination, and to assist countries in transition with capacity building on environmental information issues. The EPE calls for the participation of all European countries in the work of the Agency in order to improve comparability and harmonisation of data and to co-ordinate data collection, in particular those necessary for future reporting.

Endorsing the EPE, the Sofia Ministerial Declaration registered its concern with the findings of the Dobris Assessment and requested the Agency to build on this work. In particular, the Declaration requests that before the next conference (to be held in Denmark in the spring of 1998), the Agency should report on progress in respect of the main issues identified in the Dobris Assessment. A proposal will be drawn up in co-operation with UNECE to plan this project and to identify the specific activities and resources required to fulfil the Agency's pan-European tasks in this area.

In the framework of the PHARE multi-country programme (1995-97) the preparation of a project has begun to promote cooperation between the Agency and the eleven PHARE countries. The project is planned to finance extensions of the CORINE Biotopes and Landcover inventories in 5 new PHARE countries, where these have not yet been implemented. Another part of the project will finance the setting-up and implementation of co-operative arrangements in all 11 PHARE countries in relation to the Agency. This includes the necessary organisational framework (the elements of the national structures and their connections with each other and with EIONET), and the participation of these countries in some of the existing projects of the Agency (such as the development of air quality and inland water monitoring, and preparation of the 1994 air emissions inventory).

Source: PhotoDisc

3.2 Environment in the European Union 1995 - Report for the Review of the Fifth Environmental Action Programme

At the end of 1994, the European Commission requested the Agency to prepare a new state-of-the-environment report for the European Union to update the one presented in 1992, and to contribute to the review of the Fifth Environmental Action Programme (5EAP), which is to be completed by the end of 1996. This was the first such request that the Agency had received since being established; the importance of the framework of the 5EAP for establishing the Agency's work programme priorities gave this task particular importance. The form of the report, the timing and the process by which it was to be developed and executed, was decided upon in cooperation with the Commission (DG XI) at the beginning of 1995. The project was started in March 1995.

It is a major effort in normal circumstances to prepare a state-of- the-environment report, since it is an activity that normally involves a wide cross-section of actors in different disciplines; with the Agency established but not yet fully up and running with its complement of staff, this was particularly the case. To the Agency's advantage, we had available the results of the comprehensive report *Europe's Environment: The Dobris Assessment* on which to base much of the work. Focus had to be given to the targets and themes of interest in the 5EAP and, wherever possible, the information had to brought fully up to date.

The report is structured along similar lines to the 5EAP itself, i.e. an integrated assessment of both environmental themes and causes of environmental degradation by target sectors. This indicator-based report gives an overview of the environmental measures taken to date, analyses the main trends in society giving rise to pressures on the environment, analyses the different environmental issues and the target-sectors and includes an assessment of the costs of implementation of environmental measures. Using nine performance indicators, the report contains an assessment of where the EU stands in relation to key 5EAP targets and how much more needs to be achieved ('distance to target').

Main conclusions

The main conclusions of the report are, that the European Union is making progress towards reducing certain pressures on the environment, though this is not enough to improve the general quality of the environment and represents even less progress towards sustainability. Without accelerated policies, pressures on the environment will remain exceeding human health standards and the often limited carrying capacity of the environment. Actions taken to date will not lead to full integration of environmental considerations into economic sectors or to sustainable development. Transport appears a key sector on which to focus future policy.

Balance of EC policies so far

Those 5EAP short term environmental targets set for 1994/5 will be reached resulting in a decreasing trend of some pressures on the environment. This progress is mainly due to pre-5EAP policies. Successes can be noted in the reduction of ozone depleting substances, emissions of heavy metals, nitrogen oxides (NOx) and volatile organic compounds (VOCs). These have been mainly achieved through developments in the industrial sector. Point sources of pollution have been well targeted by regulations. Diffuse sources, such as products, consumers and transport have been targeted far less effectively.

Although all sectors show increased activities (reflected in an increase of environmental expenditure with about 50% between 1992 and 2000), the EU will not reach all 5EAP targets for the year 2000. This concerns in particular pesticides and nitrates in groundwater, NOx and VOC emissions, waste management, while noise and CO2- emissions are uncertain.

A review of the current state of action and the information gathered so far, leads to the conclusion, that at this stage it is difficult to assess the effectiveness of 5EAP policies in changing future socio-economic trends. Despite the 5EAP strategy to integrate environmental considerations into other policy areas, most production and consumption trends remain unchanged compared with those from three years ago when the 5EAP was first tabled. For transport, higher growth has made the situation worse.

While the European Commission has been honouring most of its environmental initiatives foreseen in the 5EAP, further progress requires full involvement of all the parties concerned and improved integration of environmental considerations in all EU policies.

To achieve goals, EU needs to accelerate its environmental policy

If the European Union wants to achieve its environmental objectives and targets for the year 2000 and beyond, i.e. to pave the way towards sustainable development, an accelerated EU environmental policy is needed. This will be a major challenge for the European Union in the coming years, since most societal trends show that further pressures on the environment are likely to occur.

The following key issues require further attention at the European level: climate change (including CO2-emissions), acidification, (urban) air quality, water abstraction and the quality of groundwater, habitat destruction and fragmentation, and waste management. Other issues, which have not been comprehensively tackled at European level, are: the degradation of soil quality, which is an important natural resource; coastal management, and chemicals in the environment.

In general, population and economic growth show upward trends, translating into more energy use, tourism and, in particular, transport. If these trends cannot be combined with sufficient (and cost-effective) abatement measures, (further) decoupling of economic growth from these trends is essential in order to be able to secure sustainable development.

Index 1985 = 100	1985	1990	2000 target	Achievability target
Global scale				
CO_2 emissions	100[a]	102	102	+/-
CFC production	100[b]	64	0[c]	+
European scale				
SO_2 emissions	100	88	65	+
NO_x emissions	100[a]	107	70	-
VOC emissions	100	101	70[d]	-
Regional scale				
Municipal waste per capita	100	115	100	-
Noise above 65 dB(A)	100	>100	100	+/-
Pesticides in groundwater	100	>100	0[e]	-
Nitrate in groundwater	100	>100	0	-

Legend	+	likely that target will be achieved
	+/-	uncertain
	-	unlikely

[a] Including former eastern Germany
[b] In 1986
[c] By 1995
[d] By 1999
[e] By 2005

Table 1.2.1: Assessment of environmental progress in achieving the 5EAP 2000 targets using nine performance indicators

3.3 EEA Environmental Monograph - Environment and Health

The European Environment Agency (EEA) and the WHO European Centre for Environment and Health (ECEH) developed this publication as a joint effort to draw attention to some environmental issues that have a significant impact on the health of the people of Europe.

The report discusses the contribution of environmental factors to the main causes of death in Europe and examines three particularly significant issues: air pollution with suspended particles, the microbiological contamination of drinking water and road traffic accidents.

For the main health problems affecting the European population, the dominant risk factors of the most frequent severe diseases are related to various host characteristics (such as genetic predispositions) or behavior and lifestyle factors (such as smoking and unhealthy diet or excessive drinking). Nevertheless, a number of environmental factors do in different degrees adversely influence the health of the European population. Thus, they contribute to health problems such *as respiratory diseases, some types of cancer, gastrointestinal diseases, injuries and effects on well-being.*

Three particularly significant issues have been highlighted in the monograph - three areas where significant benefits can be expected through coordinated policies. Each is a widespread problem that causes significant damage to health of many people throughout Europe, and all are amenable to coordinated action that would result in both improved environmental quality and health benefits within a short time. Delaying this action would increase the damage and make these problems harder to solve in the future. The monograph identifies these issues - air pollution with suspended particles, the microbiological contamination of drinking water and road traffic accidents - sketches the harm that they do, and lists goals and strategies for action now.

Pollution of air with suspended particles.
Adverse health effects associated with suspended particulate matter (SPM) in air exist even at very low concentrations of particles. Effects are acute and most are of short duration. It is estimated that short term pollution episodes account for 7-10% of all lower respiratory illness in children and that this proportion reaches 20% in the most polluted cities. Although more data are needed on long-term effects, increases in chronic pulmonary disease incidence and in mortality are indicated by the few existing studies conducted at the levels of pollution common in European cities. From current knowledge, the steps necessary to reduce the health effects of SPM include: Reducing emissions of fine particles especially in highly populated areas; developing pollution control strategies to eliminate brief periods of high concentrations and to reduce long-term average levels; and to begin measuring SPM of a specified particle size in the monitoring networks.

Microbiological contamination of drinking water.
12% of the population in the WHO European Region, mainly in eastern countries, lack access to safe drinking water. Lack of these facilities has long been recognized as a major cause of many communicable diseases which remain widespread in many parts of Europe i.e. various types of diarrhea and hepatitis A. The large human and financial costs of waterborne epidemics are well documented in Western Europe and the United States. The domestic water supply can also provide a protective barrier against infections by allowing personal hygiene. The extent of human exposure to chemical contaminants in Europe still needs assessment to clarify the potential impact on European populations. Goals of action include:

reducing the burden of water-related communicable diseases by interventions that have been shown to yield clear benefits, estimating the extent of human exposure and avoiding contamination of water sources. Greater emphasis needs to be given to a comprehensive consideration of all aspects of water contamination from water source to point of use. Continued international coordination is needed to define priorities and carry out the necessary investigations of the health effects of chemical contaminants.

Transport and health
- Road traffic accidents.

Transport is considered as an important part of the economy and lifestyle of contemporary Europe but it exacts a high price from society and the environment. Transport is an important source of air and water pollution and contributes to the degradation of the landscape. The air pollution and noise emitted affect populations, particularly urban residents, reducing quality of life and promoting a range of less severe symptoms, sometimes leading to the permanent impairment of health or aggravating chronic disease. The most obvious direct health effect is the deaths and injuries caused by road traffic accidents - responsible for 88% of all deaths caused by all means of transport. On average more than six thousand people are injured and about 340 people are killed on Europe's roads every day. Although deaths in traffic accidents constitute scarcely 1-3% of all deaths, road traffic accidents cause 12-19% of all deaths in people aged 15-44 years. A wide range of evidence demonstrates the importance of road traffic accidents as a multisectorial issue of public health significance. Traffic accidents cannot be separated from the broad domain of transport and its environmental effects. The goals and strategies of actions to reduce the number of accidents and the resulting injuries and deaths throughout Europe all involve important win-win measures, which reduce accidents, environmental pollution, energy consumption and road congestion. It is being recognized that transport policy needs comprehensive revision in the long term to reduce the adverse effects of road traffic on both the environment and health. More fundamental policies being considered address the very demand for transport, the development of easily accessible and efficient public transport and the design of improved cargo flows.

The monograph shows that much still needs to be done to satisfy the basic human right for a healthy environment. For the three issues highlighted in particular, it is clear that much can be done to alleviate the problems and the consequent impacts on human health.

Source: Michael St Maur Sheil

Source: PhotoDisc

3.4 Development of the EIONET - the European Environment Information and Observation Network

Establishing EIONET

During the year considerable progress was made in establishing the main elements of EIONET e.g.

- the designation, initial operation and initial reports from the seven European Topic Centres on:
  - Inland Waters
  - Nature Conservation
  - Air Quality
  - Air Emissions
  - Marine and Coastal Environment
  - Land Cover
  - Catalogue of Data Sources;
- the establishment of NFP/EIONET meetings for the integration of EIONET and its development and implementation of the Work Programmes;
- the establishment of the Information Technology and Telematics Advisory Group (ITTAG);
- the establishment of the Information Strategy Task Force.

ETC -Inland Waters

In 1995 the ETC/IW has, according to the mid 94-95 work programme, produced 14 draft or final reports. Projects MW1 and 2 of the AWP aimed firstly to establish an overview of monitoring requirements laid down in international legislation and secondly to examine how each Member State has organised its monitoring networks for quantitative and qualitative conditions of groundwater, rivers, lakes, reservoirs and estuaries.

Against this background, project MW3 proposes a new monitoring network, comprising five different types of monitoring station, to be implemented by member countries in order to obtain timely, quantitative and comparable information on the status and trends of inland waters from all EEA member states so that valid temporal and spatial comparisons can be made, and so that key environmental problems associated with Europe's inland waters can be defined, quantified and monitored. Where possible, this monitoring network will be based on existing national and international networks.

Further, a first step towards the establishment of an EEA inland waters database has been taken by updating the river water quality database held by DGXI. This database is based upon data reported regularly to the Commission according to Council Decision 77/795/EEC, and it has been transferred to the EEA for merging with the EEA Task Force database on non-EU countries gathered for the Dobris Assessment. Following from the reservoirs work, a database on these water bodies has also been set up.

The ETC has, within projects MW4 and 5, produced three major reports on selected inland water quality/quantity issues. One addressing the environmental conditions of large European rivers in relation to major human activities in their catchments; a second report has focused on reservoirs, their usage and associated water quality problems; and the third report reviews the key water resource issues in semi-arid/water scarcity regions of the EEA area.

ETC - Nature Conservation

In 1995 the ETC/NC produced 15 draft reports and worked on a small number of databases and maps. Several projects continue in 1996. The 1995 work consisted in establishing an overview of existing data and monitoring activities and methodologies and of laying the foundations for further work on species, habitats and sites.

The ETC/NC has 15 partners, which were all involved in the work in different ways.

Biodiversity and Nature Conservation - A general Approach

The ETC/NC Central Team has drawn preliminary outlines for a general approach for the work with biodiversity and nature conservation in 1995. The work will finish in 1996 taking into account the results and recommendations of the projects performed in 1995 and

the outcomes of a workshop to be held in May 1996. It will focus on support to the Agency for reporting on the environment and to the Commission for work on NATURA 2000

Survey of existing databases

The Musée Nationale d'Histoire Naturelle (France) has made a preliminary inventory of about 200 major sources of data from Europe on species, habitats and sites, existing in the member states or in international organisations. The information is being used to identify relevant sources of data to be used in the NATURA 2000 work. It will also be used as a general directory for finding information on nature for the Agency work. The final results will be accessible also to the public through the Catalogue of Datasources.

Biodiversity assessment and ecological regions

Assessments of the biodiversity (species, habitats, sites, landscapes) are necessary for any evaluation of the state and trends of nature.

In order to assess biodiversity in a comparable and relevant way it has been necessary to initiate development of assessment tools. Since Europe's nature varies with the distance to the sea and with the latitude (among other factors) a good way to assess the biodiversity is to relate it to major ecological regions before it is assessed for Europe as a whole.

In 1995, the European Centre for Nature Conservation (ECNC, in The Netherlands) together with partners from other countries started a series of pilot studies on descriptions of ecological region characteristics. ECNC also began to develop a general frame for description of biodiversity. When the pilot studies are finished, the results will be incorporated in the general frame.

In 1995, the Higher Institute for Statistics and Information Management (ISEGI, Portugal) began to develop a digitised map of ecological regions, based on several ecological factors (natural vegetation, climate etc.) as well as on the biogeographic region concept developed for the NATURA 2000 work. In 1996, the digitised map of ecological regions will be finished.

Habitat classifications

It is important to use a unified classification system for habitats in order to make information comparable. The Institute for Terrestrial Ecology (ITE, in the United Kingdom) produced a survey of the development and present state of the CORINE and Palaearctic Habitat classification and the development of the habitat list in Annex of the Habitat Directive.

In 1996 the habitat work will be co-ordinated with other habitat initiatives.

NATURA 2000 Network database

In order to assist the Commission in the NATURA 2000 work, the Agency in 1995 supported development of a software by Cray Systems (Luxembourg). By the end of 1995, the software was distributed to member states in order to enable them to input directly data on the sites nationally proposed for inclusion in the NATURA 2000 network in a uniform and quick way.

In 1996, ETC/NC will assist the Commission in treating the data as they are delivered to the Commission.

Framework of a common European Information System on Nature

The Musée National d'Histoire Naturelle (France), in collaboration with WCMC (the United Kingdom), developed a frame for discussion of the building blocks of necessary information on nature. This frame will be discussed further as part of the development of the general approach as well as part of the assessment of biodiversity.

Other important work concerned site monitoring, buffer zones and ecological corridors, biodiversity indicators, species nomenclature and a review of the CORINE Biotopes.

Source: PhotoDisc

ETC - Air Quality

European air quality is a well-known topic of considerable interest to the public. In several European countries, the air quality situation is reported daily on public information channels, such as newspapers, television, and public teledata services. Most people have come into contact with smog alert messages; policies for immediate air pollution abatement during smog events are considered by governments - most recently in Germany.

Air quality is also linked to a number of well-known broader environmental issues, such as climate change, ozone depletion, acidification, nitrogen input, and toxification of waters, soils and ecosystems. Air quality, particularly in urbanised areas, is an important aspect in environmental effects on human health. In the report *Europe's Environment: The Dobris Assessment*, you can find many of these links and relationships explained and documented. Air quality has been formulated as one of the priority issues for the Agency. Air is a transport medium, carrying man-made emissions far beyond national boundaries. Therefore, by its nature, air pollution is a strong international issue, as is evident from the number of international conventions and actions covering the field of air quality.

In this broad and dynamic field, the European Topic Centre on Air Quality was established at the end of 1994. The Centre is a combination of four institutes from three countries, each of which has considerable experience in air pollution issues, with a strong emphasis on international aspects. The lead institute is the Dutch National Institute of Public Health and Environment (RIVM), forming a team with the Norwegian Institute for Air Research (NILU), the Norwegian Meteorological Institute (DNMI), and the National Observatory of Athens (NOA) from Greece. The project leader is Roel M. van Aalst from RIVM.

The goal of the Centre is to support the Agency in its tasks relevant to air quality information. The work of the Centre in 1995 is formulated in three projects from the Multi-Annual and Annual Work Programme of the EEA:

MA1: Air quality, general approach to assessment
MA2: Design and maintenance of European air quality monitoring and data bases
MA3: Harmonisation in air pollution models and model applications.

Most of the work in 1995 was devoted to reviewing, building and improving infrastructure in air quality monitoring, information systems and air pollution models, based on needs and requirements for air quality information in Europe. Based on information from this infrastructure, a pilot European air quality report has been produced this year, as the first of an annual series.

In the work, emphasis is on urban and local air pollution; it is not intended to duplicate existing assessment frameworks for continental and global scale. The Centre takes a pan-European approach wherever possible.

Around February 1995, five questionnaires were sent out to contact points in 38 European states. On the basis of the information received, reports have been drafted on needs and requirements for air quality information, on experience with existing air quality data bases, on current monitoring practice, and on requirements for models and modelling applications. Forthcoming reports will address: a general European approach to monitoring and assessment; detailed requirements for air quality monitoring; maintenance and development of air quality databases; and the state-of-the-art of air pollution modelling.

The principal clients of the work emanating from the Centre are the European Commission's Directorate-General for Environment, Nuclear Safety and Civil Protection (DG-XI), and the environment ministries of European states. Here, the air pollution policy and legislation is developed and implemented, in support of which the EEA and its Topic Centres should provide relevant, ready-to-use, objective, reliable and comparable information, according to the main goal of EEA. To aid this,

the Centre's work is closely linked to that of the ETC for Air Emissions. The close relationship between air quality and emissions and underlying human activities, makes information on all these factors of key importance for environmental policies. A close collaboration has also been set up with the EC Joint Research Centre, at Ispra (Italy). In addition, the Centre collaborates with international organisations such as WHO, WMO, UNECE and UNEP.

For 1996 and 1997, the Centre will continue to improve and build the European air quality infrastructure, including the annual European air quality report, and an air pollution model toolkit to be provided on World Wide Web. Additional elements proposed are:

- enhanced interaction with European countries
- assessment of urban air pollution
- support to EC-DGXI ozone abatement and public information strategies
- support of WHO air pollution exposure estimates
- contributions to the next report on Europe's environment.

For these issues, enhanced interactions with other topic centres and other EEA projects is envisaged.

ETC - Air Emissions

ETC/AEM is contracted initially to address two projects from the Agency's work programme:

Project	Title	Objectives
SA 1	Air Emissions General Approach and Assessment	Analysis of the situation and development of guidelines for air emissions inventories at different levels and Europe wide
SA 2	Emissions to Air 1990 and 1994	To review, consolidate and adjust the Corinair methodology to contribute to the development of the common tools for integrated inventories. To compile an emissions inventory for Europe for the year 1994 covering the eight pollutants covered by Corinair 1990 as well as heavy metals, persistent organic and other pollutants required under the various conventions and commitments of countries involved.

The Corinair (CORINE AIR) methodology was developed initially as part of the CORINE Programme, which included an air emissions inventory for EU12 in 1985. A second inventory (Corinair 90 for the year 1990) was compiled as part of the EEA Task Force programme while the decision was awaited on the location of the Agency. 29 countries provided Corinair 90 inventories for eight pollutants. Table 1 presents a summary table of the results from these countries (EU15, Norway, Switzerland, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia). Further details are available from each country on the contributions of some 250 activities within 11 main source sectors at NUTS level 3 (country, department, region etc.). Air emissions are relevant to several Prominent European Problems recognised in the report on Europe's Environment - the Dobris Assessment, published in August 1995 by EEA, including:

- Climate Change
- Stratospheric Ozone Depletion
- Acidification
- Tropospheric photochemical oxidants
- Forest degradation
- Urban Stress, including urban air quality degradation.

Corinair 90 is now recognised as the most detailed, comprehensive and consistent atmospheric emission inventory produced to date for Europe. The Agency and ETC/AEM can therefore make a major contribution to policy making and development in these areas by continuing the Corinair methodology and developing inventories on an annual basis for 1994 and beyond.

ETC/AEM is led by the German Umweltbundesamt supported by partners in the Austrian Umweltbundesamt, CITEPA and ENERO (European Network of Environmental Research Organisations).

The ETC produced three reports during 1995:

- Review of Corinair 90 - Proposals for Air Emissions 94
- Recommendations for Revised Data Systems for Air Emission Inventories
- Corinair 90: Summary Report No 1 (Summary of Results cf. table enclosed)

The first report included a full assessment of Corinair 90, its strengths and weaknesses and an assessment of user needs and priorities in order to make the proposals on how and what to compile in the 1994 inventory.

The ETC has now started to prepare revisions to the Corinair 90 data systems in order to compile this inventory by mid-1996 to provide a much more timely and accessible system than Corinair 90, meeting national requirements for reporting under various EU legislation and international conventions. In addition, the ETC is preparing further summary reports on the results of Corinair 90 and, with EEA, will prepare the Corinair 90 comprehensive report for publication in early 1996.

The joint EMEP/Corinair activity co-ordinated through the EMEP Task Force on Emission Inventories to produce a comprehensive Atmospheric Emission Inventory Guidebook completed its first phase by the end of 1995; the first edition of the Guidebook will be published by EEA in printed form in March 1996 and on CD-ROM in July 1996. The focus of Corinair and the Guidebook to date has been on national and regional emission estimates. However, it is recognised that as attention is directed more and more towards urban air quality, there will be a need for more detailed, comprehensive and consistent urban emission inventories to contribute to urban air quality evaluation and hence policy making and assessment.

Urban inventories are now normally required at high spatial resolution (1x1 km or less) and high temporal resolution (day or hour) and hence require major resources (personnel and financial) which should be met at the local or national level. However, for consistency and comparability, urban inventories should be consistent with national and European inventories and hence the Corinair methodology and nomenclatures should be used for urban inventories. To enable this, the joint EMEP/Corinair Guidebook and other material produced by ETC/AEM will be made widely available and should be used (as far as possible).

CORINAIR90 Air Emissions Estimates - Summary of Results (Table 1)

EUROPE (29 Countries)	SO_2	NO_x as NO_2	NMVOC	CH_4	CO	CO_2	N_2O	NH_3
Source Categories	Emissions in kilotonnes							
1.Public power, cogeneration and district heating	15017	3768	55	43	807	1331956	97	1
2.Commercial, institutional and residential combustion	3085	759	989	619	9947	849641	45	2
3.Industrial combustion	7041	2457	154	92	8200	1141187	54	1
4.Production processes	924	393	1220	76	3198	179916	356	172
5.Extraction and distribution of fossil fuels	45	82	1376	10408	63	27048	0	0
6.Solvent use	0	1	4920	0	1	379	0	0
7.Road transport	725	7874	6766	200	38919	695497	30	13
8.Other mobile sources and machinery	571	2331	677	25	2223	138733	6	0
9.Waste treatment and disposal	89	241	506	8752	4427	83173	13	128
10.Agriculture	1	50	759	14793	579	22450	726	5267
11.Nature	573	50	4347	10406	1358	294779	553	115
TOTAL in kt	28051	18006	21770	45415	69712	4764759	1880	5701
TOTAL EMISSIONS (excl. Nature), kg per head	57	37	36	72	141	9216	3	12

The Agency's work programme on air quality and air emissions has been underway since the beginning of this year. It is a demanding and ambitious programme to provide and improve the objectivity, reliability and comparability of information relevant to air quality in Europe.

The European Topic Centres on Air Quality and Air Emissions co-ordinated by the Agency staff and Scientific Committee are working closely together to ensure that their activities - developing databases and preparing guidebook/guidelines and summary, assessment and evaluation reports - reinforce each other and provide consistent, accessible and readily useable tools for a wide range of experts at the national, regional and local level to use to evaluate current and emerging urban air quality issues on an increasingly objective, reliable and comparable basis.

These guides, reports and tools will become available progressively over the coming 18 months.

ETC - Marine and Coastal Environment

There is a need for objective, systematic and quantitative information on the state, development and use of the marine and coastal areas surrounding Europe to support and evaluate policy measures.

A major function of the EEA is to gather, analyse and publish balanced, up-to-date, reliable and comparable information on the pressure, state and response of the marine and coastal environment. The pressure-state-response framework has become widely accepted internationally and the EEA recommends it as the guiding principle for organising the work of the ETC - Marine and Coastal Environment (ETC/MC).

The objectives of the EEA in this field are primarily to improve the information on the marine and coastal environment and to develop an approach on pressure and state indicators relevant to coastal zone management. This should be achieved by working as closely as possible with the regional and international marine conventions and various EU legal instruments.

To assist the EEA in achieving these prime objectives, the ETC/MC will undertake the following tasks based on the following projects of the Multi-annual Workprogramme 1994-99 (EEA/030/94):

MW6: Improvement of information on coastal and marine water quality
MW7: Integrated environmental assessment of coastal zones.

ETC - Land Cover

Ecological monitoring is the key for effective environmental policy. At a time when international conventions are requesting a change from today's way of living to a more sustainable one, knowledge of land cover and land use are essential. For this reason, the European Topic Centre on Land Cover (ETC/LC) was established in the late autumn of 1995.

Land Cover inventories have been made in the Member States since 1985 through the CORINE Programme. The ETC/LC will ensure that these databases are used in an effective way for the environmental work within the EEA and the EIONET partners, and also to give technical support to the different national land cover-teams. With an ambitious R&D-programme the ETC/LC will also expand upon this work.

The ETC/LC is led by the newly established Centre for Environmental Satellite Data, or MDC (from the Swedish Miljödatacentrum). It is based in Kiruna, situated in the most northern part of Sweden, and is run in co-operation with SSC Satellitbild, part of the Swedish Space

Source: Michael St Maur Sheil

Source: PhotoDisc

Corporation, which receives, archives, processes and distributes satellite remote sensing data. MDC's main tasks will be:

- Environmental Databases
  - Production, archiving and updating
- Development in co-operation with users and other expert centres
  - Environmental Monitoring
- Monitoring present status and changes in the environment
  - Environmental Research
- Development of methodology and models in co-operation with other expert centres.

The hosting of the ETC/LC is in line with the main tasks for MDC. A synergism should arise with already existing infrastructure and competence in Kiruna, such as SSC Esrange, SSC Satellitbild, SIGIT (Swedish Institute for Geographic Information Technology) - i.e. remote sensing and GIS training - and LM Kartor - i.e. digital map production.

The ETC/LC works as a consortium of 16 different organisations all over Europe, including JRC/IRSA. The Topic Centre is managed by a Project Leader at MDC, who, together with CNIG in Portugal and JRC/IRSA in Italy form a leading Core team.

An advisory group, mainly considering long-term questions, has also been formed. Along with the Core team organisations, it consists of IFEN (France), StBA (Germany), IGN (Spain), DIPS (Denmark) and NRDC (Ireland).

It is very important to observe the geographical distribution of the consortium members. There are regional differences on land cover elements as well as environmental issues, and a need for specific applications to handle data appropriately. The consortium has been formed and organised in order to provide relevant competencies and experience to handle production problems, communicate effectively with users and provide relevant land cover data.

The first workplan for ETC/LC (1995-96) will respond to an urgent need for land cover data in practically every field of work related to the state of the environment. The strategy will be to provide users with land cover data, on a European basis, which corresponds to needs in a wide range of applications such as: environmental monitoring, biodiversity measurements, creation of ecological corridors, natural resource inventories, mapping of areas sensitive to erosion, flooding, forest fires, toxicity, desertification, acidification, eutrophication, human infrastructure, and environmental impact assessments.

Today, there is some form of land cover mapping for most of the EU. The process will now be updated and converted to CORINE standard. There are fully operational information bases available for six countries in the EU, and for the other nine countries significant parts are already inventoried.

The ETC/LC works under the Programme Group "Monitoring and Databases" in the EEA's Multi-annual Work Programme (1994-99). Project MN 4 (Land cover - ecological monitoring), is executed through 25 different tasks (1995-96), organised in 6 different Work Packages:

- project co-ordination and development of EIONET;
- production and support to national Land Cover teams;
- development of guidelines;
- environmental indicators;
- application services and strategies
- research and development.

The ETC/LC and the EEA arranged a workshop in November 1995 entitled "Land Cover, applications and user needs". The final report of this meeting will be printed in March, 1996. During 1996, there will also be reports on the 4th and the 5th levels in the nomenclature for the CORINE datasets (today there are 44 classes in 3 levels), on updating, quality assurance, integration and data storage. Writing WWW pages will start.

In many tasks, there will be connections to other Topic Centres, to National Focal Points, to National Reference Centres and others. To co-operate with EIONET will be important for the Topic Centre and information will be given through workshops, reports, Web pages and other means. Information will be sought mainly through workshops, circulation of questionnaires and by review of published/unpublished sources. It is also necessary to have connections to the Centre for Earth Observation (CEO), EUROSTAT and DG XII, Space.

ETC/LC members
The members of the ETC/LC have a broad competence in remote sensing, GIS, database development, environmental monitoring, cartography, statistics and other fields relevant to Earth observation applications and evaluation. The team has wide experience in different environmental issues, together with different remote sensing methods.

ETC - Catalogue of Data Sources

The CDS Topic Centre is now starting its activities. The work of this ETC is seen of major importance for the EEA and EIONET, integrating the activities and capacities for defining, collecting, creating and disseminating information. The simple, but challenging question to be answered is: WHAT data and information is WHERE? Inventories will be compiled, through other Topic Centres and EIONET. Combined with a Multilingual Thesaurus, they will provide a foundation and a basis for many activities such as documentation services, navigation over telematics networks, the development of applications and gateways to databases or the implementation of systems.

3.5 Presentation of results delivered from the European Topic Centres

The European Topic Centres (ETC's) have produced a considerable number of draft reports during 1995. Draft reports are presently being reviewed by the Commission (DGXI), the Member States and the Scientific Committee in order to finalise and distribute the results of the work undertaken. Below, the main findings of the work of the Topic Centres is summarised. (A list of leading institutions and partners in the Topic Centres can be found in Annex 6).

Inland Waters

Work of the ETC and the EIONET institutions involved in inland waters has in 1995 been concentrated on analyses and recommendations for development of the European freshwater monitoring network, in order to ensure future delivery of objective, reliable and comparable information at European level. Two of the 33 draft reports delivered in 1995 are presenting information on the state of the environment, trends etc. based on review of data delivered from the EIONET.

An annual summary report from the ETC presents the work undertaken by the ETC/IW under the 1994 Subvention programme with a list of all reports produced during the year and proposals for future years.

Information on inland waters
- state of the environment, trends etc.
An analysis of the data provided by Member States to the Commission under the Exchange of Information Decision (77/795/EEC) has resulted in descriptions of water quality (state and trends) and has identified relationships between water quality and a broad range of human activities in the river catchments. A number of significant trends have been identified such as decreases in organic pollution and reductions in phosphorus concentrations in around two-thirds of the stations.

Water scarcity is recognised as an increasing problem in certain areas of Europe and availability is often compromised by poor quality. The key issues which constitute a threat to sustainability and have major repercussions from environmental, social and economic viewpoints are: eutrophication; groundwater overexploitation and resulting saltwater intrusion into coastal aquifers and large-scale water transfer schemes.

Analyses of needs for information on inland waters

In order to meet international requirements for monitoring *surface and groundwater* a number of recommendations are made to improve harmonisation such as the standardisation of definitions for determinants and sampling methodologies for monitoring surface and ground water. Those recommendations are based on reviewing the monitoring specifications laid down in EU Directives, other EU legislation, and bilateral and multilateral agreements including international conventions. Barriers to harmonisation of monitoring can occur at the sampling, analysis and data handling stages due to differences in specification between legislation and to imprecise specification within the legal instruments.

National programmes share many common elements which could easily be used for EEA purposes. In some cases, international monitoring programmes could also be extended to provide data for EEA purposes with minimal impact on the activities of Member States.

Sources of information

A catalogue of data sources contained within approximately 20 databases associated with international monitoring programmes has been described in a report, recommending and describing an electronic metadatabase as a navigation tool for use in those databases to locate information relevant to the needs of the EEA.

Basic information held in a database on the national networks on water resources monitoring networks, groundwater quality and quantity, is identified, covering responsible organisations and their addresses, site location, determinants measured, geological characteristics and other details.

A review of almost 250,000 publications, held on the Water Research Abstracts CD, provides a basis for estimating past and current topics of interest to researchers and others in this field and helps identify where future projects should direct their efforts.

Improving monitoring networks

To enable the EEA to meet its objectives to provide timely, reliable and comparable information on the state and trends of the aquatic environment, a freshwater monitoring network covering the whole EEA area has been designed, based on an analysis of national surface and groundwater monitoring network activities. Thus, to establish the proposed network, based wherever possible on existing national and international monitoring activities, recommendations and criteria for incorporating national sites into the EEA network have been provided. The network design is based on a sound statistical assessment of determinant variability and desired level of precision of information and covers quantitative and qualitative conditions of different types of freshwater bodies: groundwater, rivers, lakes and reservoirs and identifies the need for different types of monitoring stations for each type of freshwater body in question.

To support the network design, reports have been produced with the following conclusions and recommendations:

An overview of national *surface water quality* monitoring activities, which form the basis of a European network has been produced. Criteria for incorporating national sites into the EEA network, proposals for harmonisation of determinants and sampling procedures and ideas for information processing are included.

For *surface water quantity*, an overview, derived from questionnaire responses from the 17 countries of the EEA basic information on over 15,000 gauging stations in a relational database management system is provided. The conclu-

sion is, that there is a significant amount of commonality between the countries and the report offers a number of recommendations to achieve a harmonised monitoring system for Europe.

A detailed questionnaire to EEA Member States, based on the database held by the International Committee on Large Dams (ICOLD), is providing information on dams, reservoirs, their usage and any water quality issues. The information is structured in a database which can be extended to other, smaller reservoirs and natural lakes.

From analyses of the need for different types of monitoring stations, recommendations are:

- for *surface freshwater quality* - that the EEA network should be designed to take full advantage of the advances in ecological monitoring and information systems development.
- for *surface freshwater quantity* - that a hierarchy of different kinds of gauging stations is necessary to meet the EEA's needs and that the information delivery capacity in terms of range and accuracy of existing networks needs to be assessed.
- for *groundwater quality* - that the future EEA monitoring network for surveillance of groundwater quality should be based on state networks from which wells are selected on rigorous, objective criteria. These are detailed in the report.
- for *groundwater quantity* - that a pan-European comparison of groundwater quantity monitoring should be based on aggregated results (area, number of monitoring stations, monthly and annual changes' water tables etc.) of the basic or principal national monitoring networks as other networks (e.g. "impacts") take account of localised effects which may not be sufficiently comparable at the regional level.

Evaluations of the representativeness of existing monitoring networks resulted in the following:

- for *surface water quality*, evaluation of the representativeness of existing national river and lake monitoring programmes has been made with particular attention to the description of the network design, especially the number of sampling stations.
- for *surface water quantity*, that data being gathered through existing networks is gathered frequently and over a wide geographic area but some possible weaknesses have been detected e.g. a biased concentration of flow gauges in the lowlands and under-representation in islands.
- for *groundwater quality*, that data from existing and highly different monitoring networks in the EEA area will not give the reliable results which are needed by the EEA. A three-staged approach to reconcile existing networks and the needs of the EEA is recommended.
- for *groundwater quantity*, that existing national networks may be unrepresentative of the whole aquifer by being biased toward heavily exploited and/or impacted areas. This may present problems in gaining a regional view which needs to be further assessed in a pilot scale project.

From identification of gaps in current national and international monitoring networks is concluded:

- for *surface water quality*, that most national river monitoring networks will be adequate for EEA needs. In several countries, no national lake monitoring programmes exist, so local authorities may need to be approached.
- for *surface water quantity*, that existing networks for monitoring water resources are biased towards the lowlands but the inclusion of data gathered in uplands and head waters for meteorological purposes may counterbalance this.
- for *groundwater quality* a number of gaps between current groundwater quality networks and the EEA's requirements are identified. Some basic adaptation of existing networks may be required and the specifications for this are described.
- for *groundwater quantity* a number of gaps between existing groundwater quantity monitoring networks and the EEA's needs are identified. At this stage, however, the gaps may be due to a shortage on information and this will be checked during a pilot scale testing of the proposed EEA network.

Source: Michael St Maur Sheil

Recommendations for determining requirements for density, sampling frequency analytical methods, quality assurance schemes, data storage and estimate costs are:

- for *groundwater quality* recommendations for testing the determined requirements on a step by step basis using a minimum density and a few key determinants and progressively move into ambitious programme of testing.
- for *groundwater quantity* recommendations for station density sampling frequency and monitoring costs are identified. Monitoring is complicated by aquifer heterogeneity and the network will need to recognise this.

For design of the networks the following was provided:

- for *surface water quality* a logical framework for selecting representative sites from the national networks.
- for *groundwater quality* a logical framework for the use of national organisations to select representative stations for the EEA network was presented. It is recommended that the first (shallow) groundwater be used initially followed by data from deeper wells..
- for *groundwater quantity* recommendations that a station density of one or two wells per 100 sq. km should be used initially but more stations are needed according to specific local characteristics. Examples are given for guidance.

Recommendations for databases and presentation

Database systems and data storage procedures are very heterogeneous through the EEA countries. This will lead to problems with codification unless the EEA institutes a standard procedure. Requirements for the construction of a functional database are identified which includes the interface with visualisation tools such as GIS and statistical packages.

Nature

Biodiversity and Nature Conservation : A European General Approach

This report contains the first outline of the problems to be dealt with under the EEA work programme in the future. The recommendations focus on work on threatened species and habitats, but it touches on the need of widening the scope of the nature conservation topic and to begin to integrate nature and other topics such as water, air and soil and landcover (acidification, eutrophication, landuse). The report will be one of the basic papers for a general workshop, in 1996, on the topic nature for the EEA work programme in the future.

Survey of existing Databases on Species, Habitats and Sites

The report is based on a questionnaire sent to all National Focal Points in 1995, asking them to describe major sources of data on species, habitats and sites in the member states. The questionnaire focused on species and habitats appearing in annexes of the nature conservation regulations in EU. The ETC/NC added descriptions of international sources relevant for Europe. 200 sources were identified and the descriptions were stored in a simple Access database at ETC/NC in Paris. The data and the database have already been used in the preparations for the EEA Catalogue of Datasources . A major problem for the work was to obtain timely and detailed replies to the questionnaire.

Analysis of Existing Datasources and Proposals for Future

The report used the information about 200 datasources in an analysis of the coverage and gaps of information on species, habitats and sites. The analysis supports the general understanding, that so far, the largest amount of data have been collected on species, mostly on animals of interest for hunting or larger vertebrates, birds and insects such as butterflies, among the plants on orchids or on a limited number of heavily threatened species, while many species groups are very poorly known. The report shows, that information about widespread commonly occurring species in cultivated areas, apart from birds, is scanty. This points to a need for discussion on how to also obtain information on such species as a basis for integration projects with agriculture, air pollution and water aspects among others . The analysis indicates, that the first survey should be followed up, because very few NGO or university data sources have been identified.

Biodiversity Assessment/ Monitoring Methodology
This report contains the first deliberations on the possible methods and issues to use in order to assess the biodiversity in larger areas. It is a theoretical work, which will be broadened when the results from a number of pilot studies in different major biogeographical regions have been finished during 1996. The results will also be used in identifying necessary information for the Information System on Nature . An annex deals in some detail with hot-spot analysis.

Nature Indicators Survey
The report is based on the results of a questionnaire sent to all National Focal Points in 1995, asking them to describe the ongoing use of indicators for nature conservation purposes. The work was concentrated on species. A major problem concerned obtaining timely and detailed replies to the questionnaire. The report indicates, that wider use of indicators in nature conservation is only recently beginning, though a small number of projects of long standing was identified. The concept of working with indicators is currently of great interest, but most development work has been done on other topics, while indicators for nature conservation and biodiversity are only now emerging. The project showed that problems exist with definitions, scales and use of the indicator concept, but the report did not contain any recommendations for actual indicators.

Habitat Classification
The report contains a thorough description of development, content and cross references between the habitat classification system developed under the Commission's CORINE project, of the subsequent expansion of the system to the Palaearctic Habitat Classification covering also new EU member states and member states of the Council of Europe. It also enables cross checking to the Habitats Directive annex of habitats. It recommends a consolidation of the Palaearctic Habitat Classification and a parametrisation of the most relevant parts for use in flexible information retrieval in the Information System for Nature and for integration of habitat information with other topics such as landcover, soils and water.

Site Monitoring Methodology
The report is based on the results of the same questionnaire as MN2.3 sent to all National Focal Points in 1995, one part of the questions concerning the nature monitoring initiatives in member states. The report indicates, that monitoring for nature conservation purposes is not yet a widespread activity. Only few old activities were identified, but several recent programmes were described, showing that monitoring for nature conservation purposes is developing. The methodologies identified varied widely, though most were related to actual sites, to species populations or to habitat coverage. The problem of scale for selecting methodology was only touched upon, but will be important for further work (reporting to the Commission on the NATURA 2000 network, biodiversity follow-up). Nature aspects were only included in a limited number of projects monitoring climatic change, water and air quality.

The Wider Landscape for Nature Conservation: Ecological corridors and buffer zones
On the basis of examples from a number of countries, the report discusses and describes the concept of working with identification of ecological corridors and buffer zones in order to secure important sites and to facilitate migration and expansion of species through cultivated landscapes. The discussion deals with problems of scale, species differences and landscape structures as well as with general problems arising from planning and administration instruments. The report provides a list of items to work with, when ecological corridors and bufferzones are considered, but it is not a handbook to use in identifying and laying out corridors or bufferzones.

Maintenance and Review of the CORINE Biotopes Sites Database
The report gives a detailed overview of the work done so far in setting up and maintaining the biotopes database, which was initiated as one of the Commission's CORINE projects. It also deals with the very different use of the data

in member states, varying from virtually no use to use of the CORINE Biotopes information process as a useful national exercise. The usefulness was largest, where no other national system or systems were in place. The report recommends further development of merging the CORINE Biotopes Sites records with the NATURA 2000 database for development of databases containing more general site-based information.

Framework of a common European Information System on Nature

This is the first report aiming at setting the frame for development of an Information System for Nature. It identifies a number of necessary building blocks and indicates the need for a modular development and for a number of basic harmonisation tools concerning terminology (species names, habitat definitions) and classification and parametrisation of descriptions to facilitate cross retrieval between classes. The report does not give recommendations on the organisation of the Information System, apart from pointing to the need for very strong co-ordination in terminology and classification. Both for species, habitats and sites the Information System is indicated to be built on existing information, which as seen from some of the other reports is of very different coverage. The report is to be used during the further discussion in 1996.

Air Quality

Requirements and needs on European air quality information have been assessed. An analysis and inventory of current monitoring practices in Europe has been made based on a questionnaire sent to 38 European countries. An important theme is the need to relate air quality to sources and effects as a basis for solutions and a sector/source oriented policy. This leads to a definition of assessment which extends beyond the determination of air quality levels and includes the causal chain.

State of the air pollution monitoring situation in Europe - problems and trends - has been presented in the form of country network description tables, country summaries and European summary tables. Although coverage of air quality monitoring stations is impressive, with some 5000 urban/local stations, and more than 750 stations for regional monitoring, coverage is not sufficient for a number of compounds considered (lead, ozone, ozone precursors). In spite of availability of national air quality reports, comparison of air quality between countries is not easy due to a lack of harmonisation. Some countries make air quality information directly available to the general public.

Recommendations for an assessment approach at the European level have been delivered. The concept of information on air quality, according to the main EEA objective, is being developed. This calls for a broad definition of the concept of air quality assessment and for an analysis of the air pollution problems directed towards actors and sectors, in conformity with the principles of the Fifth EC Environmental Action Programme.

A review of current database systems APIS and GIRAFE, for air quality and monitoring stations, has been made, based on questionnaire returns. It indicates that:

- APIS is a reasonably sound system with essential information, and clear, but with limited applications, used only by few people, while
- the GIRAFE system, with details of monitoring stations, was used even less and contained a large number of errors and imperfections.

Recommendations are, to combine the information in both systems to enable selection of air quality data from certain types of stations and to make the data more widely available, for example on CD-ROM.

Evaluation of experience on EU Exchange of Information and other international air quality data collection has been made, summarising the responses to a separate questionnaire.

A preliminary study (AIRBASE) for the European Topic Centre on Air Quality has been prepared with proposals for system requirements for an air quality information system meeting the needs and requirements of a variety of potential clients, building on the experiences in the previous reports and those in other air quality information systems. The proposed system would provide a combination

of centralised and decentralised approaches, and would serve the needs of a variety of users (EEA, ETC, Commission, General Public etc.) at three different levels of access and detail.

Air Quality in Europe 1993 - a Pilot Report provides an overview of seven air pollution compounds, for which emissions and concentrations on local/urban and regional scales and their trends are presented in maps, graphs and tables. Although the information is incomplete (data were available from 17 European countries only) the data show that EU limit values for SO_2 and black smoke are still exceeded in some European cities and that EU and WHO guide values are exceeded extensively for a number of compounds, including ozone, NO_2, SO_2 and particulates.

A first evaluation of the quality and representativeness of monitoring networks and stations has been made. It is described how quality and representativeness should be assessed, in relation to the goals of the network. An attempt has been made to determine these characteristics from the information in GIRAFE on station siting and measuring procedures. A prominent conclusion is, that quantitative quality documentation cannot be derived from GIRAFE. It is recommended to provide explicitly an estimate of measurement quality in the field and a quantitative estimate of the area of representativeness within a specified margin of uncertainty.

A common minimum quality assurance program has been drafted and is under further development with the EC Joint Research Centre (JRC-ISPRA), to be finalised during 1996.

A review of requirements for models and model applications has been produced, reviewing the Dobris assessment report and practice in EC legislation, international instruments (such as EMEP and the marine conventions), as well as responses to questionnaires. Model applications are frequently used for regulatory and general assessment purposes by various users (scientists, air quality managers, policy makers). Forecast models may play an important role in providing timely information to the public in case of smog episodes. While requirements in terms of compounds and spatial and time scales can be provided, there is not much information on requirements on accuracy. It is indicated, that there is an urgent need for harmonisation and improved documentation for a relevant selection of the many available models. Combination of air pollution models with models for other compartments (water, soil) is also becoming more and more important.

Models for ambient air quality and pollutant dispersion/transport - State of the art, needs and trends have been assessed. An overview of air pollution models currently in use in Europe is given, on scales ranging from global to local. Models are important tools, not only for assessing emission reduction strategies, but also for estimating exposure and investigating economic aspects. Many models are available for most of the applications where they might be of use. Clear guidelines for model documentation are hardly available. It is indicated, that more attention is needed for the accuracy of the model output, as related to model inputs and model formulation and to model evaluation and validation. There is also a need for multi-scale models and for better experimental data for model evaluation.

Exceedance of ozone threshold values in the European Community in 1994 has been delivered as a report provided to DGXI to help prepare the Commission's report to the Council on data, that had been submitted by Member States in the framework of the Ozone Directive. It shows evidence that all threshold values set under EC legislation are exceeded, some of them frequently, largely and over major parts of EU territory. Recommendations are made to improve data exchange.

Air Emissions

In 1995, the Topic Centre on Air Emissions (ETC/AEM) finalised the review of CORINAIR 90 and prepared proposals for the CORINAIR 94 inventory.

CORINAIR 90 provides the most complete, consistent and transparent air emission inventory for Europe to date. Twenty nine countries delivered final inventories to the EEA (12 EU countries at that moment, 5 EFTA

Source: PhotoDisc

countries and 12 Central and East European Countries). The results of CORINAIR 90 were presented in several summary reports. The first report focused on the emissions of the main eleven source sectors for each of the eight pollutants that were inventoried (sulphur dioxide, nitrogen oxides, carbon dioxide, carbon monoxide, non-methane volatile organic compounds, ammonia, methane, nitrous oxide). Emissions were presented for each country by main source sector, per capita and per square km. The second report considered the emissions of the sixty detailed emission "sub sectors".

There still remain some gaps and inconsistencies in the inventory and the period for delivery of the final data was too long. To solve these problems, a revised data system was developed in 1995 for new inventories. Many improvements have now been incorporated in the system, for example complete correspondence with the source sectors used by the IPPC (Intergovernmental Panel on Climate Change), inclusion of energy balance calculations, inclusion of default emission factors (conform to the joint EMEP/CORINAIR Atmospheric Emission Inventory Guidebook) and inclusion of heavy metals and persistent organic pollutants to a total of twenty seven pollutants, compared to the eight pollutants of the previous inventory.

The inventories for 1994 and 1995 have started in January 1996 and the first provisional results for national totals (for 1994) of the first eight pollutants are expected in June 1996. In 1996 much attention will be given by the ETC/AEM to assist national experts and to improve the inventory methodology further. There is a need to integrate emission inventories and emission projections, which will be another important topic in the work programme for 1996.

Products and outputs:

Review of Corinair 90 - Proposals for Air Emissions 94

This report was part of project SA1 "Air emissions general approach and assessment". The experiences and the results of the 1990 air emission inventory Corinair 90 were reviewed, based on a questionnaire and sent to all participating national experts (29 countries). A number of proposals for the next inventories were made, regarding for example the timely delivery of national data to the EEA, the consistency with other inventories and changes in the data collection and database systems.

Recommendations for Revised Data System for Air Emission Inventories

Also as part of project SA1 and based on report no. 1 recommendations were made for a revised data system. Changes with high priority had to be implemented in 1995 in the new Corinair 94 software.

Corinair 90 - Summary Report no. 1

This work was part of project SA2 "Air Emissions Inventory 1990 and 1994". The report focused on the emissions of the main eleven source sectors for each of the eight pollutants that were inventoried (sulphur dioxide, nitrogen oxides, carbon dioxide, carbon monoxide, non-methane volatile organic compounds, ammonia, methane, nitrous oxide). Emissions were presented for each country by main source sector, per capita and per square km.

Corinair90 - Summary report no. 2

The second report on Corinair 90 considered the emissions of the sixty detailed emission "sub sectors". For each pollutant the ten largest contributing "sub sectors" were analysed, for example for sulphur dioxide the main "sub sector" is "Public power and cogeneration plants".

Revised software for Corinair 94

Based on report 03/95 the data model and the software for Corinair 94 were improved. Examples of the main improvements are correspondence with the source sectors used by IPCC and EMEP, inclusion of energy balance calculations, inclusion of default emission factors (conform the joint EMEP/CORINAIR Atmospheric Emission Inventory Guidebook) and inclusion of heavy metals and persistent organic pollutants to a total of twenty seven pollutants, use of an output module for carbon dioxide emissions (as required by the EU). The Corinair 94 software was distributed in January 1996 to national experts.

3.6 EEA and EIONET

Seminars and Workshops

- Seminar on the State of Europe's Environment and on the evaluation of measures to protect it, based on the first proofs of the Dobris Assessment, was held on 10 March 1995. It was attended by members of the Dobris Project Group and Agency Task Force who developed the report and by independent experts. Results included new Expert Corner Projects on a popular version of the Dobris Assessment and on the Environmental Space concept and related indicators. It also laid the basis for the Information Strategy Task Force meeting in September.

- Scoping study reports and seminar on Integrated Environmental Assessment: In 1995 a start was made to develop a clear and efficient strategy for integrated environmental assessment and to incorporate the integrated approach into the Agency's structure. Six months (February - July) were dedicated to help develop this strategy. The seminar was held on June 22, attended by 55 participants from member countries of the Agency, the European Commission, international organisations, the EEA Scientific Committee, the Topic Centres and EEA staff to discuss the results of these studies and give guidance about the Agency's role in IEA. The main conclusions of this work were fed into the development of the 1996 AWP.

- The Information Strategy Task Force had its first meeting in September where it addressed the role of the EEA in providing "information with a meaning" and "early warnings". Discussion centred on the need for a "hypothesis" or "vision" which would help turn "best available information" into meaningful information, and the implications of this for supportive coalitions, contacts with NGO's and other sources of early warnings. The meeting also addressed criteria for priorities and the balance between the EEA's three main roles of providing better descriptive statistics, interpretation of data for policy makers, and providing information for good practices.

- Workshop on Land Cover, Copenhagen 7-8 November 1995: This workshop, focusing on applications and user needs within the land cover area, gathered about 60 participants from Member Countries, Topic Centres, the European Commission, PHARE countries and NGO's, and laid the basis for further development of the work of the Topic Centre on Land Cover.

- First contacts with the European Investment Bank were made in November with a visit of the Executive Director to the Bank. A limited programme of mutual co-operation and exchange of information has been established.

Source: Michael St Maur Sheil

3.7 EEA's second anniversary - visit by President Santer & Commissioner Bjerregaard

13 November 1995 was an important day for the European Environment Agency. On that day it welcomed the President of the European Commission, Mr Jacques Santer, and the Commissioner for the Environment, Ms Ritt Bjerregaard, for a celebration of its second anniversary.

140 guests, including Ambassadors from the 18 EEA Member States, Members of EEA's Management Board and Scientific Committee, representatives from the European Commission, the European Parliament, industry, trade-unions, trade-associations, NGO's, as well as 45 members of the press, both Danish and international, listened to speeches by Derek Osborn, Chairman of EEA's Management Board, Domingo Jiménez-Beltrán, EEA's Executive Director, Commission President Jacques Santer and Environment Commissioner Ritt Bjerregaard. Chairman of the day was the Danish Minister for Environment and Energy, Mr Svend Auken.

Derek Osborn, Chairman of EEA's Management Board, was the first speaker. He said that much had been achieved in a relatively short time, and that this had been made possible by the generosity of the Danish hosts and strong support from DGXI (Environment) of the European Commission. Much of the first year had inevitably been spent in getting the EEA set up, but now it was up and running and had a wide-ranging and ambitious work programme.

Mr Osborn pointed out that the EEA Report for the Review of the EC's Fifth Environmental Action Programme (published by the Agency on 10 November) was an excellent example of the sort of high quality report which the EEA would be aiming to deliver in the future. The Commission had requested the report in good time as being directly relevant to its needs in developing future policies, and the report itself was well presented and it had been produced in time. It was to be hoped that this sort of rhythm could become the model in future with the Commission requesting the Agency to produce similar reports to feed into the development of European water or air quality policy, for example.

Mr Osborn emphasised that improving the quality of environmental information across Europe was essential. This varied from Member State to Member State, and the EEA's work would begin to identify gaps and flaws which would need to be addressed. This was an area where the EEA and the European Commission need to work closely together.

Mr Osborn underlined the fact that the EEA would need to disseminate its reports as widely as possible in order to focus the debate across Europe: the Commission and the Member States both had a role to play here in drawing attention to the messages which cried out for action. The EEA's role in the wider Europe would also need to be considered carefully: the Sofia Conference, at which EEA had presented its comprehensive report on the state of the Pan-European Environment (The Dobris Assessment), had shown that there was great enthusiasm among the CEE countries for early participation in the work of the Agency. EEA was ready to take on this task , and the Environment Council had given its agreement in principle to EEA expanding its work in this way, but this was inevitably subject to funds being made available.

Domingo Jiménez-Beltrán, EEA's Executive Director, in his speech focused on the messages emerging from EEA's Report for the Review of the Fifth Environmental Action Programme (5EAP). It was clear from this evaluation, that Europe was set to meet the 5EAP targets in some areas but not others - particular areas of concern were climate change, urban air quality, acidification, emissions from transport, groundwater quality, habitat destruction and waste management.

New approaches were needed on soil, coastal management and chemicals. Europe would need to consider how it responded to societal changes such as the rapid growth of tourism, private transport and energy consumption.

Mr Jiménez-Beltrán said that EEA's role in monitoring these targets was essential. It would strive to maintain timely and responsive data and information banks; and would seek to develop routine environmental reporting and indicators of environmental performance and sufficiency across the Union. These were considerable tasks, but they were essential to the future quality of Europe's environment.

The President of the European Commission, Mr Jacques Santer, said that it was clear that there was a real desire and commitment across Europe for EEA to succeed in its goals. EEA's key task was to provide the EU Institutions, Member States and the public with high quality information on key environmental issues. It had made excellent progress so far - the Dobris Report and the Review of the 5EAP were good examples of this process at work, and the latter in particular showed how EEA was beginning to contribute to the development of European environmental policy.

Mr Santer emphasised the importance of the environment being integrated into all policies. Sustainable development had to be the cornerstone of the Commission's policy making - protecting the environment did not mean less economic growth. It was important to change attitudes across Europe, and the Commission was seeking to do this by establishing indicators and developing market-based instruments to implement environmental policies. He wanted to see the Commission at the forefront of environmental protection and making rapid progress towards sustainable development.

In order to succeed, its environmental policies needed to be robust and justifiable on cost/benefit grounds, because otherwise it would be difficult to secure agreement for them in the Council of Ministers.

Mr Santer said that subsidiarity and proportionality were also essential. The sort of quality information EEA was now beginning to produce could go a long way towards countering the strong deregulatory pressures that were emerging. He was also very interested in the area of environmental valuation and green accounting, and felt that more should be done to take account of the fact that when the costs of a degrading environment were taken into account in calculating the GDP of a country, total GDP often went down and not up.

Ms Ritt Bjerregaard, Commissioner responsible for Environment and Nuclear Safety, said that the Agency was well placed to contribute to improving Europe's environment and helping to achieve sustainable development. The Commission would respond to the findings of EEA's Report for the Review of the 5EAP, particularly concerning transport and energy policies.

The 5EAP objectives remained valid, and there was no question of producing a Sixth Environmental Action Programme now. It was essential to ensure that Member States remained committed to the 5EAP objectives and played their part in accelerating progress towards sustainable development. Integration of the environment into other policy areas was critical, and with this in mind the Commission was considering producing a White Paper on its rural and agricultural policies, in which the environment would be a key theme. The concept of shared responsibility needed to be developed as all Europeans were stakeholders in Europe's environment, and a flow of accurate information was a key factor in promoting this.

Economic instruments were important, as was better economic analysis in decision making. Ms Bjerregaard was keen to encourage a switch in taxes from labour-based taxes to taxes on natural resources, and this was to some extent already happening at national level throughout Europe, but the need for unanimity on policies with fiscal provisions caused difficulties at EU level (notably concerning the proposal for an EU wide Carbon Tax). The unanimity requirement was an issue which might be reconsidered during the 1996 Inter-Governmental Conference (IGC).

Green accounting was also an area of particular interest, as was the development of indicators as benchmarks against which to monitor progress. Europe's environmental image had slipped a little since Rio, and it was important to get back to the forefront of global issues and take a leading role in key areas. In all of this, EEA had a key role to play.

At the end of the proceedings there was question time: among the points raised were that the Commission was keen to do more to improve its transport policies; that President Santer would consider how the environment might feature in the IGC, and that the Commission would do its best to persuade the Parliament to increase EEA's budget for 1996.

Finally, going to a computer terminal provided in the meeting room, President Santer opened the Agency's homepage on Internet by clicking on the mouse.

Source: PhotoDisc

3.8. THE EEA HOMEPAGE ON WWW

The World-Wide Web site of the EEA was launched on November 13 at

http://www.eea.dk/.

The EEA web site will play a key role in making information from the EEA available to the general public. It will also be the primary vehicle for information exchange within EIONET (the European Environmental Information and Observation Network).

Currently, the EEA web site provides basic information in the following areas:

- The mission of and expectations for the EEA
- EEA products and services
- The collaborators in the EIONET
- Organisation and staff of the EEA
- Links to other relevant environmental web sources

The products and services' section contains a list of EEA publications and all the newsletters. A summary of the Dobris Assessment and other publications can also be found in that area. Gradually, more publications and many EEA databases will also become on-line through the web. The newest items can be quickly seen at the main home page of the EEA.

Web sites are never finished nor complete, but there is continuous development. A web management team at EEA is taking care of the technical development of the service; another team looks after the on-line databases and coordination among the EIONET nodes. These teams can be reached by sending email to webmaster@eea.dk, or through the web.

As other EIONET nodes become better connected and start their web services too, the current emphasis on presenting the activities of the EEA only at the web site will gradually shift to providing live access distributed environmental information through a constellation of environmental web services all around Europe. Thematic nodes represented by the Topic Centres are playing a major role here.

In the first seven weeks till the end of 1995, there were 3000 accesses on the EEA home page and the total number of file retrievals was over 20 000 at the entire site. When fully operational/functional (mid 1996), the web site will be updated weekly.

Our Homepage

4. Towards 1997 - and after

In 1997, the first annual reporting will be launched, EEA will prepare for the second generation of ETC's, strengthen the integrated approach, and target information for integration of environment policy in the EU's sectoral policies. A main task will be to progress results for the reporting to the Follow-up Conference of Sofia, to be held in 1998, in Denmark, and supporting the preparation of the Sixth EU Environmental Action Programme - delivering the second tri-annual report on Europe's Environment.

1997 will also be the year in which the EEA's founding Regulation will be up for review. Article 20 of Regulation (EEC) No 1210, setting up the European Environment Agency and the EIONET, provides for a decision on further tasks for the Agency, based on a Report from the European Commission, by 30 October 1995.

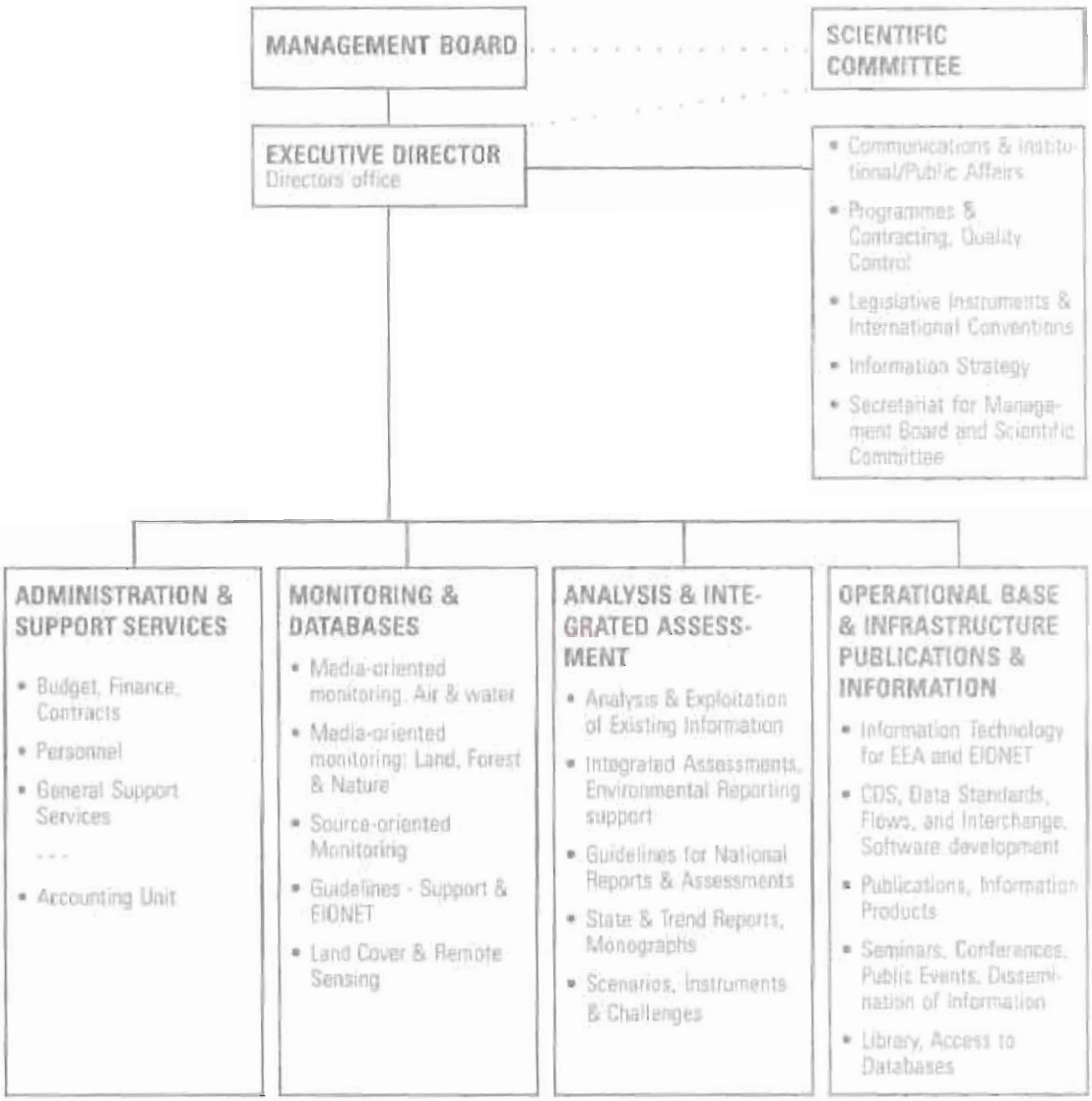
However, the EU Environment Ministers and the Commission considered at their meeting in Luxembourg, on 6 October 1995, that "as the Agency started to operate only in mid-1994 with its full staff not in post until the end of 1995, it would be desirable to allow the Agency at least two fully operational years before a decision is made on the assignment of further tasks to it".

In the long term, the coverage of the EEA area can be expected to include most of the European countries as they enter into agreements with the European Commission.

Source: Michael St Maur Sheil

Annexes

ANNEX 1: Organigram of the EEA



The organigram for the Agency contains 54 posts, 7-8 National Experts and consultants to implement the PHARE programme, etc. During 1995, 34 of the 54 posts were filled. The remaining 20 posts are planned to be filled before summer 1996.

At the beginning of January 1996, 42 persons are working in the Agency, including 1 Executive Director, 4 Programme Managers,13 Project Managers, 6 Support Posts, 10 Secretarial Posts etc., 1 officer affiliated from the Publication Office, 4 National Experts and 3 auxiliaries.

Source:
Michael St Maur Sheil

Personnel and tasks in EEA

The following list is a guide to the personnel and distribution of tasks in the EEA primo 1996:

Domingo JIMÉNEZ-BELTRÁN, *Executive Director*

- Communications & Institutional/Public Affairs: Ernst KLATTE, *Project manager*
- Programmes & Contracting, Quality Control: Jytte KELDBORG, *Project manager*
- Legislative Instruments, International Programmes and Conventions: .....(1/7/96)[1], *Project manager*
- Information Strategy: David GEE, *Project manager*
- Management Board & Scientific Committee Secretariat: Cécile DE ROOSE, *Officer*

1. State of the environment monitoring and data bases

- Gordon MCINNES, *Programme manager*
- Media-oriented monitoring 1: Niels THYSSEN, Project manager
- Media-oriented monitoring 2: Ulla PINBORG, Project manager
- Source-oriented Monitoring: André JOL, Project manager
- Monitoring Guidelines - Support & EIONET: Anna-Rita GENTILE, Project manager
- Landcover and Remote Sensing: .....(1/9/96) [1] Project Manager
- National Expert: Tone SOLHAUG, Project manager
- National Expert: Rudolf HERLITZE, Project manager

2. Operational infrastructure publications and information

- Jef MAES, *Programme manager*
- Information technology of EEA and EIONET: Organisation, co-ordination and management: Hannu SAARENMAA, *Project manager*
- Catalogue of Data Sources, Data Standards and Interchange, Software development: Sigfús BJARNASON, *Project manager*
- System and Network Administration 1: Florus BOTH, *Officer*
- Publications, Products & Communications, Library: .....(1/7/96) [1] (*Project manager*)
- Library: Albertus JANSEN, *Officer*
- Seminars, Conferences, Fellowships, Information Service: Axel KRISTIANSEN, *Project manager*

3. Integrated assessment prospective analysis

- David STANNERS, *Programme manager*
- Analysis & Exploitation of Existing Information: Paolo MEOZZI, *Project manager*
- Integrated Assessment: .....(1/9/96) [1], *Project manager*
- Guidelines for National Reports & Assessments: Peter BOSCH, *Project manager*
- State & Trend Reports, Monographs: Ronan UHEL, *Project manager*
- Scenarios, Instruments & Challenges: Maria Teresa RIBEIRO, *Project manager*
- National Expert: Ingvar ANDERSSON, *Project Manager*
- National Expert: Kempe WIERINGA, *Project Manager*

4. Personnel, Budget, Finance, Contracts, Management Board and Scientific Committee Secretariat

- Johan ÖRTENGREN, *Programme manager*
- Finance: .....(1/9/96) [1], *Finance Manager*
- Accounting Officer: Farhat GUENDOUZ, *Officer*
- Assistant Accounting Officer: Pascale GILSON, *Officer*
- Budget Officer: Anne-Marie CORDIE, *Officer*
- Contract Officer: .....(1/6/96)[1]
- Personnel: .....(1/6/96)[1], *Personnel Officer*

1) Date when postholder is foreseen to take up duty

ANNEX 2: Finances

6.1 RESOURCES

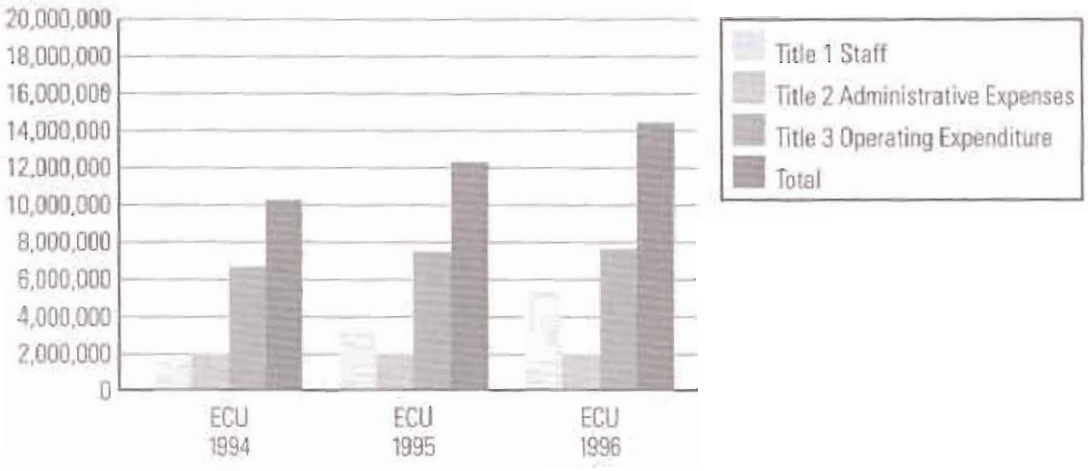
The budget for 1995, as approved by the Management Board, was 12.158.450 ECU, consisting of 11,788,000 ECU as the financial allocation for 1995, and a contribution of 170,450 ECU from the EFTA countries (Iceland, Norway and Liechtenstein).

6.2 EEA EXPENDITURE FOR 1995, BUDGET 1996 AND ESTIMATED BUDGET FOR 1997

The expenses for staff and administration and for implementation and operation of the Agency's Annual Work Programme in 1994, budget 1995, and actual budget for 1996, are presented in the table below.

Title	Heading	Financial Year KECU		
		1994 budget	1995 budget	1996 actual budget
1	**Staff expenses** (e.g. salaries, allowances, missions)	**1.659**	**3.212**	**5.157**
2	**Administrative expenses** Premises, office equipment and other running costs	**2.066**	**1.819**	**2.083**
3	**Operating Expenditures - Programme areas:**	**6.530**	**7.127**	**7.260**
	1-Information dissemination and pooling	0	540	200
	2-Periodic reports on state of the environment	840	1.100	750
	3-Guidelines for reports	80	115	300
	4-Media oriented monitoring	3.360	1.880	2.310
	5-Source oriented monitoring	150	887	550
	6-Integrated environmental assessment	0	200	100
	7-Scenarios for environmental improvement	0	80	300
	8-Instruments for policy development	0	5	50
	9-Capacity building for EEA and EIONET	1.670	1.600	1.800
	10-Exchange and dissemination of information	0.080	0.400	900
	Expert meetings	0.350	0.320	0
	Total	10.255	12.158	14.500

EEA Budget 1994-1996



ANNEX 3: EEA Work Programmes

OVERVIEW BY PROGRAMMES AND PROJECTS

- Projects in the Multi-Annual Work Programme 1994-1999 and their status in the 1996 Annual Work Programme.
The Multiannual Work Programme consists of 10 Programme Areas - implemented in the three divisions in the EEA , each responsible for a Programme Group

- Analysis and Integrated Assessment: Part I-Exploitation of existing information, reports and guidelines. Part II-Integrated assessments, scenarios and challenges.
- Monitoring and Databases.
- Operational base and Infrastructure, Publications and Information.

In the Annual Work Programme 1994-95 most projects from the Multi-Annual Work Programme were included; some were postponed until later AWP's, and a number of projects were deferred for further analysis, revision and review of the MAWP after two years. (Information concerning 1994-95 Work Programme indicated in the notes.).

The continuity of the 64 projects in the 1994-95 Work Programme is the following: 53 are continued as such (including IAR2 changed to MW7), 6 are continued at lower activity and merged with other projects (IAG2, IAP4, IAR1, IAR3, IAS1, CB9) and 6 were finished in 1995 (MW1-2, MA1, MN1, MS1, SA1 - mainly scoping subsequent work by ETCs.)

The AWP 1996 was adopted by the Management Board at its twelfth meeting on 19 December 1995, following receipt of the opinions of the Scientific Committee and the European Commission. The AWP 1996 presents a total of 57 projects. 19 of the 57 projects are to be executed by 7 European Topic Centres. 4 of the 57 projects are introduced directly from the Multiannual Work Programme to be started in 1996 - MW4-5 (partly initiated by the ETC on Inland Waters in 1995) plus G5 and MS2.

In the overview below, the complete list of projects in the Multi-Annual Work Programme is listed, and for each project its status in accordance with 1995 and 1996 activities is indicated: (finished 1995 or in 1996 AWP). The majority of the projects are ongoing from 1995. It is also indicated when a project is introduced in 1996 or is included, but merged with other projects.

Programme Group - ANALYSIS AND INTEGRATED ASSESSMENTS
Part I: Exploitation of existing information, reports and guidelines

1. DISSEMINATION AND POOLING OF EXISTING INFORMATION AND KNOW-HOW

*D1	Strategy for dissemination and pooling of information and know-how	in 1996AWP
*D2	Handbooks on existing experiences	in 1996AWP
-D3	Pool of experiences on sustainable development	
*D4	Pool of experiences with EIA, BAT, eco-audits, labelling	in 1996AWP
-D5	Information dissemination on environment-employment	

2. PERIODICAL REPORTS ON THE STATE OF THE ENVIRONMENT

*PR1	Publication of *Europe's Environment*	
*PR2	Development of products of *Europe's Environment*	in 1996AWP
*PR3	Development of monographs on *Europe's Environment*	in 1996AWP
*PR4	Tri-annual report on the state of the environment	in 1996AWP
*PR5	Reports in agreement with other institutions	in 1996AWP

3. GUIDELINES FOR REPORTS/ ASSESSMENTS/DATA PROCESSING OF SPECIAL INTEREST AT EUROPEAN LEVEL

*G1	Analysis of comparability and reliability, needs for guidelines and standards	in 1996AWP
*G2	Guidelines for reports on the state of the environment	in 1996AWP
*G3	Guidelines for drafting sustainable development reports	in 1996AWP
*G4	Guidelines for evaluating costs of environmental damage and policy responses	in 1996AWP
-G5	Guidelines for developing "green accounting" indicators	new in 1996AWP
-G6	Guidelines for evaluating socio-economic impacts of environmental/resource degradation	
-G7	Guidelines for developing programmes and projects for environmental infrastructure - technical and financial aspects (EIB)	

Programme Group - MONITORING AND DATABASES

4. MEDIA ORIENTED MONITORING. ASSESSMENT OF THE STATE AND TRENDS OF THE ENVIRONMENT. Water - Air - Nature - Soil

*MW1	Water resources - general approach to assessment	finished 1995
*MW2	Inventory of water resources monitoring networks	finished 1995
*MW3	Design of a freshwater water monitoring network	in 1996AWP
MW4	European freshwater monitoring network and databases -	new in 1996AWP
MW5	Water resources evaluation	new in 1996AWP
*MW6	Information on coastal and marine water quality	in 1996AWP
MW7	Coastal pressure and state indicators (former IAR2)	in 1996AWP
*MA1	Air Quality - general approach to assessment	finished 1995
*MA2	European air quality monitoring network and databases - establishment and maintenance	in 1996AWP
*MA3	Harmonisation in the use of models for ambient air quality and pollution dispersion/transport	in 1996AWP
*MA4	Ambient noise levels and exposure	in 1996AWP
*MN1	Nature protection - general approach to assessment	finished 1995
*MN2	State and trends of biodiversity in Europe	in 1996AWP
*MN3	Support to NATURA 2000 network	in 1996AWP
*MN4	Land cover - ecological monitoring	in 1996AWP
*MN5	Forest conditions - monitoring network and databases	in 1996AWP
*MS1	Soil quality and degradation - general approach	finished 1995
MS2	Soil characteristics, monitoring and mapping	new in 1996AWP
*MS3	Methodologies for inventories of contaminated sites	in 1996AWP

5. SOURCE ORIENTED MONITORING. ASSESSMENT OF PRESSURES.

*SG1	Common tools for emissions and waste integrated inventories	in 1996AWP
*SA1	Air emissions - general approach and assessment	finished 1995
*SA2	Air emissions inventories '90 and '94	in 1996AWP
*SW1	Emissions to water - general approach and assessment	in 1996AWP
SW2	Inventories on emissions to water	in 1996AWP
*SS1	Emissions to land and soil - general approach and assessment	in 1996AWP
SS2	Inventories on emissions to land and soil	
*SWS1	Waste generation and flows - general approach and assessment	in 1996AWP
SWS2	Waste - pilot projects for further assessments of inventories and analysis of main flows	
SWS3	Inventories and analysis on waste movements and transfers	

Source: PhotoDisc

Programme Group - ANALYSIS AND INTEGRATED ASSESSMENTS
Part II: Integrated assessments, scenarios and challenges

6. INTEGRATED ENVIRONMENTAL ASSESSMENT - PROBLEMS, AREAS AND SECTORS

*IAG1	The European environmental agenda: Highlights - basis for identification and ranking of priorities	in 1996AWP
*IAG2	Strategy for integrated environmental assessment	(in 1996AWP merged with IAG1)
*IAP1	Identification of need and feasibility of complementary analyses for specific problems	in 1996AWP
IAP2	Chemical pathways - references & pilot analyses	
IAP3	Natural cycles perturbances - references & pilot analyses	
*IAP4	Threats to human health	(in 1996AWP merged with PR3)
*IAR1	Integrated assessment - urban areas	
*IAR2	Integrated assessment - coastal areas	(in 1996AWP as MW7)
IAR3	Integrated assessment - rural and mountain areas	(in 1996AWP merged with PR3)
*IAS1	Integrated assessment - economic sectors	(in 1996AWP merged with IAP1)

7. SCENARIOS FOR ENVIRONMENTAL IMPROVEMENT

*SC1	Development of environmental scenarios & tools for prediction & analysis of trends	in 1996AWP
*SC2	Analyses of cases - air emission reduction scenarios	in 1996AWP
SC3	Analyses of cases - life cycle evaluations of specific products and production processes	

8. INSTRUMENTS AND CHALLENGES FOR ENVIRONMENTAL POLICY DEVELOPMENT AND IMPLEMENTATION

*IC1	Policy instruments - analysis of applications and trends	in 1996AWP
-IC2	The precautionary principle - application	
-IC3	Environmental liability - state and prospects	
-IC4	"No regret strategies" - state and prospects	
-IC5	International conventions - state and prospects	
-IC6	Sustainable development in main economic sectors - state and trends	
-IC7	Application of economic instruments - state and prospects	
-IC8	Environment and health - facts and questions	
-IC9	Technology prospects - technology and environment	
-IC10	Environmentally best available technologies - state and prospects	
-IC11	Environment and employment - state and prospects	
-IC12	Environmental research and development - state and prospects	
-IC13	Environment and trade	

Programme Group - OPERATIONAL BASE & INFRASTRUCTURE, PUBLICATIONS & INFORMATION

9. CAPACITY BUILDING

*CB1	EEA information technology infrastructure	in 1996AWP
*CB2	EEA wide area network	in 1996AWP
*CB3	Data and information interchange	in 1996AWP
*CB4	Consistency of terminology	in 1996AWP
*CB5	Development of multilingual thesaurus	in 1996AWP
*CB6	Catalogues of data sources - EEA and EIONET	in 1996AWP
*CB7	Development of data models	in 1996AWP
*CB8	Development of software for EEA-CDS	in 1996AWP
*CB9	Interconnecting CDS's of EEA and EIONET	(in 1996AWP merged with CB8)
*CB10	Development of library and reference data bases	in 1996AWP
*CB11	Support to EU Reporting Directive	in 1996AWP
*CB12	Acquisition of basic data	in 1996AWP
*CB13	Work-share agreements	in 1996AWP
*CB14	Pre-press and publications	in 1996AWP
*CB15	Programming and quality control of the EEA products	in 1996AWP
*CB16	Reports and research for the Scientific Committee	in 1996AWP
*CB17	Reports and projects not foreseen - requested by EU institutions	in 1996AWP

10. EXCHANGE AND DISSEMINATION OF INFORMATION

*ED1	Publications, bulletins, catalogues, CD-ROM's (Datasets, multimedia), report series, etc.	in 1996AWP
ED2	Seminars, conferences and public information	
ED3	Fellowships at the EEA	
*ED4	Information exchange system with M.S./ EU / NGO's	in 1996AWP
*ED5	Promotion of external participation - marketing of the EEA	in 1996AWP

NOTES :

* = included in Annual Work Programme 1994/95.

\- = not adopted by Management Board on 26 - 27 July 1994 (to be considered in next review).

= no symbol indicates that the project is adopted in the Multiannual Work Programme but not included in the 1994/95 Annual Work Programme.

ANNEX 4: EEA Management Board

By 31 December 1995 the composition of the Management Board was as follows:

Austria
Heinz Schreiber
Director General Bundesministerium für Umwelt, Jugend und Familie

Belgium
Paul Herman
Directeur Général de l' Environnement de la région Wallonne

Denmark
Leo Bjørnskov
Permanent Under-secretary of State
Ministry of Environment and Energy

Finland
Markku Nurmi
Director General
Environmental Policy Department
Ministry of the Environment

France
Michèle Pappalardo
Directrice Générale de l'Administration et du Développement Ministère de l'Environnement

Germany
Rudolf Viereggе
Head of Division - Directorate-General on Domestic and International Environmental Policy Affairs
Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit

Greece
Alexandros Voulgaris
Secretary General
Ministry of Environment, Physical Planning and Public Works

Iceland
Hugi Ólafsson
Head of Division Ministry for the Environment

Italy
Constanza Pera
Directeur Général du Service d'Evaluation de l'impact sur l'Environnement, Ministero dell'Ambiente

Ireland
Niall Callan
Assistant Secretary, Environment Division
Department of the Environment

Luxembourg
Charles Zimmer
Ministère de l'Environnement

The Netherlands
Paul E. de Jongh
Ministry of Housing, Physical Planning and Environment

Norway
Harald Rensvik
Secretary General Ministry of the Environment

Portugal
Artur Pires (Vice-Chairman)
Director General
Ministerio do Ambiente e dos Recursos Naturais

Spain
José Ramón González Lastra
Director General de Política Ambiental
Ministerio de Obras Públicas, Transportes y Medio Ambiente

Sweden
Mats Engström
Deputy Under-Secretary
Ministry of the Environment

United Kingdom
F. (Derek) A. Osborn (Chairman)
Director General, Environment Protection
Department of the Environment

Members designated by the European Parliament
Michael Scoullos
Professor
University of Athens
Greece

Brian Wynne
Research Director
Centre for the Study of Environmental Change
Lancaster University, United Kingdom

European Commission
Marius Enthoven
Director General
Directorate General for the Environment, Nuclear Safety and Civil Protection

Jean-Pierre Contzen
Director General
Joint Research Centre

EEA Scientific Committee*
Philippe Bourdeau,
Chairman of the Scientific Committee (invited to participate as a non-member)*
Université Libre de Bruxelles
Belgium

During 1995 the following members of the Management Board resigned as representatives:
Karel de Brabander, Head of International Relations, Vlaamse Milieumaatschappi, Belgium
Bérengère Quincy (Vice-chairman), Directeur Général Adjoint, Ministère de l'Environnement, France
Clemens Stroetmann (Chairman),Staatssekretär, Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit, Germany
Ingimar Sigurdsson, Director for Environmental Affairs, Ministry for the Environment, Iceland
Roberto Lasagna, Sous-secrétaire d'Etat, Ministero dell'Ambiente, Italy
Emilio Gerelli, Ministero dell'Ambiente, Italy
Kees Zoeteman, Deputy Director General for Environmental Affairs, Ministry of Housing, Physical Planning and Environment, The Netherlands
Graham Oddmund, Secretary General, Ministry of the Environment, Norway
Jon Kahn, Assistant Under-secretary, Ministry of the Environment, Sweden

ANNEX 5: Scientific Committee

On 31 December 1995 the membership of the Scientific Committee was as follows:

Full members	Alternate Members
Prof. Demosthenes Asimakopoulos (Vice-Chairman) University of Athens Greece	Director Knut H. Alfsen Research Department, Statistics Norway, Oslo, Norway
Prof. Philippe Bourdeau (Chairman) Université Libre de Bruxelles Belgium	Prof. Winfried E.H. Blum University of Agriculture, Vienna Austria
Dr. Eileen Buttle Willows Farm, Cleverton United Kingdom	Prof. Allan Johansson State Technical Research Centre, Helsinki, Finland
Prof. Frank Convery University College, Dublin Ireland	Prof. Marco Painho ISEGI/UNL, Lisbon Portugal
Prof. Georges Fülgraff Technische Universität Berlin Germany	Prof. Germund Tyler Lund University, Lund Sweden
Prof. Walter Ganapini Lombardy Environmental Protection Agency, Milan Italy	
Prof. Poul Harremoës Technical University of Denmark, Copenhagen Denmark	
Prof. J.C. Lefeuvre Laboratoire de zoologie et d'écologie, Rennes France	

During 1995, Prof. Johannes Opschoor, Advisory Council for Research on Nature and the Environment, Rijswijk, The Netherlands has resigned from his post as member of the Scientific Committee.

ANNEX 6:
EIONET Development - ETC Capacity

THE EUROPEAN TOPIC CENTRES (ETC) AND THE DEVELOPMENT OF THE EUROPEAN ENVIRONMENT INFORMATION AND OBSERVATION NETWORK (EIONET)

The co-operating organisations included in the networks of the seven ETCs are as follows :

Inland Water Topic Centre (ETC/IW)
WRc plc - WATER RESEARCH CENTRE, Medmenham, United Kingdom

AWW	Austrian Working Group on Water, Umweltbundesamt, Vienna, Austria
SWDE	Société Wallonne de Distribution d'Eau, Verviers, Belgium
VMM	Vlaamse Milieumaatschappij, Erembodegem, Belgium
DGU	Geological Survey of Denmark, Copenhagen, Denmark
NERI	National Environmental Research Institute, Silkeborg, Denmark
NBWE	National Board of Waters and the Environment, Helsinki, Finland
IOWater	International Office for Water, Paris, France
BfG	Bundesanstalt für Gewässerkunde, Koblenz, Germany
EPA	Environmental Protection Agency, Ardcavan, Ireland
DH	Delft Hydraulics, Delft, The Netherlands
NIVA	Norwegian Institute for Water Research, Oslo, Norway
RIZA	Institute for Inland Water Management and Wastewater Treatment, Lelystad, The Netherlands
INAG	Instituto da Agua, Lisboa, Portugal
LNEC	Laboratorio Nacional de Engenharia Civil, Lisboa, Portugal
CEDEX	Centro de Estudios y Experimentación de Obras Públicas, Madrid, Spain
BGS	British Geological Survey, Nottingham, United Kingdom
HR	HR Wallingford Ltd, Wallingford, United Kingdom
IH	Institute of Hydrology, Wallingford, United Kingdom

Marine and Coastal Environment Topic Centre (ETC/MC)
ENEA - MARINE ENVIRONMENTAL RESEARCH CENTRE, La Spezia, Italy

NBWE	National Board of Waters and the Environment, Helsinki, Finland
IFREMER	Institut Francais pour l'Exploitation de la Mer, Plouzane, France
NCMR	National Centre for Marine Research, Athens, Greece
NIFNM	Marine Institute Foras Na Mara, Dublin, Ireland
NIVA	Norwegian Institute for Water Research, Oslo, Norway
LNEC	Laboratorio Nacional de Engenharia Civil, Lisboa, Portugal
SMRC	Stockholm Marine Research Centre, Stockholm, Sweden
IEO	Instituto Espanol de Oceanografia, Madrid, Spain
MAFF	Fisheries Laboratory, Lowestoft, United Kingdom
NICMM	National Institute for Coastal and Marine Management, The Netherlands

Nature Conservation Topic Centre (ETC/NC)
MNHN - MUSEE NATIONAL D'HISTOIRE NATURELLE, Paris, France.

NERI	National Environmental Research Institute, Denmark
NBWE	National Board of Waters and the Environment, Helsinki, Finland
BfN	Bundesamt für Naturschutz, Bonn, Germany
EKBY	Greek Biotope Wetland Centre, Thessaloniki, Greece
NCR	National Council for Research, Naples, Italy
NINA	Norwegian Institute for Natura Research, Norway
ISEGI	Higher Institute for Statistics and Information Management, Portugal
ICN	National Parks and Reserves, Nature Conservation Service, Portugal
NNHM	National Natural History Museum, Madrid, Spain
ICONA	National Institute for Nature Conservation, Madrid, Spain
SEPA	Swedish Environmental Protection Agency, Solna, Sweden
ITE	Institute of Terrestrial Ecology, United Kingdom
ECNC	European Centre for Nature Conservation, Tilburg, Netherlands (including network members in universities and institutes in Austria, Belgium, Germany, Greece, Italy, Hungary, the Netherlands, Poland, the Russian Federation, Spain and United Kingdom)

Air Quality Topic Centre (ETC/AQ)
RIVM - RIJKSINSTITUUT VOOR VOLKSGEZONDHEID EN MILIEUHYGIENE, Bilthoven, The Netherlands

NILU	Norwegian Institute for Air Research, Kjeller, Norway
NOA	National Observatory of Athens, Athens, Greece
DNMI	Norwegian Meteorological Institute, Oslo, Norway

Air Emissions Topic Centre (ETC/AEM)
UBA - UMWELTBUNDESAMT, Berlin, Germany

UBA	Umweltbundesamt, Vienna, Austria
CITEPA	Centre Interprofessionel Technique de la Pollution Atmosphérique, Paris, France
ENERO	European Network of Environmental Research Organisations including: NETCEN, Culham, United Kingdom; RISØ, Roskilde, Denmark; ENEA, Rome, Italy.

Land Cover Topic Centre
SWEDISH SPACE CORPORATION, Solna, Sweden

MDC	Centre for Environmental Satellite Data; Sweden.
CNIG	Centro Nacional de Informacao Geografica; Portugal.
JRC/IRSA	European Commission's Joint Research Centre/Institute for Remote Sensing Applications; Italy.
CI	Centro Interregionale; Italy.
CRP-HT	Centre de Recherche Publique Henri Tudor; Luxembourg.
DIPS	The Danish Institute of Plant and Soil Science; Denmark.
FEA	Finland. Finnish Environment Agency;
GEOSPACE	Austria;
GIM	Geographic Information Management; Belgium.
HEMCD	Hellenic Mapping & Cadastral Organisation; Greece.
IFEN	Institut Francais de l'Environnement;
IGN	Instituto Geografico Nacional; Spain.
ITE	Institute for Terrestrial Ecology; United Kingdom
NRDC	Natural Resources Development Centre; Ireland.
SC-DLO	Winand Staring Centre for Integrated Land, Soil and Water Research; The Netherlands
StBA	Federal Statistical Office Germany.

Source: Michael St Maur Sheil

Catalogue of Data Sources and Thesaurus Topic Centre Niedersächsisches Umweltministerium, Hannover, Germany

APIT	APIT, Firenze, Italy
CNR	Centre Nationale de Richerche, Italy
ISEP	International Society for Environmental Protection, Austria.
LIPPKE&WAGNER	Dr. Lippke und Dr. Wagner GmbH, Germany
MOPTMA	Ministry of Public Works, Transport and Environment, Spain
MUVIS	MUVIS Umweltsysteme, Austria
SABINI	Sabini Library Automation, Spain
TNO	TNO Beleidstudies en Advies, the Netherlands
UDK-DC	Development Centre of UmweltDatenKatalog, Germany
UBA	Umweltbundesamt, Germany

In addition an advisory Committee comprised of members from Sweden, Norway, Ireland, Italy, Germany, Austria, Liechtenstein, Switzerland and France is established

Summary of information recieved on main component elements (MCE) and national reference centres (NRC)

Country	MCEs	NRCs
AUSTRIA	10	8
BELGIUM 1)	29	29
DENMARK	66	13
FINLAND	8	3
FRANCE	30	10
GERMANY 2)	17	17
GREECE	39	7
ICELAND	7	7
IRELAND	40	18
ITALY 3)	58	13
LUXEMBOURG	17	11
NORWAY	11	8
PORTUGAL	17	10
SPAIN 4)	23	15
SWEDEN	14	14
THE NETHERLANDS	22	21
UNITED KINGDOM	32	17
TOTALS	**458**	**219**

1) All MCEs are considered to be National and/or Regional RCs
2) UBA counted as 1 MCE but 11 units are listed under UBA
3) Regions (21) and River-basin authorities (6) counted as 1 MCE each
4) 16 State Administration Agencies included as MCEs

ANNEX 7: National Focal Points

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Source: PhotoDisc

During 1995 Mr Karel de Brabander, Flemish Environment Agency, served as National Focal Point for Belgium, and Mr Angel Herrero, Ministry of Environment, for Spain

ANNEX 8: Products and Services

PROVIDED BY THE EEA IN 1995

1 Dissemination and pooling of existing information and know-how
Internal papers on: Role of the Agency in the process of sustainable development; Information for environmental management; Demands and expectations from EU-institutions, NGOs, industrial federations and educational organisations; draft joint information strategy for EEA and EIONET; EIONET, Master plan for EEA and EIONET; ENVISION, a common vision of development of EIONET;

A strategy for pooling and dissemination of existing information and know-how.

2 Periodical reports on the state of the environment

- 'Europe's Environment - The Dobris Assessment' and its 'Statistical Compendium' with UNECE, UNEP, OECD, the Council of Europe, IUCN, WHO together with individual European countries and EUROSTAT
- Report on the Review of the Fifth EU Environmental Action Programme - Environment in the European Union 1995
- An annual report on ozone episodes developed as technical support to the European Commission.
- Environment and Health Monograph based on the DOBRIS report was drafted and available in 1995, developed with WHO

3 Guidelines for reports/assessment/ data processing of special interest at European level
No reports/services in 1995

4 Media oriented monitoring. Assessment of the state and trends of the environment
Most of those reports drafted mainly by ETC's are being discussed with the EIONET and other partners, final versions to be published by EEA during 1996.

Air Quality:

- Air Quality Monitoring - current situation, state and trends
- Report on state of the air pollution monitoring situation in Europe - problems and trends
- Report on recommendations for an assessment approach at the European level
- Review of current database systems APIS and GIRAFE for air quality and monitoring stations
- Evaluation of Experience on EU exchange of Information and other international air quality data collection
- Report Preliminary Study AIRBASE for the European Topic Centre on Air Quality
- Technical Report on 1994 Ozone Data prepared for DGXI
- Air Quality in Europe 1993 - a Pilot Report
- Report on first evaluation of representativeness and quality of monitoring networks and stations
- Report on requirements on European air quality monitoring information
- Review of requirements for models and model applications
- Report on models for Ambient Air Quality and Pollutant Dispersion/Transformation
- Report on maintenance and development of air quality databases
- Report on a common minimum quality assurance programme

Inland Waters:

- Detailed technical work plan
- International requirements for monitoring surface and ground waters
- Inventory of surface water quality monitoring activities in the EEA area
- Inventory of surface water quantity and groundwater quality/quantity monitoring activities in the EEA area (4 reports)
- Design of a freshwater monitoring network for the EEA area
- Quality of large EEA rivers in relation to catchment activities
- *Large river database merged with EEA-TF* database
- Development of reservoir database
- Importance of reservoirs, usage, environmental conditions and causes of identified problems
- Water resources issues in semi-arid European regions
- Annual summary report

Nature Conservation:

- Approche biogéographique
- Biodiversity and Nature Conservation: A European General Approach
- Survey of existing databases on species, habitats and sites

- Analysis of existing datasources and proposals for the future
- Biodiversity Assessment
- Digital map of European Ecological Regions (DMEER)
- Pilot Studies for the Assessment of State and Trends
- Nature Indicators Survey
- Species Nomenclature Survey
- Habitat Classification
- Site Monitoring Methodology
- The Wider Landscape for Nature Conservation: ecological corridors and buffer-zones
- Maintenance and Review of the CORINE Biotopes Sites Database
- Initiate the Creation of the NATURA 2000 Data Base
- Framework of a common European Information System on Nature

Other topics
- Scoping Study for ETC/MC (Marine Aspects)
- Scoping Study on Integrated Environmental Assessment of Coastal Zones
- Scoping Study on establishing a European Topic Centre for Forests
- Scoping study on establishing a European Topic Centre for Soil (1 and 2)
- Workshop on Land Cover - applications and user needs
- Workshop on contaminated sites

5 Source oriented monitoring. Assessment of pressures
- Review of Corinair 90 - Proposals for Air Emission 94 inventory
- Recommendations for Revised Data System for Air Emission Inventories
- Corinair 90 : Summary Report nr 1
- Corinair 90 : Summary Report nr 2
- The first edition of the Atmospheric Emission Inventory Guidebook, a joint EEA/EMEP publication, reference document for the preparation of the 1994 and subsequent annual inventories.

6 Integrated environmental assessments - problems, areas and sectors
- Integrated approach scoping study
- Scoping study on integrated environmental assessment of coastal zones as part of the development of an ETC/MC
- Seminar on integrated assessment

7 Scenarios and prospective analyses for environmental improvement
No reports/services in 1995

8 Instruments and challenges for environmental policy development and implementation
No reports/services in 1995

9 Capacity building of the functions of the EEA and the EIONET
- EEA Information Technology (EEA-IT) and the Local Area Network (LAN) for the EEA is partly established in 1995 (to be finalised in 1996)
- The basic infrastructure (servers, workstations/ PCs, peripherals, basic software etc.) was installed in 1994-95 (minor extensions foreseen in 1996)
- Establishment of the EEA reception, library and information centre
- EEA -homepage on WWW
- IDA commitment for first phase of the EEA wide area network to link up National Focal Points

10 Exchange and dissemination of information. Publication, seminars, conferences, education
- Newsletters and bulletins
- Annual report 1994
- Annual Work Programme 1996
- Brochures and videos
- EEA - Presentations on the premises
- EEA - Participation in a broad range of seminars, conferences, workshops etc.

Source: PhotoDisc

ANNEX 9:

PRESENTATIONS BY THE EEA EXECUTIVE DIRECTOR IN 1995:

- Presentation to the European Communities Committee, Sub-committee C, House of Lords (London, 11 January 1995);
- Presentation to the Economic and Social Committee (Brussels, 3 March 1995);
- Alocución de Domingo Jiménez-Beltrán en la ceremonia de entrega de la Medalla de Oro de la Villa (Calatorao, 4 de Marzo de 1995);
- Inaugural lecture "Environmental information in sustainable development. Objectives and programme of the European Environment Agency". Conference on Sustainable Development in the Community of Madrid (Madrid, 6-7 March 1995);
- Générale des Eaux Cambridge Environment Lecture: " The process of Sustainable Development and the Role of the European Environment Agency" (Emmanuel College, Cambridge, 17 May 1995);
- Round Table on Remote Sensing Policy, May 23, "Remote Sensing - The Need for a User-Driven Space Policy" ; Speech on "The European Environment Agency: goals and means. Elements for an efficient Remote Sensing Policy", (The Space Congress, Bremen, 23-25 May 1995);
- UNEP-Seminar "The Role of the Electronic Highway in the Preparation of Environmental Information for DecisionMaking", presentation on "The European Environment Agency and CyberSpace" (Arendal, Norway, 1 September 1995);
- Presentation on "Information and Environmental Management. The Role of the European Environment Agency", (Opening Ceremony of the Inauguration of the International Institute for Industrial Environmental Economics, Lund University, 15 September 1996);
- Børsen, Center for erhvervsinformation, Seminar on the Environmental Report in a future Perspective: presentation on "The development of Environmental Indicators and the Contribution to Green Accounting" (Copenhagen, 3 October 1995);
- Discours pour l'inauguration du Centre Thématique Européen pour la Conservation de la Nature (Paris, le 5 Octobre 1995).

Source: PhotoDisc