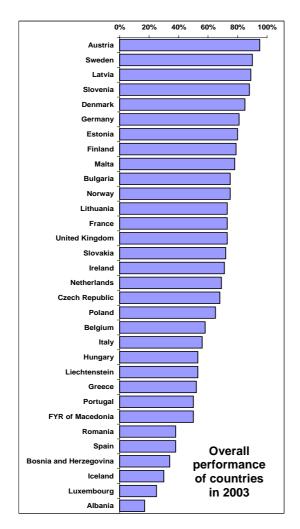
# **EIONET Priority Data Flows 2003**

# Seventh Progress Report to the Management Board

prepared by Sheila Cryan and Hermann Peifer EEA, Copenhagen – August 2004



### Contents

Foreword by the Executive Director

### Main messages

Overall performance of countries 2003 Performance of countries 2000-2003 Summary table of country performance Overall approach for scoring Timetable for priority data flows Reportnet implementation Data quality in EIONET reporting

### The basis for the analysis

Detailed criteria for scoring Relationship to EEA indicators Summary of deliveries by data flow Data flow reporting: History and outlook

### Progress in 2003

Detailed analysis by country Additional countries



#### Foreword by the Executive Director

#### Dear Colleagues,

I would like to present the seventh progress report on EIONET Priority Data Flows. The purpose of the Priority Data Flows report is to show progress against agreed, stable, well-defined objectives in order to allow countries to focus their resources on putting regular reporting procedures in place. The objective is to encourage countries towards better performance through "compétition amicale" concentrating on praise for achievements rather than blame for failures.

Progress has been assessed in 12 priority areas. This is the same thematic scope as in 2002, however, two of last year's data flows have been subdivided in the 2003 progress report according to the relevant reporting obligations so that the assessment is more transparent. Information on two additional data flows (Corine Land Cover 2000 and Contaminated soil) has again been provided but not included in the assessment of progress. Most data flows now cover 32 countries – see country performance analysis on page 3 – a substantially broader geographical coverage than in other ranking exercises and an aspect, which we think is a key added value of the EEA/EIONET collaboration.

In 2003 this analysis has been expanded even further by the inclusion of an overview of performance of those countries that participated in selected data flows: Croatia, Cyprus, Monaco, Serbia and Montenegro, Switzerland and Turkey.

My congratulations to Austria for the best performance once again in 2003. They have also found the time and energy to help other countries improve their reporting status. Sweden and Latvia have also done well again and they are joined at the top by Slovenia. It is encouraging to see how many countries are now managing to sustain or even improve on good results from one year to the next. This year 11 countries achieved a significant increase in their scores. Among these, Lithuania has made the greatest progress and Albania has begun to participate actively in EIONET data reporting. A special mention must be made for Malta entering the chart for the first time with a remarkable score of 78%. There are now 16 countries with scores above 70% and only six with scores failing to reach 50%.

Use of Reportnet tools to facilitate data flows has continued to increase during 2003. In particular the Central Data Repository (CDR) has been more systematically used by an increasing number of countries. We will continue to work with National Focal Points to improve and integrate the Reportnet tools further into all priority data flow activities. Ideas and feedback from national networks are invaluable to ensure that the tools provide support, which is useful at national level. While the development of software tools will continue, Reportnet is also about to enter a new phase with the EIONET project focussing on the improvement of institutional structures needed for efficient environmental data reporting.

The EEA Strategy for 2004 to 2008 includes an emphasis on quality assurance so that data can be used in an appropriate way. As indicated in last year's progress report, we are looking at how data quality can be assessed and presented in a systematic way. The concept of the priority data flows, their continuous monitoring and annual country benchmarking has over the past years already contributed substantially to the improvement of data quality in the EIONET reporting system. Provision of high quality data by EIONET is fundamental for EEA's mission to provide timely, targeted, relevant and reliable information to policy-making agents and the public.

With many thanks for your continued enthusiasm and support, I remain yours sincerely,

Jacqueline McGlade Executive Director European Environment Agency

#### **EIONET Priority Data Flows:**

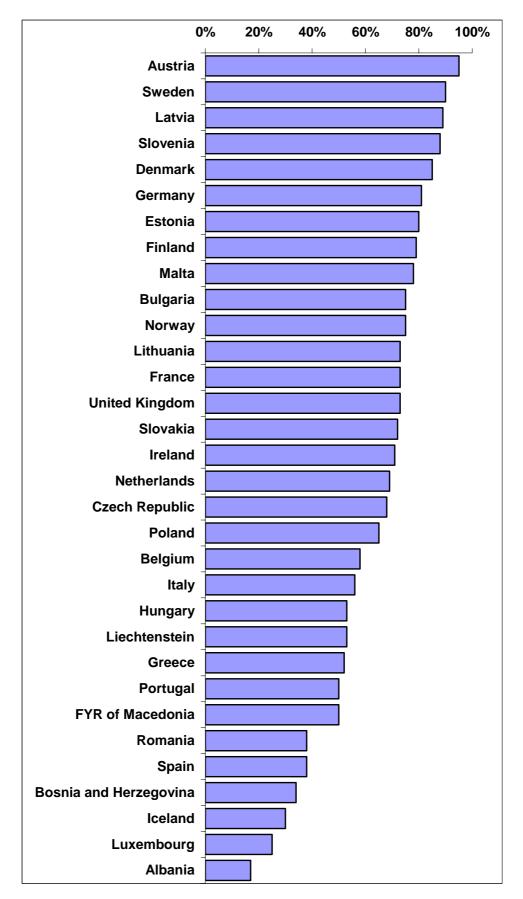


Figure 1: Overall performance of countries in 2003

### **EIONET Priority Data Flows:**

#### Table 1: Performance of countries 2000-2003

Country	No of flows	Score 2000	Score 2001	Score 2002	Score 2003	Trend 2	002-2003
Albania	9	0%	0%	0%	17%	+17	
Austria	11	81%	81%	97%	95%	-2	→
Belgium	12	31%	50%	53%	58%	+5	→
Bosnia and Herzegovina	8	18%	39%	29%	34%	+5	→
Bulgaria	10	42%	71%	69%	75%	+6	7
Czech Republic	10	38%	75%	72%	68%	-4	→
Denmark	12	81%	86%	83%	85%	+2	→
Estonia	11	54%	81%	72%	80%	+8	7
Finland	12	61%	72%	68%	79%	+11	7
France	12	47%	53%	63%	73%	+10	7
FYR of Macedonia	7	29%	42%	54%	50%	-4	→
Germany	12	69%	64%	83%	81%	-2	→
Greece	12	50%	50%	60%	52%	-8	R
Hungary	9	46%	68%	56%	53%	-3	→
Iceland	10	28%	14%	36%	30%	-6	R
Ireland	12	67%	61%	68%	71%	+3	→
Italy	12	39%	33%	65%	56%	-9	Ľ
Latvia	11	50%	66%	80%	89%	+9	7
Liechtenstein	8	19%	9%	61%	53%	-8	Ľ
Lithuania	12	36%	50%	47%	73%	+26	
Luxembourg	11	22%	36%	18%	25%	+7	7
Malta	8	N/A	N/A	N/A	78%	N/A	N/A
Netherlands	12	58%	67%	70%	69%	-1	→
Norway	10	64%	64%	81%	75%	-6	Ľ
Poland	10	36%	53%	72%	65%	-7	Ľ
Portugal	12	39%	33%	35%	50%	+15	7
Romania	10	21%	21%	47%	38%	-9	Ľ
Slovakia	9	25%	43%	63%	72%	+9	7
Slovenia	10	50%	66%	78%	88%	+10	7
Spain	12	58%	33%	55%	38%	-17	$\mathbf{I}$
Sweden	12	47%	89%	90%	90%	0	→
United Kingdom	12	78%	72%	83%	73%	-10	Ľ
Average (all countries)	7-12	45%	53%	62%	64%	+2	→

				EIONET Priority Data Flows									For inform	For information only —			
Country	No of flows	Score 2003 (number)	Score 2003 (%)	AE-1: CLRTAP data	AE-1b: NEC data	AE-2: UNFCCC data	AE-2b: EU GHG data	AQ-1: Eol data	AQ-2: Annual ozone	AQ-2b: Monthly ozone	CDDA-1: Designated areas	EWN-1: River quality	EWN-2: Lake quality	EWN-3: Groundwater quality	ME-1: Marine data	TE-1: CLC-2000 update	TE-2: Contaminated soil
Albania	9	-3	17%	-1	N/A	1	N/A	-1	1	N/A	1	-1	-1	-1	-1	N/A	-1
Austria	11	31	95%	3	3	3	3	3	3	2	2	3	3	3	N/A	3	3
Belgium	12	16	58%	2	2	3	3	3	3	2	-1	-1	-1	-1	2	3	3
Bosnia and Herzegovina	8	3	34%	-1	N/A	-1	N/A	2	N/A	N/A	1	2	-1	-1	2	N/A	-1
Bulgaria	10	20	75%	1	N/A	1	N/A	3	2	2	2	2	2	2	3	3	2
Czech Republic	10	17	68%	1	N/A	1	1	3	3	2	2	2	-1	3	N/A	3	2
Denmark	12	29	85%	3	1	3	3	3	3	2	2	2	3	2	2	2	2
Estonia	11	24	80%	2	N/A	1	1	3	3	2	2	2	2	3	3	3	2
Finland	12	26	79%	3	3	3	3	3	3	2	-1	3	1	2	1	3	3
France	12	23	73%	3	2	3	3	1	1	1	2	2	1	1	3	3	3
FYR of Macedonia	7	7	50%	1	N/A	-1	N/A	1	N/A	N/A	1	3	1	1	N/A	N/A	-1
Germany	12	27	81%	3	1	1	3	3	3	2	1	3	2	2	3	3	2
Greece	12	13	52%	1	1	1	1	3	3	2	1	1	1	-1	-1	1	2
Hungary	9	10	53%	-1	N/A	-1	N/A	3	3	2	1	1	1	1	N/A	3	1
Iceland	10	2	30%	-1	N/A	-1	N/A	1	3	2	2	-1	-1	-1	-1	N/A	2
Ireland	12	22	71%	2	3	1	2	1	3	1	2	-1	3	2	3	3	-1
Italy	12	15	56%	-1	-1	1	-1	3	3	2	2	1	1	2	3	3	2
Latvia	11	28	89%	3	3	1	N/A	3	3	2	2	3	3	2	3	3	2
Liechtenstein	8	9	53%	-1	N/A	-1	N/A	1	1	2	3	2	N/A	2	N/A	2	1
Lithuania	12	23	73%	2	1	1	1	2	3	2	2	3	2	2	2	3	2
Luxembourg	11	0	25%	1	1	1	-1	-1	-1	1	-1	2	-1	-1	N/A	3	-1
Malta	8	17	78%	1	N/A	1	N/A	3	3	2	2	N/A	N/A	2	3	3	1
Netherlands	12	21	69%	3	3	3	3	3	3	2	-1	-1	-1	2	2	3	2
Norway	10	20	75%	3	N/A	3	N/A	3	3	2	-1	1	1	2	3	N/A	3
Poland	10	16	65%	-1	N/A	-1	N/A	3	3	2	2	2	1	2	3	3	2
Portugal	12	12	50%	1	1	3	-1	3	3	2	2	-1	-1	1	-1	3	-1
Romania	10	5	38%	-1	N/A	-1	N/A	2	3	2	1	-1	-1	-1	2	3	-1
Slovakia	9	17	72%	1	N/A	1	N/A	3	3	2	2	3	-1	3	N/A	3	-1
Slovenia	10	25	88%	2	N/A	3	N/A	3	3	2	2	3	2	2	3	3	1
Spain	12	6	38%	1	-1	1	1	1	2	2	1	1	-1	-1	-1	3	2
Sweden	12	31	90%	3	3	3	3	3	3	2	1	2	3	2	3	3	3
United Kingdom	12	23	73%	3	1	3	3	3	3	2	-1	2	1	1	2	3	2

### Table 2: Summary table of country performance by data flow

#### **Overall approach for scoring**

The following simple rules have been applied for the evaluation of the overall country performance in Tables 1 and 2:

- For each data flow, the maximum score is 3 points ( ☺☺☺ ) and the minimum score is -1 point ( ☺) ) Please also see pages 8-20 in this report for the definition of individual scoring criteria per data flow area.
- 2. Scores from all 12 priority data flow areas are summed up for each country and then expressed as a percentage of the country's maximum score. Maximum scores are country specific, as not all countries are involved in all EIONET Priority Data Flows. Scores from the two additional data flows (Corine Land Cover 2000 and Contaminated soil) are **not included** in the overall results.
- 3. A result of 0% would mean that no data has been delivered at all for EIONET Priority Data Flows. A result of 100% would mean that complete data sets for all data flow areas have been delivered on time.

#### An example : Malta

In 2003, Malta participated for the first time in the EIONET Priority Data Flows. Malta was involved in 8 out of the 12 priority areas. The country did not have to deliver EU greenhouse gas (AE-2b: EU GHG) or National Emissions Ceilings (AE-1b: NEC) data, as these data flows were only relevant for the **15** EU member states in 2003. Furthermore, the Eurowaternet data collection on river and lake quality is not applicable to Malta as there are no rivers or lakes in the country.

The maximum score is:	8 data flows x 3 points		points
The minimum score is:	8 data flows x (-1) poi		points
The actual score 2003 is: equals 78% of the scale	17 points, which -8 24 points:	$\frac{17+8}{24+8}$	- x 100 = 78 %

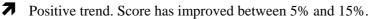
#### N/A

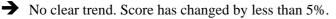
N/A means not applicable. Two out of the 12 data flows were only relevant for the 15 member countries of the European Union in 2003. Furthermore, some countries such as Austria are not party to the relevant marine conventions.

#### Trend 2002-2003

In Table 1, the trend of country performance 2002-2003 is indicated. The arrows show the overall trend in the following 5 categories:

↑ Strong positive trend. Score has improved by more than 15%.





- Negative trend. Score has deteriorated between 5% and 15%.
- ♥ Strong negative trend. Score has deteriorated by more than 15%.

#### **Timetable for EIONET Priority Data Flows**

Below is an overview of the deadlines for delivering data under the EIONET Priority Data Flows 2003. The reporting cycle began on 22 March 2003 with the deadline for the designated areas data (CDDA-1 data flow) and ended on 15 April 2004 with the delivery deadline for the AE-2 UNFCCC data flow.

Data Flow	]	Deadli	ne
CDDA-1: Designated areas	22	Mar	2003
AQ-2: Annual ozone data	18	Aug	2003
AQ-2b: Monthly ozone data	16	Sep	2003
TE-2: Contaminated soil	30	Sep	2003
AQ-1: EoI data	1	Oct	2003
EWN-1: River quality	19	Dec	2003
EWN-2: Lake quality	19	Dec	2003
EWN-3: Groundwater quality	19	Dec	2003
AE-1b: NEC data	31	Dec	2003
AE-2b: EU GHG data	31	Dec	2003
TE-1: CLC-2000 update	31	Dec	2003
ME-1: Marine data	30	Jan	2004
AE-1: CLRTAP data	15	Feb	2004
AE-2: UNFCCC data	15	Apr	2004

In 2004, most of the data delivery deadlines will be the same or similar to the previous year. An always up-to-date timetable of delivery deadlines is available as part of the Reporting Obligations Database (ROD) web service: <u>http://rod.eionet.eu.int</u>

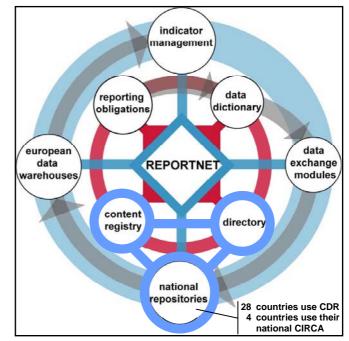
Through ROD's deadlines functionality ( **Deadlines** ), country-specific lists with reporting deadlines can be generated.



#### **Reportnet implementation**

Reportnet is EIONET's infrastructure for supporting and improving data and information flows. Reportnet is based on a set of inter-related tools and services which all build on the active use of the World Wide Web.

EIONET directory, national repositories and content registry are being used for the collection of data in all priority data flow areas. The tools facilitate data deliveries and ensure an efficient monitoring of data flows in an open and transparent reporting system.



#### **EIONET directory**

All EIONET Priority Data Flows involve Primary Contact Points (PCPs) and National Reference Centres (NRCs) in the countries' networks. All address and contact information on NRCs is stored in the EIONET directory, which holds the data for close to 900 nominated National Reference Centres from more than 330 organisation in EEA member countries and collaborating countries. Updating of directory information is done by the countries.

All communications relevant to EIONET Priority Data Flows are sent via the role based mailing function of the EIONET Directory. The following NRCs are the data providers for the priority data flows:

#### **Data Flow**

AE-1: CLRTAP data AE-1b: NEC data AE-2: UNFCCC data AE-2b: EU GHG data AQ-1: EoI data AQ-2: Annual ozone data AQ-2b: Monthly ozone data CDDA-1: Designated areas EWN-1: River quality EWN-2: Lake quality EWN-3: Groundwater quality ME-1: Marine data

TE-1: CLC-2000 update TE-2: Contaminated soil

#### **Relevant EIONET role**

NRC Air and GHG Emissions NRC Air Quality NRC River Quality NRC River Quality NRC Groundwater Quality NRC Coastal Water Quality NRC Marine Water Quality NRC Land Cover NRC Contaminated Soil

#### Central Data Repository (CDR)

Most countries have decided to use CDR for storing their national data. The Netherlands and Estonia, previously using a data repository on their national CIRCA server, are now also making use of the central CDR service.

Reportek is the open source software on which the Central Data Repository is based. It has been further improved in 2003. Reportek release 1.4 is freely available for download on the EIONET Portal website.



#### Content registry (CR)

The content registry enables transparent tracking of data delivered under the EIONET Priority Data Flows. Meta-information about data uploads is regularly harvested from other Reportnet services and stored in a central database. The contents are searchable through a web-interface. The URL to this Reportnet service is: <u>http://cr.eionet.eu.int</u>.

#### Data quality in the EIONET reporting system

The importance of strengthened data quality assurance measures and the need for implementing regular data quality assessments is strongly emphasized in the <u>EEA Strategy for 2004 to 2008</u> and the <u>EEA Annual Management Plan 2004</u>. This section gives a first overview on data quality issues in the EIONET reporting system. It also describes the close relationship between the regular priority data flow reporting and improvement of data quality.

#### Definition of data quality and related indicators.

Traditionally, it was understood that quality of data is a synonym for the accuracy of data. This perception has however changed in the last 20 years. A more modern and broader definition of data quality is:

Data quality is a measure of the degree of usefulness of the data for a specific purpose. Data quality indicators are qualitative or quantitative descriptors of data quality.

In the following overview, selected data quality indicators are presented: relevance, timeliness, completeness, and accuracy. These indicators are of particular importance when assessing data quality at the interchange between national and international data reporting with the main objective of giving feedback to the data providers, i.e. the EIONET countries. The selected indicators are also part of the definition of quality in statistics, as <u>adopted by Eurostat</u>.

#### Data quality indicators

#### Relevance

Relevance is the degree to which the data meet current and potential users' needs.

The initial set of priority data flows were selected in 1999 because they provided data for regularly produced Agency products and were therefore good targets for focusing national resources to improve quality (see <u>Justification for Priority data flows on EIONET Minutes</u> <u>NFP/EIONET Group meeting June 1999</u>). The mapping of data sets to EEA indicators has shown that the relevance of all priority data flows is still high. Data from all priority areas have been used for the production of those indicators which are already published on EEA web site. All priority data flows also feed into the indicators of the recently defined EEA core set of indicators. Countries beginning to participate in EIONET can use these data flows to orient their network development.

As new issues emerge the demand for new data flows increases. The EEA is currently embarking on a project to assign levels of certainty/uncertainty to a range of data sources and potential flows e.g. in environment and health, to assess their relevance in the future.

#### Timeliness

Timeliness of information reflects the length of time between its availability and the event or phenomenon it describes.

Timely delivery is important as delays with data deliveries do have an impact on the further steps in the production chain (data processing by the EEA's European Topic Centres, data publishing by EEA). It is particularly important when the processed data are required for a further reporting sequence as with the EU Greenhouse Gas Mechanism where the European community inventory must be submitted to the UNFCCC three months later.

Timeliness of data deliveries is therefore the principal criteria in most of the priority data flows. Where possible, EEA shifts deadlines in order to reduce delay with publishing data: e.g. Eurowaternet data delivery deadlines which were moved from the end of December (2002) to earlier in December (2003) and now to the end of November (2004). Publishing of quality-assured Eurowaternet data through EEA data service is now scheduled for February of the following year where previously it was April of the following year.

The EEA is also working with the Commission, other international organisations and countries to ensure that reporting deadlines are suitable for all parties. The reporting obligations database (ROD) now provides a calendar of deadlines, which can be viewed from the national or thematic aspect.

#### Completeness

Completeness refers to the amount of available data. Most important is the completeness across geographical entities (typically countries, regions or communes) and over time. For the individual priority data flows, the underlying reporting obligation defines what is considered to be complete.

Concerning the geographical completeness of European data sets, achieved quality improvements can be easily quantified. More and more countries are now participating and making their deliveries. An example of improved completeness are the Eurowaternet data sets, where country coverage increased significantly from 2000 to 2003: from 15 to 24 countries (groundwater data), from 17 to 24 countries (river data) and from 16 to 19 countries (lake data). Another example is the improved geographical coverage of the CLRTAP data flow, where country participation increased from 13 countries (2000) to 24 countries (2003).

With respect to the completeness of the national data deliveries, the evaluation of content in priority data flow deliveries has so far been based only on a selective view such as the percentage of records with key attributes such as geographical coordinates in the CDDA. The introduction of the Data Dictionary and the Central Data Repository version 2, which includes a Generic Data Exchange Module (GDEM), in 2004 will permit more complete checking of content across all data flows in future.

#### Accuracy

Accuracy is understood as the proximity of the figures to the exact or true values.

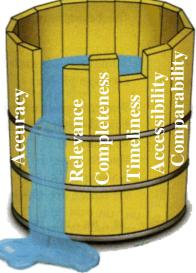
Accuracy of monitoring is a national responsibility. Some data collections require countries to provide information on how the data has been collected in particular the National Inventory Reports specified by the UNFCCC. Accuracy also requires no loss or corruption of data between the national delivery and the subsequent products. The use of national repositories in Reportnet already provides traceability between processing stages. The introduction of the GDEM will automate processing further and reduce problems inherent in manual procedures.

#### Other data quality indicators

Accessibility (physical access conditions for data users), clarity (availability of metainformation) and punctuality (time lag between the actual and planned release date of data) are also part of the Eurostat definition of data quality. These indicators are however mainly describing the quality of data from an end-user perspective (i.e. the quality of published data after processing and harmonisation) and hence less suited to assess data quality in the EIONET data reporting system itself.

Many more indicators could be applied in order to grade the assessment of data quality, among which are consistency, cost-efficiency, integrity, neutrality, reliability, robustness, security and soundness. Some of them will be picked up as EEA data quality reporting develops.

It is often argued which data quality indicator is most important. One answer to that is that the overall level of quality is limited by the weakest score among the assessed data quality indicators. This concept is well illustrated by the adjacent figure where the shortest stave defines the water level in the barrel.



#### Summary

EIONET Priority Data Flows, the monitoring, annual benchmarking and reporting back to countries is all about improving data quality in EIONET. The concept of "compétition amicable" is used to highlight the strengths and weaknesses of individual countries and to indicate where national resources for improvement could best be focused.

The annual overviews provided by the progress report show that the EIONET reporting system is achieving measurable sustainable improvement. The average score across all countries has improved from year to year: 45% in 2000, 53% in 2001, 62% in 2002 and 64% in 2003 (see Table 1 on page 2 of this report).

#### AE-1: CLRTAP data

#### Detailed criteria for scoring

Scoring criteria based on completeness of time series of requested pollutants included in national submission under the UNECE Convention on Long-Range Transboundary Air Pollution (CLRTAP). It is critical for the EIONET priority data flow that a copy of the national submission is made available electronically in good time in agreed national data repository.

	Complete time series made available from 1980 to 2000 for all pollutants SO2, NOx, CO, NMVOC, NH3 by 15/02/2004.
00	Only minor gaps in time series made available and/or delay not more than 4 weeks.
	Some major gaps in time series made available and/or delay not more than 6 weeks.
	Few years/pollutants made available and/or delay more than 6 weeks.
Related indicators	<ul> <li>Published indicators on EEA website: <u>Air quality indicators</u></li> <li>EEA Core set of indicators:</li> <li>1. Emissions of acidifying substances</li> <li>2. Emissions of ozone precursors</li> <li>3. Emissions of primary particulates and secondary particulate precursors</li> </ul>

#### Summary of data deliveries

Countries were asked once again to provide a copy of their national subvention to the Convention on Long Range Transboundary Air Pollution in their national data repository.

The quality of this data flow continues to improve. Fifteen countries delivered on time again this year. Ten achieved the full score of 3 points while a further 4 countries would have reached the full score if their delivery had been on time. The number of countries that did not deliver dropped to 8 countries this year. Hungary, Iceland and Romania together with Albania, Bosnia and Herzegovina and FYR Macedonia have never provided information for this data flow.

#### AE-1b: NEC data

#### Detailed criteria for scoring

Scoring criteria based on completeness of time series of requested pollutants included in national submission under the National Emissions Ceilings Directive (NEC). It is critical for the EIONET Priority Data Flow that a copy of the national submission is made available electronically in good time and <u>in agreed national data repository</u>.

	Complete time series made available from 2000 to 20002 for all pollutants SO2, NOx, NMVOC, NH3 by 31/12/2003.
00	Only minor gaps in time series made available and/or delay not more than 4 weeks.
	Some major gaps in time series made available and/or delay not more than 6 weeks.
	Few years/pollutants made available and/or delay more than 6 weeks.
Related indicators	<ul> <li>Published indicators on EEA website: <u>Air quality indicators</u></li> <li>EEA Core set of indicators:</li> <li>1. Emissions of acidifying substances</li> <li>2. Emissions of ozone precursors</li> <li>3. Emissions of primary particulates and secondary particulate precursors</li> </ul>

#### Summary of data deliveries

2003 was the second year of reporting for EU Member States under the National Emissions Ceiling Directive. Once again 13 out of 15 countries provided information although the countries, which failed to deliver (Italy and Spain) did so in 2002.

This data flow is not yet well established. Only 5 EU countries delivered their data by the deadline. Several countries only used their national data repository for later revisions. Lithuania and Latvia also provided data with Latvia gaining the full score.

#### AE-2: UNFCCC data

#### Detailed criteria for scoring

Scoring criteria based on completeness of time series of requested pollutants ... It is critical for the EIONET Priority Data Flow that a copy of the national submission is made available electronically and in good time <u>in agreed national data repository</u>.

000	Complete time series made available from 1990 to 2002 for all pollutants requested by data flow project: CO2, CH4, N2O, HFC, PFC and SF6 made available by 15/04/2004.
00	Only minor gaps in time series made available and/or delay of less than 4 weeks.
$\odot$	Some major gaps in time series made available and/or delay of no more than 6 weeks.
$\overline{\mathbf{S}}$	Few years/pollutants made available or delay of more than 6 weeks.
Related indicators	<ul> <li>Published indicators on EEA website: <u>Climate Change indicators</u></li> <li>EEA Core set of indicators:</li> <li>10. Greenhouse gas emissions and removals</li> <li>11. Projections of Greenhouse Gas Emissions and Removals and policies and measures</li> </ul>

#### Summary of data deliveries

The EU GHG and UNFCCC data flows have different reporting deadlines so they have been assessed separately in the present progress report for greater transparency.

In the AE-2 UNFCCC data flow, countries are asked to provide a copy of their national subvention to the UN Framework Convention on Climate Change by the deadline of 15 April 2004.

18 countries delivered on time including Albania. However only 11 countries provided the complete set of required data. 6 countries did not respond: Hungary, Poland and Romania, Iceland and Liechtenstein, Bosnia Herzegovina and FYR Macedonia.

#### AE-2b: EU GHG data

#### **Detailed criteria for scoring**

Scoring criteria based on completeness of time series of requested pollutants included in national submission under Council Decision 1999/296/EC (Monitoring Mechanism of Community CO2 and other greenhouse gas emissions). It is critical for the EIONET Priority Data Flow that a copy of the national submission is made available electronically and in good time in agreed national data repository.

000	Complete time series made available from 1990 to 2002 for all pollutants requested by data flow project: CO2, CH4, N2O, HFC, PFC and SF6 made available by 31/12/2003.
$\odot$	Only minor gaps in time series made available and/or delay of less than 4 weeks.
	Some major gaps in time series made available and/or delay of no more than 6 weeks.
$\overline{\mathbf{i}}$	Few years/pollutants made available or delay of more than 6 weeks.
Related indicators	<ul> <li>Published indicators on EEA website: <u>Climate Change indicators</u></li> <li>EEA Core set of indicators:</li> <li>10. Greenhouse gas emissions and removals</li> <li>11. Projections of Greenhouse Gas Emissions and Removals and policies and measures</li> </ul>

#### Summary of data deliveries

The EU GHG and UNFCCC data flows have different reporting deadlines so they have been assessed separately in the present progress report for greater transparency.

The AE-2b EU GHG data flow is only relevant for member states of the European Union. This means that in 2003, only the following 15 countries were asked to deliver data: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and United Kingdom.

9 out 15 countries provided a full and timely delivery for the EU GHG Monitoring Mechanism. Spain and Greece delivered after a short delay while Italy, Portugal and Luxembourg were significantly late. Lithuania, Estonia and Czech Republic also made data available.

#### AQ-1: EoI data

Scoring criter	<b>Detailed criteria for scoring</b> Scoring criteria based on timeliness of reporting in latest year and availability of data for Particulate Matter.				
	2002 data delivery in time and includes Particulate Matter (Black Smoke, TSP, PM10 or PM2,5)				
00	2002 data delivery in time i.e. by 1 October 2003				
$\odot$	2002 data delivery delayed.				
$\overline{\mathbf{i}}$	No 2002 data delivery				
	Published indicators on EEA website: <u>Air quality indicators</u>				
Related	EEA Core set of indicators:				
indicators	4. Exceedance of air quality limit values in urban areas				
	5. Exceedance of air quality limit values and critical loads				
	in rural areas				

#### Summary of data deliveries

The Exchange of Information and associated Euroairnet process require countries to provide information on air quality measurements and on the networks where monitoring has taken place.

21 countries made timely deliveries and provided the additional information on particulate matter. 3 further countries also delivered on time but without addition information. 6 countries made delayed deliveries. Only Luxembourg and Albania continue not to provide any data.

Reporting during 2003 again demonstrated that the procedure for this data flow is well organised in most countries. This means that in future greater attention should be turned to the quality of the data being reported.

In 2005, it is planned to undertake work on the data quality in Euroairnet.

#### AQ-2: Annual ozone data

#### Detailed criteria for scoring

Scoring is based on ozone data reported for the annual reference period according to Directive 92/72/EEC. Most important criterion is the timeliness of reporting. The maximum score is only given when additional information is provided together with the ozone data.

	Data delivered in time and additional information on station type, altitude of stations provided.
00	Data delivered in time. Deadline for the delivery of validated ozone 2002 data:18 August 2003.
$\odot$	Data delivery delayed.
$\overline{\mathbf{S}}$	No data delivery.
Related indicators	<ul> <li>Published indicators on EEA website: Ozone exceedances</li> <li>EEA Core set of indicators:</li> <li>4. Exceedance of air quality limit values in urban areas</li> <li>5. Exceedance of air quality limit values and critical loads in rural areas</li> </ul>

#### Summary of data deliveries

Reporting for validated annual ozone data (AQ-2) and reporting for monthly summer ozone exceedances (AQ-2b) have different content and deadlines so they have been assessed separately in the present progress report for greater transparency. 2003 was the last year of reporting under Directive 92/72/EEC as Directive 2002/3/EC relating to ozone in ambient air came in force in March 2002.

For the AQ-2 data flow, 24 countries delivered their validated annual ozone data on time and provided additional metadata for the monitoring stations, which is needed when using the data for assessment. A further 5 countries delivered after the deadline or without the metadata. Albania has made preliminary information available for the first time. No data were received from Luxembourg.

#### AQ-2b: Monthly ozone data

<b>Detailed criteria for scoring</b> Scoring is based on ozone data reported for the annual reference period according to Directive 92/72/EEC. Most important criterion is the timeliness of reporting.				
	Category not defined yet.			
00	Exceedance data for the period April-August 2003 should be reported before 16 September 2003.			
	Data delivery delayed.			
	No data delivery.			
Related products	Annual ozone reports on EEA website			

#### Summary of data deliveries

Reporting for validated annual ozone data (AQ-2) and reporting for monthly summer ozone exceedances (AQ-2b) have different content and deadlines so they have been assessed separately in the present progress report for greater transparency. 2003 was the last year of reporting under Directive 92/72/EEC as Directive 2002/3/EC relating to ozone in ambient air came in force in March 2002.

For the AQ-2b data flow, deliveries for monthly summer ozone exceedances were evaluated only for timeliness so the maximum score available was 2 smiles. 26 countries achieved this result. A further 3 countries delivered information with some degree of delay.

#### **CDDA-1: Designated areas**

#### **Detailed criteria for scoring**

Scoring criteria based on the quality of the data made available in the agreed national data repository.

inational data	
000	Designated areas made available by 22/03/2003. At least 95% of the nationally designated areas reported have the required attributes: centre co-ordinates, size of area and valid IUCN category. In addition: At least 50% of the nationally designated areas reported have the new attributes: altitude and valid habitat category.
00	Designated areas made available by 22/03/2003. At least 66% of the nationally designated areas made available have the required attributes: centre co-ordinates, size of area and valid IUCN category. In addition: At least 30% of the nationally designated areas reported have the new attributes: altitude and valid habitat category.
	Designated areas made available by 31/12/2003. At least 30% of the nationally designated areas made available have the required attributes: centre co-ordinates, size of area and valid IUCN category.
$\overline{\mathbf{i}}$	No data made available or less than 30% of the nationally designated areas reported have the required attributes.
Related indicators	EEA Data service: Nationally designated areas EEA Core set of indicators: 8. Designated areas

#### Summary of data deliveries

New and more stringent criteria were introduced in 2003 for evaluating the inventories of nationally designated areas. Countries have been asked to provide information on the geographical coordinates, the size and the IUCN category of their designated areas for the past 3 years. Countries now also have to provide information on altitude and on the habitats which occur within the designated areas in order to achieve a full score. All the requested information is needed to support biodiversity assessment.

Most countries found the criteria very difficult to meet this year. Allocation of valid IUCN categories, which permit comparison between differing national instruments, has caused great problems to some countries. Several countries have worked hard to add the new information on altitude to all or many of their records (Austria, Ireland, Italy and Sweden). Italy made the best effort to add habitat information, providing it for more than 200 sites. Liechtenstein and Monaco, both with very small inventories, achieved full scores.

It should also be mentioned that several countries are providing more detailed geographical information on a voluntary basis. However this type of information is not yet included in this progress report.

#### EWN-1: River quality, EWN-2: Lake quality, EWN-3: Groundwater quality

#### **Detailed criteria for scoring**

Scoring criteria are based on data deliveries for the current year and the provision of long time series of quality data for a variety of determinands. A further criterion is the identification of river and lake stations and groundwater bodies according to the criteria in the <u>Technical</u> <u>Guidelines for Eurowaternet Implementation</u>.

**New criteria** for achieving the maximum score are the provision of impact and hazardous substances data and the response of a country to the data validation questionnaire which helps us to improve the overall quality of Waterbase data.

	Rivers:	Lakes:	Groundwater:						
	Additionally, at least 2 out of the following criteria are met:	Additionally,	Additionally, at least 2 out of the following data sets have been provided:						
000	<ol> <li>More than 75% of sites identified and described, or</li> <li>Delivery of impact data, or</li> <li>Provision of a detailed response to the data validation questionnaire.</li> </ol>	<ol> <li>More than 75% of sites identified, or</li> <li>Impact data have been delivered</li> </ol>	<ol> <li>Data on pesticides and hazardous substances, or</li> <li>GIS data, or</li> <li>Saltwater intrusion data</li> </ol>						
00	1. Timely data delivery 2003 to national repository in the requested format, and 2. Long time series (more than 10 years) for ammonium, nitrate and total P available.	<ol> <li>Timely data delivery 2003 to national repository in the requested format, and</li> <li>Long time series (more than 10 years) for selected determinands (phosphorous, nitrogen, oxygen) available.</li> </ol>	<ol> <li>Timely data delivery 2003 to national repository in the requested format, and</li> <li>General description and quality data for at least 3 out of the following list of determinands have been provided: Nitrate, Nitrite, Ammonium, Dissolved Oxygen.</li> </ol>						
$\odot$	Delayed data delivery under Eurowaternet data collection 2003 (i.e. after the delivery deadline of 19 December 2003)								
$\overline{\mathbf{i}}$	No data delivery under Eurowaternet data collection 2003.								
Related indicators	Published indicators on E EEA Core set of indicator 19. Oxygen consuming 20. Nutrients in freshwa	ors: substances in rivers	<u>icators</u>						

#### EWN-1: River quality, EWN-2: Lake quality, EWN-3: Groundwater quality

#### Summary of data deliveries

The data request for this priority area was sent on 12 September 2003. Countries had 3 months time to deliver updated Eurowaternet information (deadline for data deliveries: 19 December 2003).

The best response rate to the Eurowaternet update request 2003 was observed for the river and groundwater quality data flows (24 countries provided data for both areas), followed by the lake data flow where 19 countries responded to the data request.

#### **EWN-1: River quality data**

19 countries made timely deliveries, but only 8 countries achieved the full score of 3 points which is only awarded if deliveries are complete. Another 5 countries achieved the score of 1 point for delayed and/or very incomplete data delivery. Luxembourg made its first delivery of data for Eurowaternet: quality data for 3 river stations have been provided. No data were received from Albania, Belgium, Iceland, Ireland, Netherlands, Portugal and Romania.

#### EWN-2: Lake quality data

Most of the 19 countries delivered data on time but only 5 countries achieved the full score of 3 points. No data were received from Albania, Belgium, Bosnia and Herzegovina, Czech Republic, Iceland, Luxembourg, Netherlands, Portugal, Romania, Slovakia and Spain.

#### EWN-3: Groundwater quality data

22 countries delivered data on time and 2 countries provided groundwater data after the deadline. Only 4 countries achieved the maximum score of 3 points. The following 8 countries did not deliver data in 2003: Albania, Belgium, Bosnia and Herzegovina, Greece, Iceland, Luxembourg, Romania and Spain.

#### **Reference Waterbase**

Reference Waterbase contains nationally validated, aggregated data on Europe's rivers, lakes and groundwater bodies collected from EEA member countries and collaborating countries through the Eurowaternet process. The data are primarily used in the production of the EEA's indicator-based factsheets.

Reference Waterbase contains information, applications and downloadable files on European river, lake and groundwater data. The database is part of the EEA Data Service and <u>available on public Internet</u>.

In 2005, it is planned to undertake work on the data quality in Eurowaternet.

#### ME-1: Marine data

#### Detailed criteria for scoring

Real data deliveries from countries have again been monitored and evaluated. However, as in last year's data collection: it is not the intention that the Eurowaternet data flow should require countries to make duplicate supplies of data. Any data already submitted to the Marine Conventions need not be re-supplied through the Eurowaternet process. These data will be requested directly from the Marine Conventions.

In summary: countries are asked to submit for this EIONET priority area only missing or additional data, not the data already delivered to Marine Conventions.

1							
	<ul> <li>Additionally, at least 3 items out of the following list have been provided:</li> <li>Hazardous substances in biota</li> </ul>						
	Hazardous substances in sediment						
	Hazardous substances in seawater						
	Nutrients in sea water						
	Riverine inputs and pressure data						
	Direct discharges						
	Station characteristics						
$\bigcirc \bigcirc \bigcirc$	Timely data delivery under Eurowaternet or to Marine Conventions, and						
	provision of data in the requested format.						
	Delayed data delivery under Eurowaternet or to Marine Conventions in 2003 (i.e.						
	after the delivery deadline of 30 January 2004). Deadlines for Eurowaternet and						
	Marine Conventions are identical.						
$\overline{\mathbf{S}}$	No data delivery under Eurowaternet or to Marine Conventions.						
	Published indicators on EEA website: Coast and seas indicators						
Related							
indicators	EEA Core set of indicators:						
	21. Nutrients in coastal waters						

#### Summary of data deliveries

An early notice concerning the data collection has been sent on 11 August 2003. The actual data request then followed on 31 October 2003. The deadline for data deliveries was 30 January 2004. This data flow only covers 25 countries, as 7 countries do not have a coastline.

12 countries made a timely and complete delivery and achieved the full score of 3 points. Less complete and partially delayed data were available from another 8 countries. No data were received from the following 5 countries: Albania, Greece, Iceland, Portugal and Spain.

On the working level, data sharing between EEA and Marine Conventions has improved in 2003. There is however still the need to better define related procedures through establishment and implementation of formal data exchange agreements.

#### TE-1: CLC 2000 update

<b>Detailed criteria for scoring</b> Criteria used here is whether there is evidence of progress in national preparations for CLC2000.								
000	CLC2000 data made available in national data repository by 31/12/2003. Deliveries may be final or partial, depending on the project stage. Data must correspond to the CLC 2000 format requirements.							
00	Relevant progress report made available in national data repository by 31/12/2003. Countries may post their most recent contractually required CLC2000 report: Quarterly progress report, Final report for Phase 1, Final report for CLC2000. Countries, that are not yet required to produce a contractual progress report, should make available a short description of actions taken at national level to advance their CLC2000 project.							
	National project management documents made available in national data repository by 31/12/2003.							
$\overline{\mathbf{i}}$	National CLC2000 commitment not in place by 31/12/2003.							
Related indicators	Published indicators on EEA website:       Nature grasslands         Fragmentation of land         EEA Core set of indicators:         14.         Land take							

#### Summary of progress in the countries

26 countries achieved the planned rate of progress with their national projects and of these 24 delivered data (although not necessarily of final quality) to the national data repository. At 31/12/2003, Iceland and Norway had not expressed interest in participating in this project.

**N.B.** The scores from this data flow are once again not included in the overall assessment. The scores are provided for information only.

#### **TE-2: Contaminated soil**

#### Detailed criteria for scoring

Regular annual deliveries to the agreed <u>national data repository</u> are requested on a limited set of data at this early stage of development:

- % contribution of localised sources to soil contamination;
- annual public expenditure on remediation of contaminated sites;
- progress in the management of contaminated sites.

$\odot$ $\odot$ $\odot$ $\odot$	Data made available on all 3 categories by 30/09/2003.
	Data made available on 2 categories by 30/09/2003.
$\odot$	Data made available on 1 category by 30/09/2003.
$\overline{\mathbf{i}}$	No data made available by 30/09/2003.
Related	Published indicators on EEA website: Soil indicators
indicators	EEA Core set of indicators: 15. Progress in management of contaminated sites

#### Summary of data deliveries

The deadline for this data flow was brought forward from December to September in 2003 so that the resulting information could be made available for the timetable for preparation of the Soil Thematic Strategy.

20 countries provided information by the deadline and a further 3 countries delivered later. Ireland, Luxembourg, Portugal, Romania, Slovakia, Albania, Bosnia-Herzegovina and FYR of Macedonia did not deliver data in 2003. However, Slovakia has explained that relevant new national legislation is being prepared, which will enable contributions in future.

# **N.B.** The scores from this data flow are once again not included in the overall assessment. The scores are provided for information only.

#### **EIONET** Priority Data Flows: History and outlook

The first progress report on data flow priorities was presented to the Management Board in March 1999.

The second report was sent together with a cover letter from the Executive Director in December 1999. In the letter it was indicated that the Agency would move to regular data flow monitoring on a 6-monthly basis.

The third progress report analysed the progress with priority data flows by June 2000. It was sent to the Management Board in August 2000.

The fourth progress report described progress with priority data flows by December 2000. It was prepared in April 2001.

In 2001, it was decided to adopt an annual cycle for the priority data flow progress reporting. Most reporting deadlines fall in the second half of the calendar year with a few falling in late January and February. It is not efficient to assess the data deliveries and begin the preparation of the report until the deadlines and a buffer period for delayed deliveries have passed.

The fifth progress report to the Management Board analysed progress with EIONET data flows in 2001. The final report was available in May 2002.

The sixth progress report described the progress of EIONET Priority Data Flows in 2002. It was published in June 2003.

The present seventh progress report presents the analysis of data deliveries between March 2003 and April 2004. The final version of the report was prepared in July and made available in August 2004.

In order to make the analytical process transparent, the two most recent data flow reports are available in electronic form in <u>the public library section</u> of the NFP/EIONET Interest Group on CIRCA at EEA.

#### Schedule and new approach for the next data flow report

The eighth data flow progress report will analyse data deliveries made by countries between May 2004 and April 2005. The final report will be presented in May 2005.

Concerning presentation and country review of the draft analysis, a new approach will be adopted for the next report. About 4-6 weeks after the delivery deadline of a data flow, the draft results will be made available for countries through a newly developed web application on the EIONET Portal. Countries will then be invited to comment on data flows, as soon as draft evaluation results are available. It is expected that timeliness and hence quality of the EIONET data flow reporting will improve considerably with the new approach.

The draft analysis for the CDDA 2004 data flow is already available in the new format:

http://www.eionet.eu.int/dataflows/pdf2004

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	Not applicable	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	$\overline{\boldsymbol{\otimes}}$	No information made available by 23 June 2004.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	Not applicable	Data flow is relevant for EU15 countries only.
AE-2: UNFCCC data	Not applicable	Not applicable	$\odot$	$\odot$	Limited time series in old format but posted in national repository.
AE-2b: EU GHG data		y evaluated tog UNFCCC data		Not applicable	Data flow is relevant for EU15 countries only.
AQ-1: Eol data	$\overline{\mathbf{i}}$	:0	30	$\overline{\mathbf{i}}$	No data delivery.
AQ-2: Annual ozone data	Not included in 2000	Not applicable	Not applicable	$\odot$	Text information delivered with delay.
AQ-2b: Monthly ozone data		y evaluated tog nnual ozone da		Not applicable	Not applicable.
CDDA-1: Designated areas	Not applicable	Not applicable	Not applicable	٢	52 sites reported. 100% have IUCN category and size but less than 50% have coordinates. 11% have information on altitude. None have information on habitats.
EWN-1: River quality	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	$\odot$	$\overline{\boldsymbol{\otimes}}$	No data delivery in 2003. No deliveries under earlier data collection.
EWN-2: Lake quality	8	$\overline{\boldsymbol{\otimes}}$	$(\dot{\mathbf{S}})$	$\overline{\otimes}$	No data delivery in 2003. No deliveries under earlier data collection.
EWN-3: Groundwater quality	8	$\overline{\boldsymbol{\otimes}}$	$\overline{(3)}$	$\overline{\otimes}$	No data delivery in 2003. No deliveries under earlier data collection.
ME-1: Marine data	$\overline{\boldsymbol{\aleph}}$	$\overline{\mathbf{i}}$	$(\mathbf{\hat{s}})$	$\overline{\otimes}$	No data delivery in 2003. No deliveries under earlier data collection.
TE-1: CLC-2000 update	Not included in 2000	Not applicable	Not applicable	Not applicable	Not applicable.
TE-2: Contaminated soil	Not included in 2000	Not applicable	Not applicable	$\overline{\boldsymbol{\otimes}}$	No delivery

## Table 3.2: Detailed data flow analysis for Austria

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	000			000	Full time series delivered on time. Additional data also provided.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	$\odot$ $\odot$ $\odot$		Time series for all pollutants delivered in time.
AE-2: UNFCCC data	000	00			Full time series on time.
AE-2b: EU GHG data		/ evaluated tog UNFCCC data			Full time series on time
AQ-1: Eol data	000			000	Data delivered in time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000				Data delivered in time. Additional requested data included.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance data delivered in time.
CDDA-1: Designated areas	00	$\odot$	000	00	1087 sites reported. 100% with information on IUCN category, size, coordinates and altitude. None have information on habitat.
EWN-1: River quality	00	00	00	000	Data delivered on time. Number of reported river stations far above the target number (288%). Time series for total ammonium, nitrate and total phosphorus data: around 10 years. Impact data delivered.
EWN-2: Lake quality	00	$\odot$	$\odot \odot \odot \odot$		Basic quality data delivered on time. 75% of lake stations identified. Some long time series available. No impact data provided.
EWN-3: Groundwater quality		00	000	000	Data provided on time. 14 important groundwater bodies identified. Data on pesticides, hazardous substances and saltwater intrusion provided. GIS data provided.
ME-1: Marine data	Not applicable	Not applicable	Not applicable	Not applicable	Country does not have a coastline.
TE-1: CLC-2000 update	Not included in 2000	$\odot$	$\odot$		National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	$\odot \odot \odot \odot$	$\odot$ $\odot$ $\odot$		Requested data delivered on time.

## Table 3.3: Detailed data flow analysis for Belgium

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	8	00	00	00	Partial time series provided. No additional information. Delivered on time.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001		00	Time series to 2000 delivered with a slight delay.
AE-2: UNFCCC data	00	00	$\odot \odot \odot \odot$		Full time series on time.
AE-2b: EU GHG data		y evaluated tog			Full time series on time
AQ-1: Eol data	000		$\odot$ $\odot$ $\odot$	000	Data delivered in time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot$			Data delivered in time. Additional requested data included.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance data delivered in time.
CDDA-1: Designated areas				$\overline{\mathbf{S}}$	618 sites reported. More than 80% have information on size and coordinates but only 10% have valid IUCN categories. No information for altitude or habitats.
EWN-1: River quality	8	$\overline{\mathbf{S}}$	$(\dot{s})$	$\overline{\boldsymbol{\otimes}}$	No data delivery in 2003. No deliveries under earlier data collection.
EWN-2: Lake quality	8	$\overline{\boldsymbol{\otimes}}$	$(\mathbf{i})$	$\overline{\mathfrak{S}}$	No data delivery in 2003. No deliveries under earlier data collection.
EWN-3: Groundwater quality	8	$\odot$	$\odot$	$\overline{\mathfrak{S}}$	No data delivery in 2003.
ME-1: Marine data	8	$\overline{\mathbf{i}}$	$(\mathbf{i})$	00	Data on concentrations in water available via ICES.
TE-1: CLC-2000 update	Not included in 2000	00	$\odot$		National project on schedule at 31/12/2003 and at least some preliminary data deliveries made available.
TE-2: Contaminated soil	Not included in 2000	$\odot$ $\odot$ $\odot$ $\odot$	$\odot$ $\odot$ $\odot$	$\odot$ $\odot$ $\odot$ $\odot$	Delivered on time.

## Table 3.4: Detailed data flow analysis for Bosnia and Herzegovina

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	$\overline{\otimes}$	No information made available by 23 June 2004.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	Not applicable	Data flow is relevant for EU15 countries only.
AE-2: UNFCCC data	8	$\overline{\boldsymbol{\otimes}}$	$\overline{\boldsymbol{\otimes}}$	$\overline{\otimes}$	No information by 23 June 2004.
AE-2b: EU GHG data	Previously AE-2:	y evaluated tog	ether with a flow.	Not applicable	Data flow is relevant for EU15 countries only.
AQ-1: Eol data	$\overline{\mathbf{i}}$	00	00	00	Data delivered on time.
AQ-2: Annual ozone data	Not included in 2000	Not applicable	Not applicable	Not applicable	Not applicable.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			Not applicable	Not applicable.
CDDA-1: Designated areas	Not applicable	Not applicable	Not applicable		31 sites reported. More than 65% have information on IUCN category, size and coordinates. 3% have information on altitude. None have information on habitats.
EWN-1: River quality	$\overline{\mathbf{S}}$	00	00	00	Quality and impact data delivered on time. 36 stations (71%) identified for Eurowaternet. Only very short time series (3 years) for total ammonium, nitrate and total phosphorus data.
EWN-2: Lake quality	$\overline{\mathfrak{S}}$	$\overline{\mathfrak{S}}$	$\overline{\mathbf{i}}$	$\overline{\mathbf{S}}$	No data delivery in 2003. No deliveries under earlier data collection.
EWN-3: Groundwater quality	<b></b>	$\odot$	$\odot$	$\overline{\mathfrak{S}}$	No data delivery in 2003.
ME-1: Marine data	00	00	$\overline{\mathbf{i}}$	00	Data delivered on time and in the requested format. Only limited quality data provided for 3 sites.
TE-1: CLC-2000 update	Not included in 2000	Not applicable	Not applicable	Not applicable	Not applicable.
TE-2: Contaminated soil	Not included in 2000	Not applicable	Not applicable	$\overline{\mathbf{i}}$	No delivery

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$\overline{\mathbf{i}}$	$\odot$	$\odot$	$\odot$	Partial information. Delivery delayed.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	Not applicable	Data flow is relevant for EU15 countries only.
AE-2: UNFCCC data	8	$\odot$	$\odot$	$\odot$	Limited time series not covering all gases. Delivered on time.
AE-2b: EU GHG data		/ evaluated tog UNFCCC data		Not applicable	Data flow is relevant for EU15 countries only.
AQ-1: Eol data	00	$\odot$	$\odot$ $\odot$ $\odot$	$\odot \odot \odot \odot$	Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot \odot \odot \odot$		00	Data for delivered on time.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance data delivered on time.
CDDA-1: Designated areas	Not applicable	Not applicable		00	756 sites reported. 95% with information on IUCN category, size and coordinates. No information on altitude or habitats.
EWN-1: River quality	00	00	00	00	Basic quality data delivered on time. More than the target number of river stations identified (125%) but only short time series (1-10 years) of quality data available. No impact data delivered.
EWN-2: Lake quality	$\odot$	$\odot$	$\odot$	$\odot$	Basic quality data provided on time. About 50% of lake stations identified, but some basic data were missing. No impact data provided.
EWN-3: Groundwater quality	$\odot$	000	000		Data provided on time. 74 groundwater bodies selected for EWN. General descriptions and selected quality data available. No GIS data provided.
ME-1: Marine data	Not applicable	Not applicable	$\odot$		Data delivered on time. Station characteristics, riverine input loads and some discharge data provided.
TE-1: CLC-2000 update	Not included in 2000	$\bigcirc \bigcirc$	$\bigcirc \bigcirc$		National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	Not applicable	$\odot \odot \odot$	$\odot$	Delivered on time. Data on expenditure not provided.

## Table 3.5: Detailed data flow analysis for Bulgaria

## Table 3.6: Detailed data flow analysis for the Czech Republic

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$\overline{\mathbf{i}}$	00	00	$\odot$	Time series 1990 - 2002 delivered and additional data provided. Delivery slightly delayed. Conversion to current format underway.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	Not applicable	Data flow is relevant for EU15 countries only.
AE-2: UNFCCC data	$\overline{\mathbf{S}}$	$\odot$	$\odot$	$\odot$	Limited time series but covering all gases. Delivered on time.
AE-2b: EU GHG data		/ evaluated tog UNFCCC data		$\odot$	Partial information delivered on time.
AQ-1: Eol data	000	$\odot$ $\odot$ $\odot$			Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot \odot \odot \odot$	$\odot$ $\odot$ $\odot$		Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance data delivered on time.
CDDA-1: Designated areas	Not applicable	Not applicable	$\odot$	00	1776 sites reported. 99% have information on IUCN category, size and coordinates. 3% have information on altitude. No information on habitats.
EWN-1: River quality	00	$\odot$	00	00	First delivery of data provided on time. A re-supply was necessary: 2004/01/15. 90% of stations identified. Time series for around 10 years. No impact data delivered. Some data issues need clarification.
EWN-2: Lake quality	$\odot$	$\odot$	$\odot$	$\overline{\mathbf{i}}$	No data delivery in 2003.
EWN-3: Groundwater quality	8	00	00	000	Data provided on time. 39 groundwater bodies selected for EWN. General descriptions and selected quality data available. Data on pesticides and hazardous substances provided. GIS data provided.
ME-1: Marine data	Not applicable	Not applicable	Not applicable	Not applicable	Country does not have a coastline.
TE-1: CLC-2000 update	Not included in 2000		00		National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	Not applicable	$\odot$	$\odot$	Delivered on time. Data on expenditure not provided.

## Table 3.7: Detailed data flow analysis for Denmark

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	00	$\odot$	$\odot \odot \odot \odot$		Full time series delivered on time. Additional data also provided. Delivered on time.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	$\odot$	$\odot$	Time series for all pollutants delivered with delay.
AE-2: UNFCCC data	00	000	$\odot \odot \odot \odot$		Full time series on time.
AE-2b: EU GHG data		v evaluated tog UNFCCC data			Full time series on time.
AQ-1: Eol data		0	$\odot \odot \odot \odot$		Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot$ $\odot$ $\odot$	$\odot \odot \odot \odot$		Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance data delivered on time.
CDDA-1: Designated areas	000	000	000	00	341 sites reported. 100% have information on IUCN category, size and coordinates. 1% have information on altitude. None have information on habitats.
EWN-1: River quality	000	000	000	00	Basic quality data provided on time but not in the requested format. All river sites identified. Long time series on ammonium and phosphorus concentration in rivers. No impact data delivered.
EWN-2: Lake quality		$\odot$			Basic quality data provided on time. All lake stations identified. Long time series available. No impact data provided.
EWN-3: Groundwater quality	$\odot$	$\odot$	$\odot$	$\odot$	Data provided on time. 3 groundwater bodies selected for EWN. General descriptions missing. Selected quality data available. No GIS data.
ME-1: Marine data	00	$\odot$	$(\mathbf{\hat{s}})$	00	Data on concentrations in water and biota available via ICES.
TE-1: CLC-2000 update	Not included in 2000	$\odot$		00	National project on schedule at 31/12/2003. No information in national repository.
TE-2: Contaminated soil	Not included in 2000		$\odot \odot \odot \odot$	$\odot$	Delivered on time. Data on expenditure not provided.

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	8	00	$\odot$	00	Information for 2002 delivered on time. Additional material also provided.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	Not applicable	Data flow is relevant for EU15 countries only.
AE-2: UNFCCC data	8	$\odot \odot \odot \odot$	:	$\odot$	Limited time series not covering all gases. Delivered on time.
AE-2b: EU GHG data	Previously evaluated together with AE-2: UNFCCC data flow.			$\odot$	Partial information delivered on time.
AQ-1: Eol data	000		$\odot$ $\odot$ $\odot$ $\odot$	000	Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot$		000	Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance data delivered on time.
CDDA-1: Designated areas	Not applicable	Not applicable	$\odot$	00	2342 sites reported. Approximately 85% have information on IUCN category, size and coordinates. No information on altitude or habitats.
EWN-1: River quality	00	00	00	00	Basic quality data delivered on time. All river stations identified. Time series for ammonium, nitrate and total phosphorous concentration are now covering 11 years (1992-2002). No impact data delivered.
EWN-2: Lake quality	00	00	00	00	Basic quality data provided on time. About 50% of lake stations identified. Some time series are now covering 11 years. No impact data provided.
EWN-3: Groundwater quality	$\odot$	$\odot$	$\odot \odot \odot \odot$		Data provided on time. 5 important groundwater bodies identified. Data on saltwater intrusion provided. GIS data provided.
ME-1: Marine data	00			000	Data delivered on time. Physical characteristics, concentrations and riverine input loads provided.
TE-1: CLC-2000 update	Not included in 2000			000	National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	Not applicable	$\odot$	00	Delivered on time. Data on progress in management not provided.

## Table 3.8: Detailed data flow analysis for Estonia

## Table 3.9: Detailed data flow analysis for Finland

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$\odot$	$(\mathbf{i})$	$\bigcirc$		Full time series delivered on time in process of converting to current format. Additional data also provided. Delivered on time.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	$\odot$		Required information provided on time.
AE-2: UNFCCC data	$\odot$	$\odot$ $\odot$ $\odot$	$\odot$ $\odot$ $\odot$	$\odot \odot \odot \odot$	Full time series on time.
AE-2b: EU GHG data	Previously evaluated together with AE-2: UNFCCC data flow.				Full time series on time.
AQ-1: Eol data	000		$\odot$	000	Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot \odot \odot \odot$			Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance data delivered on time.
CDDA-1: Designated areas		$\odot$	٢	$\overline{\mathbf{S}}$	3466 sites reported. All have information on size but only 40% have coordinates and only 5% have valid IUCN categories. 10% have information on altitude and none have information on habitats.
EWN-1: River quality	00	00	00	000	Basic quality data delivered very early: first country delivery for this data flow! 58% of stations identified. Long time series available. Replies to the validation questionnaire provided.
EWN-2: Lake quality	$\odot$ $\odot$ $\odot$	$\odot$	$\odot$	$\odot$	Basic quality and impact data delivered on time. All lake sites identified. Long time series available (1976-2002).
EWN-3: Groundwater quality	$\odot$	$\odot$	$\odot \odot \odot \odot$	$\odot$	Data provided on time. 41 important groundwater bodies identified. Quality data: NO3 and NH4 data provided. No GIS data provided.
ME-1: Marine data	8		:	$\odot$	Data delivered with delay: 09/03/2004.
TE-1: CLC-2000 update	Not included in 2000	$\odot$	$\odot$		National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	$\odot \odot \odot$	$\odot \odot \odot$		Delivered on time.

## Table 3.10: Detailed data flow analysis for France

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$\overline{\mathbf{S}}$	$\overline{\mathbf{S}}$	$\overline{\mathbf{S}}$	$\odot$ $\odot$ $\odot$ $\odot$	Full time series delivered on time. Additional data also provided. Delivered on time.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	$\odot$	$\odot$ $\odot$	Required information provided with slight delay.
AE-2: UNFCCC data	$\odot$	$\odot$ $\odot$ $\odot$			Full time series on time.
AE-2b: EU GHG data	Previously evaluated together with AE-2: UNFCCC data flow.				Full time series on time.
AQ-1: Eol data	$\odot$	$\odot$		$\odot$	Data delivered with delay. Data on particulate matter available for 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot$	$\odot$	$\odot$	Data delivered with delay. Additional requested data included.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			$\odot$	Data delivered with delay.
CDDA-1: Designated areas	00	00	00	00	1386 sites reported. Approximately 90% have information on IUCN category, size and coordinates. 2% have information on altitude and none have information on habitats.
EWN-1: River quality	000	$\odot$ $\odot$ $\odot$	$\odot$ $\odot$ $\odot$	00	First data delivery on time. A re-supply was however necessary. All river sites identified. Most time series covers more than 10 years.
EWN-2: Lake quality	$\odot$	$\odot$	$\odot$	$\odot$	Basic quality and impact data provided with delay: 2004/01/09. Only about 10% of lake stations identified.
EWN-3: Groundwater quality	8	$\odot$	00		Data provided on time, however not formatted according to the data guidelines. Basic quality data and data on pesticides and hazardous substances available. No GIS data provided.
ME-1: Marine data	$\odot$	$\odot$	$\overline{\mathbf{S}}$		Data delivered on time. Data on monitoring stations, riverine inputs and hazardous substances provided.
TE-1: CLC-2000 update	Not included in 2000	$\odot$	$\odot$		National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000		$\odot$ $\odot$		Delivered on time.

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	8	$\overline{\bigotimes}$	$\overline{\mathbf{i}}$	$\odot$	Partial information. Delivery delayed.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	Not applicable	Data flow is relevant for EU15 countries only.
AE-2: UNFCCC data	8	8	$\overline{\mathbf{i}}$	(;)	No information by 23 June 2004.
AE-2b: EU GHG data	Previously evaluated together with AE-2: UNFCCC data flow.			Not applicable	Data flow is relevant for EU15 countries only.
AQ-1: Eol data		$\odot$	$\odot$ $\odot$ $\odot$	$\odot$	Data delivered with a delay. Data on Black Smoke available 2002.
AQ-2: Annual ozone data	Not included in 2000	Not applicable	Not applicable	Not applicable	Not applicable.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			Not applicable	Not applicable.
CDDA-1: Designated areas	Not applicable	Not applicable	Not applicable	٢	86 sites reported. More than 60% have information on IUCN category, size and coordinates. 20% have information on altitude. None have information on habitats.
EWN-1: River quality	$\overline{\mathbf{S}}$	00	00	000	Basic quality and impact data delivered on time. 20 river stations identified. Some long time series of quality data available. Response to the data validation questionnaire provided.
EWN-2: Lake quality	00	00	$\odot$	$\odot$	Basic quality data provided on time. 50% of lake stations identified. Mainly short time series available. No impact data provided.
EWN-3: Groundwater quality	$\overline{\mathbf{i}}$	$\odot$	00	$\odot$	Data provided on time. 7 groundwater bodies selected for EWN. Only general descriptions of groundwater bodies available. No GIS data.
ME-1: Marine data	Not applicable	Not applicable	Not applicable	Not applicable	Country does not have a coastline.
TE-1: CLC-2000 update	Not included in 2000	Not applicable	Not applicable	Not applicable	Not applicable.
TE-2: Contaminated soil	Not included in 2000	Not applicable		$\odot$	No delivery

### Table 3.11: Detailed data flow analysis for the Former Yugoslav Republic of Macedonia

# Table 3.12: Detailed data flow analysis for Germany

Data Flow	2000	2001	2002	2003	Remarks
	2000	2001	2002	2003	
AE-1: CLRTAP data	$\odot$	$\overline{\mathbf{S}}$	$\odot$	$\odot$ $\odot$ $\odot$	Full time series delivered on time. Additional data also provided. Delivered on time.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	$\odot$ $\odot$ $\odot$	$\odot$	Time series for all pollutants delivered with delay.
AE-2: UNFCCC data	00	$\overline{\mathbf{S}}$	$\odot$	$\odot$	Full time series delivered with a slight delay.
AE-2b: EU GHG data		y evaluated tog : UNFCCC data			Full time series on time.
AQ-1: Eol data	00	00		$\odot \odot \odot \odot$	Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	00	$\odot$ $\odot$ $\odot$	$\odot \odot \odot \odot$	Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data		y evaluated tog Annual ozone da		$\odot$	Exceedance data delivered on time.
CDDA-1: Designated areas	00	000	000		7244 sites reported. All have information on IUCN category and size but only 35% have coordinates. 2% have information on altitude and none have information on habitats.
EWN-1: River quality	000	000	000	000	Basic quality data provided on time. River data available for 152 stations Long time series for ammonium, nitrate and phosphorus concentrations in rivers. No impact data delivered.
EWN-2: Lake quality	$\odot$	00	00	$\odot$	Basic quality and pressure data provided on time. Data for only 20 lakes provided. Some long time series available. No impact data provided.
EWN-3: Groundwater quality		00	00	00	Data delivered on time. 9 groundwater bodies identified. General descriptions are partly incomplete. Data on pesticides and hazardous substances provided. No GIS data provided.
ME-1: Marine data	00	00	$\odot$	000	All requested data available via ICES.
TE-1: CLC-2000 update	Not included in 2000	00	00		National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	$\odot$ $\odot$ $\odot$		$\odot$	Delivered on time. Data on expenditure not provided.

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$\odot$	$\overline{\mathbf{i}}$	$\odot$	$\odot$	Full time series. No additional data. Slightly delayed delivery.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	$\odot$	$\odot$	Partial time series delivered with delay.
AE-2: UNFCCC data	$\odot$	$\odot$	$\odot$	$\odot$	Limited time series. Delivered on time.
AE-2b: EU GHG data	Previously AE-2:	/ evaluated tog UNFCCC data	ether with a flow.	$\odot$	Short time series. Delivery slightly delayed.
AQ-1: Eol data	$\odot$	$\odot$			Data delivered on time. Data on particulate matter available for 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot \odot \odot \odot$	$\odot$		Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data		/ evaluated tog nnual ozone da		00	Exceedance data delivered on time.
CDDA-1: Designated areas		$\odot$	$\odot$		147 sites reported. 75% have information on IUCN category, size and coordinates. 11% have information on altitude and none have information on habitats.
EWN-1: River quality	00	00	00		First delivery of quality and impact data on time, a complete re-supply was however needed due to inconsistencies with station selection (provided in March 2004). Only very short time series available.
EWN-2: Lake quality	$\overline{\mathfrak{S}}$	$\odot$	$\odot$	$\odot$	Basic quality and impact data provided on time. About 40% of lakes identified. However, there are some issues which need clarification.
EWN-3: Groundwater quality	$\odot$	$\odot$	$\odot$	$\overline{\boldsymbol{\otimes}}$	No data delivery in 2003.
ME-1: Marine data	00	$\odot$	$\odot$	$\overline{\boldsymbol{\otimes}}$	No data delivery in 2003.
TE-1: CLC-2000 update	Not included in 2000	(:)	$\odot$	$\odot$	Delay in national project being reduced at 31/12/2003. No information in national repository.
TE-2: Contaminated soil	Not included in 2000		$\odot$	00	Delivered on time. Data on expenditure not provided.

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	<u> </u>		8	8	No information made available by 23 June 2004.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	Not applicable	Data flow is relevant for EU15 countries only.
AE-2: UNFCCC data	$\overline{\mathbf{S}}$	00	$\overline{\mathbf{S}}$	$(\mathbf{\hat{x}})$	No information by 23 June 2004.
AE-2b: EU GHG data		v evaluated tog UNFCCC data		Not applicable	Data flow is relevant for EU15 countries only.
AQ-1: Eol data	000		$\odot$		Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	00	00	000	Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data		Previously evaluated together with AQ-2: Annual ozone data flow.			Exceedance data delivered on time.
CDDA-1: Designated areas	Not applicable	Not applicable	000	٢	236 sites reported. More than 80% have information on size and IUCN category but less than 60% have coordinates. No information on altitude or habitats.
EWN-1: River quality	00	00	00	٢	First delivery on time, but final data (basic quality and impact data) delivered with delay. All river stations identified. Long time series (1987-2002) available.
EWN-2: Lake quality	$\odot$	$\odot$	$\odot$	$\odot$	Data delivered on time but not released for processing until 2004/01/30. About 50% of lake stations identified. No impact data provided.
EWN-3: Groundwater quality	<b></b>			$\odot$	Data delivered on time but released after significant delay: 2004/05/20. 11 important groundwater bodies selected for EWN.
ME-1: Marine data	Not applicable	Not applicable	Not applicable	Not applicable	Country does not have a coastline.
TE-1: CLC-2000 update	Not included in 2000	$\odot$	00		National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	Not applicable	$\odot$ $\odot$ $\odot$	$\odot$	Delayed delivery

# Table 3.14: Detailed data flow analysis for Hungary

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$(\mathbf{S})$	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	No information made available by 23 June 2004.
AE-1b: NEC data	Did not exist	Did not exist	Not	Not	Data flow is relevant for EU15 countries only.
	in 2000	in 2001	applicable	applicable	
AE-2: UNFCCC data	$\overline{\mathbf{S}}$	$\overline{\mathbf{S}}$	$\odot$	$\overline{\mathbf{S}}$	No information by 23 June 2004.
AE-2b: EU GHG data		y evaluated tog		Not applicable	Data flow is relevant for EU15 countries only.
AQ-1: Eol data	$\odot$	$\overline{\mathbf{S}}$	$\odot$	$\odot$	Data delivered with delay. Data on particulate matter available for 2002.
AQ-2: Annual ozone data	Not included in 2000	8	<u></u>	000	Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance data delivered on time.
CDDA-1: Designated areas	00	00	00		79 sites reported. 100% have information on IUCN category, size and coordinates. 19% have information on altitude but none have information on habitats.
EWN-1: River quality	$\overline{\boldsymbol{\otimes}}$	$\overline{\otimes}$	$\overline{\mathfrak{S}}$	$\overline{\mathfrak{S}}$	No data delivery in 2003. No deliveries under earlier data collection.
EWN-2: Lake quality	00	$\odot$	$\odot$	$\overline{\boldsymbol{\otimes}}$	No data delivery in 2003.
EWN-3: Groundwater quality	$\overline{\boldsymbol{\otimes}}$	$\bigotimes$	$\overline{\boldsymbol{\otimes}}$	8	No data delivery in 2003. No deliveries under earlier data collection.
ME-1: Marine data	$\overline{\mathfrak{S}}$	$\overline{\boldsymbol{\otimes}}$	$\odot$	$\overline{\mathfrak{S}}$	No data delivery in 2003.
TE-1: CLC-2000 update	Not included in 2000	Not available	Not available	Not available	Not available.
TE-2: Contaminated soil	Not included in 2000		$\odot$	00	Delivered on time. Data on expenditure not provided.

# Table 3.15: Detailed data flow analysis for Iceland

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	<b></b>	$\odot$	00	00	Short time series. No additional information. Delivered on time.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	$\odot$		Time series for all pollutants delivered on time and later posted in national repository.
AE-2: UNFCCC data	$\odot$	$\odot$	$\odot$	$\odot$	Full time series delivered with a slight delay.
AE-2b: EU GHG data		y evaluated tog		00	Draft time series delivered on time and later revised.
AQ-1: Eol data	$\odot$	$\odot$	000	$\odot$	Data delivered with delay. Data on particulate matter available for 2002.
AQ-2: Annual ozone data	Not included in 2000	000	$\odot$		Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data		y evaluated tog nnual ozone da		$\odot$	Exceedance information delivered with delay.
CDDA-1: Designated areas	00	00	00	00	706 sites reported. 97% have information on IUCN category, size and coordinates. More than 70% have information on altitude and none have information on habitats.
EWN-1: River quality	00	$\odot$	$\odot$	$\overline{\boldsymbol{\otimes}}$	No data delivery in 2003. EEA has been notified that data analysis and compilation will be completed by Q4 2004.
EWN-2: Lake quality	000	$\odot$	$\odot$	000	Basic quality data provided on time. 80% of stations identified. Long time series on phosphorus concentration available. No impact data provided.
EWN-3: Groundwater quality	$\odot$	$\odot$	$\odot$	00	Data provided on time. 3 important groundwater bodies identified. Selected quality provided. No GIS data provided.
ME-1: Marine data	00	00	$\odot$	000	All requested data available via ICES.
TE-1: CLC-2000 update	Not included in 2000	00	$\odot$		National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	$\odot$ $\odot$	$\odot$	$\overline{\mathbf{i}}$	No delivery

# Table 3.17: Detailed data flow analysis for Italy

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	00	$\overline{\mathbf{i}}$	00	8	No information made available by 23 June 2004.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	$\odot$	$\overline{\boldsymbol{\otimes}}$	No information available at 23 June 2004.
AE-2: UNFCCC data	00	8	$\odot$	$\odot$	Full time series delivered with a slight delay.
AE-2b: EU GHG data		y evaluated tog : UNFCCC data		$\overline{\boldsymbol{\otimes}}$	Full time series delivered with delay of more than 2 months
AQ-1: Eol data	00	$\odot$	$\odot$	$\odot$ $\odot$ $\odot$ $\odot$	Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000		00	000	Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data	Previousl AQ-2: A	in 2000     Image: Constraint of the sector of			Exceedance data delivered on time.
CDDA-1: Designated areas	<u></u>	00	00	00	752 sites reported. More than 98% have information on size, IUCN category, coordinates and altitude. Information on habitat categories has been provided for 30% of the sites.
EWN-1: River quality	8	$\overline{\mathbf{S}}$	00		Basic quality data delivered on time. 78% of stations identified. Only short time series of quality data available. No impact data delivered. Many open data issues concerning the selection of EWN stations.
EWN-2: Lake quality	8	$\overline{\mathbf{i}}$	$\odot$	$\odot$	Basic quality data delivered on time. All lake sites identified. Only data for 2002 (and some data for 2001) available. No impact data provided.
EWN-3: Groundwater quality	<b></b>	$\overline{\mathbf{S}}$	00	00	Data provided on time. 43 important groundwater bodies identified. Basic quality data and data on pesticides and hazardous substances provided. Some data issues need clarification. No GIS data provided.
ME-1: Marine data	8	00	00	000	Data delivered on time. Data provided on nutrients and hazardous substances in biota and sediments.
TE-1: CLC-2000 update	Not included in 2000	00	00	$\odot$ $\odot$ $\odot$	National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	$\odot$		00	Delivered on time. Data on expenditure not provided.

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$\overline{\mathbf{i}}$	$\overline{\mathbf{S}}$			Full time series for all requested pollutants. Additional information provided. Delivered on time.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	$\bigcirc \bigcirc $		Time series for all pollutants delivered on time.
AE-2: UNFCCC data	$\overline{\mathbf{S}}$	$\odot$	$\odot$	$\odot$	Full time series but not all gases. Delivered on time.
AE-2b: EU GHG data		Previously evaluated together with AE-2: UNFCCC data flow.			Data flow is relevant for EU15 countries only.
AQ-1: Eol data	$\odot$ $\odot$ $\odot$ $\odot$	$\odot$	$\odot$		Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot$ $\odot$ $\odot$ $\odot$	$\odot$		Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data		y evaluated tog nnual ozone da		$\odot$ $\odot$	Exceedance data delivered on time.
CDDA-1: Designated areas	Not applicable	Not applicable	$\odot \odot \odot \odot$	$\odot$	542 sites reported. More than 90% have information on size, coordinates and IUCN category. None have information on altitude or habitats
EWN-1: River quality	00	$\odot$	$\odot$		Basic quality and impact data provided on time. All river stations identified. Time series are now covering 11 years.
EWN-2: Lake quality	$\odot$	$\odot$	$\odot$		Basic quality, pressure and impact data provided on time. About 30% of lake stations identified. Most of the time series cover now 11 years.
EWN-3: Groundwater quality	$\odot$			00	Data for 2002 already sent with earlier delivery. No GIS data provided.
ME-1: Marine data	00	00		$\odot \odot \odot \odot$	Data delivered on time. Data provided on pressures, hazardous substances in biota and sediments, plus riverine input data.
TE-1: CLC-2000 update	Not included in 2000	00			National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	Not applicable	$\odot \odot \odot$	$\odot$	Delivered on time. Data on expenditure not provided.

# Table 3.19: Detailed data flow analysis for Liechtenstein

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	8	$\overline{\mathbf{S}}$	$\odot$	$\overline{\boldsymbol{\otimes}}$	No information made available by 23 June 2004.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	Not applicable	Data flow is relevant for EU15 countries only.
AE-2: UNFCCC data	8	$\overline{\mathbf{S}}$	$\odot$	$\overline{\otimes}$	No information by 23 June 2004.
AE-2b: EU GHG data		y evaluated tog UNFCCC data		Not applicable	Data flow is relevant for EU15 countries only.
AQ-1: Eol data	8	$\overline{\mathbf{o}}$	$\odot$	$\odot$	Data delivered with delay.
AQ-2: Annual ozone data	Not included in 2000	$\overline{\mathbf{o}}$	$\odot$	$\odot$	Data delivered with delay. No additional data provided.
AQ-2b: Monthly ozone data		Previously evaluated together with AQ-2: Annual ozone data flow.			Exceedance information delivered on time.
CDDA-1: Designated areas	00	00		000	10 sites reported. 100% have all required information including altitude and habitats.
EWN-1: River quality	$\overline{\mathbf{S}}$	::	00	00	Basic quality and impact data delivered on time. 1 station identified, which is 100% of the target figure. Only short time series of quality data available. Reply to the data validation questionnaire provided.
EWN-2: Lake quality	8	$\overline{\mathbf{o}}$	Not applicable	Not applicable	Country does not have any lake which would fall under Eurowaternet Data Collection.
EWN-3: Groundwater quality	8	$\overline{\mathbf{o}}$	$\odot \odot \odot \odot$	00	Data provided on time. 1 groundwater body selected for EWN. General description and selected quality data available. No GIS data provided.
ME-1: Marine data	Not applicable	Not applicable	Not applicable	Not applicable	Country does not have a coastline.
TE-1: CLC-2000 update	Not included in 2000	$\odot$	$\odot$	00	National project on schedule at 31/12/2003.
TE-2: Contaminated soil	Not included in 2000	$\odot$	$\odot \odot \odot$	$\odot$	Late delivery

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	8	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	00	Short time series. Additional data provided. Delivery on time.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	$\odot$	Partial information delivered late.
AE-2: UNFCCC data	$\overline{\mathbf{i}}$	$(\mathbf{i})$	$(\mathbf{i})$	$\odot$	Full time series but not all gases. Delivered with a slight delay.
AE-2b: EU GHG data		v evaluated tog UNFCCC data		$\odot$	Partial information delivered on time.
AQ-1: Eol data	00	$\odot$	$\odot$		Data delivered on time. No information on particulate matter for 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot$ $\odot$ $\odot$	$\odot$		Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance information delivered on time.
CDDA-1: Designated areas	Not applicable	Not applicable	$\overline{\mathbf{i}}$	00	297 sites reported. 100% have information on IUCN category, size and coordinates but none have information on altitude or habitats.
EWN-1: River quality	00	00	00	000	Basic quality and impact data provided on time. All river stations identified. Time series on ammonium, nitrate and total phosphorous concentration now covering 11 years. Reply to the data validation questionnaire provided.
EWN-2: Lake quality	$\odot$	$\odot$	$\odot$	00	Basic quality and impact data provided on time. About 38% of lake sites identified. Most time series cover now 10 years.
EWN-3: Groundwater quality	$\odot$			00	Data for 2002 already sent with earlier data delivery.
ME-1: Marine data	$\overline{\mathbf{i}}$	(;)	$\odot$	00	Data delivered on time. Data provided for nutrients (1995-2001) and hazardous substances in biota and sediments (2002).
TE-1: CLC-2000 update	Not included in 2000	$\odot$			National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	Not applicable	$\odot \odot \odot \odot$	$\odot$	Delivered on time. Data on expenditure not provided.

# Table 3.21: Detailed data flow analysis for Luxembourg

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$\overline{\mathbf{i}}$	$\odot$	$\overline{\mathbf{i}}$	$\odot$	Submission from previous reporting cycle was posted to national repository.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	$\overline{\mathbf{i}}$	$\odot$	Partial information delivered late.
AE-2: UNFCCC data	8	$\odot$	$\odot$	$\odot$	Limited time series. Delivered on time.
AE-2b: EU GHG data		y evaluated tog		8	Short time series. Delivery delayed by more than 2 months.
AQ-1: Eol data	8	8	$\overline{\mathbf{i}}$	8	No data delivery.
AQ-2: Annual ozone data	Not included in 2000	000	00	8	No information available.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			$\odot$	Exceedance information delivered with delay.
CDDA-1: Designated areas				8	191 sites reported. Approximately 90% have information on size and coordinates but only 10% have a valid IUCN category. None have information on altitude or habitats.
EWN-1: River quality	$\overline{\mathbf{S}}$	$\overline{\mathbf{S}}$	$\overline{\mathbf{S}}$	00	Data delivered on time. First data delivery of Luxembourg for Eurowaternet! 3 stations identified. Time series of quality data cover 12 years.
EWN-2: Lake quality	8	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	8	No data delivery in 2003. No deliveries under earlier data collection.
EWN-3: Groundwater quality	8	$\overline{\mathfrak{S}}$	$\overline{\mathbf{i}}$	8	No data delivery in 2003. No deliveries under earlier data collection.
ME-1: Marine data	00	00	$\overline{\mathbf{i}}$	Not applicable	Country does not have a coastline. However, Luxembourg is party to the OSPAR Convention.
TE-1: CLC-2000 update	Not included in 2000	00	00	$\odot \odot \odot \odot$	National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	8	No data delivery.

# Table 3.22: Detailed data flow analysis for Malta

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data		erformance no e period 2000-		$\odot$	Partial data not in current format.
AE-1b: NEC data		erformance no e period 2000-		Not applicable	Not applicable.
AE-2: UNFCCC data		erformance no e period 2000-		$\odot$	Partial data not in current format.
AE-2b: EU GHG data		erformance no e period 2000-		Not applicable	Not applicable.
AQ-1: Eol data		erformance no e period 2000-			Data delivered on time. Additional data provided.
AQ-2: Annual ozone data	Country performance not evaluated in the period 2000-2002.				Data delivered with slight delay. Additional data provided.
AQ-2b: Monthly ozone data	Country performance not evaluated in the period 2000-2002.			00	Exceedance information delivered on time
CDDA-1: Designated areas	Country performance not evaluated in the period 2000-2002.			00	93 sites reported. 100% have information on IUCN categories, coordinates and altitude. Only 71% have information on size. None have habitats.
EWN-1: River quality	Country performance not evaluated in the period 2000-2002.			Not applicable	Not applicable.
EWN-2: Lake quality		erformance no e period 2000-		Not applicable	Not applicable.
EWN-3: Groundwater quality	Country performance not evaluated in the period 2000-2002.			00	Data provided on time. 2 groundwater bodies selected for EWN. General description and selected quality data available. GIS data provided.
ME-1: Marine data	Country performance not evaluated in the period 2000-2002.				Data delivered on time. Data on pressures and hazardous substances in biota and sediments provided.
TE-1: CLC-2000 update	Country performance not evaluated in the period 2000-2002.				Project completed as planned.
TE-2: Contaminated soil		erformance no e period 2000-		$\odot$	Partial data delivered on time

# Table 3.23: Detailed data flow analysis for the Netherlands

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	00				Full time series for all requested pollutants. Additional information provided. Delivered on time.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	() () ()		Time series for all pollutants delivered on time.
AE-2: UNFCCC data	$\odot$	$\odot$ $\odot$ $\odot$ $\odot$	$\odot$		Full time series on time.
AE-2b: EU GHG data		y evaluated tog UNFCCC data			Full time series on time.
AQ-1: Eol data	000			000	Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot \odot \odot \odot$	$\odot \odot \odot \odot$		Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance information delivered on time.
CDDA-1: Designated areas	8	$\overline{\mathbf{S}}$	<b>::</b>	$\overline{\mathbf{S}}$	1596 sites reported. Approximately 90% have information on size but less than 10% have IUCN category and coordinates. 1% have information on altitude.
EWN-1: River quality	00	$\odot$	$\odot$	$\overline{\otimes}$	No data delivery in 2003.
EWN-2: Lake quality	000	$\odot$	$\odot$	$\overline{\otimes}$	No data delivery in 2003.
EWN-3: Groundwater quality	<u></u>	$\odot$	$\odot$	00	Data provided on time. 9 important groundwater bodies identified. Quality data: NO3 and NH4 data provided. No GIS data provided.
ME-1: Marine data	8	00	$\odot$	00	Data on concentrations in water available via ICES.
TE-1: CLC-2000 update	Not included in 2000	00	$\odot$		National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000		$\odot \odot \odot$	$\odot$	Delivered on time. Data on sources of contamination not provided.

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$\odot$	$\odot$	$\odot$		Full time series for all requested pollutants. Additional information provided. Delivered on time.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	Not applicable	Data flow is relevant for EU15 countries only.
AE-2: UNFCCC data	$\odot$ $\odot$	$\odot$	$\odot$		Full time series delivered on time. Conversion to current format completed for some years.
AE-2b: EU GHG data		y evaluated tog		Not applicable	Data flow is relevant for EU15 countries only.
AQ-1: Eol data	$\odot$	$\odot$	$\odot$ $\odot$ $\odot$	$\odot$ $\odot$ $\odot$	Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot \odot \odot \odot$	$\odot \odot \odot \odot$		Data delivered on time. Additional requested data included.
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			$\odot$	Exceedance information delivered on time.
CDDA-1: Designated areas	00	00	00	$\overline{\mathbf{S}}$	1819 sites reported. 100% have coordinates but only about 10% have size and IUCN category. 5% have information on altitude but none have information on habitats.
EWN-1: River quality	$\odot$	$\odot$	$\odot$	$\odot$	Data for Eurowaternet Data Collection 2003 delivered with delay: 2004/02/09. No impact data provided.
EWN-2: Lake quality	000	$\odot$	000		Basic quality data delivered with delay: 2004/01/14. More than the target number of lake stations identified. Only short time series (1997-2002) available. No impact data provided.
EWN-3: Groundwater quality	$\overline{\mathbf{i}}$	$\overline{\mathbf{S}}$	00	00	Data for 2002 already sent with earlier data delivery. No GIS data provided.
ME-1: Marine data	00	00	00		Data delivered on time. Data provided for nutrients and hazardous substances in biota and sediments.
TE-1: CLC-2000 update	Not included in 2000	Not available	Not available	Not available	Not available.
TE-2: Contaminated soil	Not included in 2000	$\odot$			Delivered on time

# Table 3.24: Detailed data flow analysis for Norway

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$\overline{\mathbf{i}}$	$\odot$	$\odot$	$\overline{\mathbf{i}}$	No information made available by 23 June 2004.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	Not applicable	Data flow is relevant for EU15 countries only.
AE-2: UNFCCC data	8	$\overline{\mathbf{i}}$	$\odot$	$\overline{\boldsymbol{\otimes}}$	No information by 23 June 2004.
AE-2b: EU GHG data		y evaluated tog UNFCCC data		Not applicable	Data flow is relevant for EU15 countries only.
AQ-1: Eol data	$\odot$ $\odot$ $\odot$	$\odot$ $\odot$ $\odot$ $\odot$	$\odot$ $\odot$ $\odot$ $\odot$	$\odot$ $\odot$ $\odot$	Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot$ $\odot$	$\odot \odot \odot \odot$		Data delivered on time. Additional requested data on station types
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			$\odot$	Exceedance information delivered on time.
CDDA-1: Designated areas	Not applicable	Not applicable	$\odot$	$\odot$	1822 sites reported. More than 80% have information on size, IUCN category and coordinates. No information on altitude or habitats.
EWN-1: River quality		00	00	00	Basic quality data provided on time. About 50% of river stations identified. Time series are now covering 11 years. No impact data delivered.
EWN-2: Lake quality	$\odot$	$\odot$	$\odot$	$\odot$	Basic quality data provided on time. Only about 5% of lake stations identified. Only short time series available. No impact data provided.
EWN-3: Groundwater quality		$\odot$	00	00	Data provided on time, however not formatted according to the data guidelines. 173 groundwater bodies selected for EWN. General descriptions and basic quality data available. GIS data provided.
ME-1: Marine data	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	$\odot$ $\odot$		Data delivered on time. Data provided on nutrients and hazardous substances in biota and sediments.
TE-1: CLC-2000 update	Not included in 2000	00			National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	Not applicable		$\odot$ $\odot$	Delivered on time. Data on expenditure not provided.

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$\odot$	$\overline{\mathbf{i}}$	$\odot$	$\odot$	Full time series for all requested pollutants. Additional information provided. Delivered slightly delayed.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	$\odot$	$\odot$	Required information delivered with delay.
AE-2: UNFCCC data	$\odot$	$\overline{\mathbf{i}}$	$\odot$		Full time series delivered on time.
AE-2b: EU GHG data		y evaluated tog		$\overline{\mathbf{i}}$	Full time series delivered with delay of more than 1 month .
AQ-1: Eol data	00	00			Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot \odot \odot \odot$	$\odot$		Data delivered on time. Additional requested data on station types
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance information delivered on time.
CDDA-1: Designated areas	00	00	00	00	68 sites reported. Approximately 85% have information on size, IUCN category and coordinates. 10% have information on altitude and none on habitats.
EWN-1: River quality	8	$\overline{\boldsymbol{\otimes}}$	$\overline{\bigotimes}$	8	No data delivery in 2003. No deliveries under earlier data collection.
EWN-2: Lake quality	$\odot$	$\odot$	$\odot$	$\overline{\boldsymbol{\otimes}}$	No data delivery in 2003.
EWN-3: Groundwater quality	$\overline{\mathbf{S}}$	$\overline{\mathbf{S}}$	$\overline{\mathbf{S}}$	$\odot$	No formal data delivery, but part of the requested data is made available via a national web site.
ME-1: Marine data	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	$\overline{\boldsymbol{\otimes}}$	No data delivery in 2003. No deliveries under earlier data collection.
TE-1: CLC-2000 update	Not included in 2000	$\odot$	$\odot$		National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	$\odot$	$\odot$	$\overline{\mathbf{i}}$	No data delivery.

# Table 3.26: Detailed data flow analysis for Portugal

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$\overline{\mathbf{S}}$	$\overline{\mathbf{S}}$	$\overline{\mathbf{S}}$	8	No information made available by 23 June 2004.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	Not applicable	Data flow is relevant for EU15 countries only.
AE-2: UNFCCC data	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	$\odot$	$\overline{\boldsymbol{\otimes}}$	No information by 23 June 2004.
AE-2b: EU GHG data		y evaluated tog UNFCCC data		Not applicable	Data flow is relevant for EU15 countries only.
AQ-1: Eol data	00	$\odot$		00	Data delivered on time. No information on particulate matter for 2002.
AQ-2: Annual ozone data	Not included in 2000	$\overline{\mathbf{i}}$	00	000	Data delivered on time. Additional requested data on station types
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance information delivered on time.
CDDA-1: Designated areas	Not applicable	Not applicable	٢		185 sites reported. Approximately 80% have information on IUCN category and size. Less than 40% have coordinates. 7% have information on altitude. None have information on habitats.
EWN-1: River quality	$\overline{\mathbf{i}}$	$\odot$	$\odot$	$\overline{\otimes}$	No data delivery in 2003.
EWN-2: Lake quality	$\odot$	$\odot$	$\odot$	$\overline{\mathfrak{S}}$	No data delivery in 2003.
EWN-3: Groundwater quality	$\overline{\mathbf{i}}$	$\overline{\boldsymbol{\otimes}}$	$\overline{\boldsymbol{\otimes}}$	$\overline{\otimes}$	No data delivery in 2003. No deliveries under earlier data collection.
ME-1: Marine data	Not applicable	Not applicable	$\odot$	00	Data on concentrations (incl. hazardous substances) in water available via marine convention.
TE-1: CLC-2000 update	Not included in 2000	00	00		National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	Not applicable	$\odot$ $\odot$ $\odot$	$\overline{\mathbf{i}}$	No data delivery.

# Table 3.27: Detailed data flow analysis for Romania

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	$\overline{\mathbf{S}}$	$\overline{\mathbf{S}}$		$\odot$	Short time series for all requested pollutants. Additional information provided. Delivery slightly delayed.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	Not applicable	Data flow is relevant for EU15 countries only.
AE-2: UNFCCC data	$\overline{\mathbf{S}}$	$\overline{\mathbf{o}}$	$\odot$	$\odot$	Limited time series. Delivered with delay.
AE-2b: EU GHG data		y evaluated tog UNFCCC data		Not applicable	Data flow is relevant for EU15 countries only.
AQ-1: Eol data	$\odot$ $\odot$ $\odot$	$\odot$ $\odot$ $\odot$	$\odot$ $\odot$ $\odot$		Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	$\odot \odot \odot \odot$	$\odot$		Data delivered on time. Additional requested data on station types
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			$\odot$	Exceedance information delivered on time.
CDDA-1: Designated areas	Not applicable	Not applicable	$\odot$	$\odot$	1176 sites reported. 95 % have information on size, IUCN category and coordinates. None have information on altitude or habitats.
EWN-1: River quality	$\odot$	$\odot$	$\odot$		Basic quality data delivered on time. All river stations identified. Time series are now covering 11 years. No impact data delivered.
EWN-2: Lake quality	8	$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	$\overline{\boldsymbol{\otimes}}$	No data delivery in 2003. No deliveries under earlier data collection.
EWN-3: Groundwater quality	8	$\odot$	00	000	Data provided on time. 10 important groundwater bodies identified. Data on pesticides, hazardous substances and saltwater intrusion provided. GIS data provided.
ME-1: Marine data	Not applicable	Not applicable	Not applicable	Not applicable	Country does not have a coastline.
TE-1: CLC-2000 update	Not included in 2000	$\odot$	$\odot$		National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	Not applicable	$\odot$	$\overline{\mathbf{i}}$	The required data is not yet available at national level but new legislation is under preparation.

# Table 3.28: Detailed data flow analysis for Slovakia

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	00	$\odot$	$\odot$	$\odot$	Short time series for all requested pollutants. Additional information provided. Delivery on time.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	Not applicable	Not applicable	Data flow is relevant for EU15 countries only.
AE-2: UNFCCC data	$\overline{\mathbf{S}}$	$\odot$	$\odot$		Full time series delivered on time.
AE-2b: EU GHG data	Previously AE-2:	v evaluated tog UNFCCC data	ether with 1 flow.	Not applicable	Data flow is relevant for EU15 countries only.
AQ-1: Eol data		(;)	$\odot \odot \odot \odot$		Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	(;)	$\odot \odot \odot \odot$		Data delivered on time. Additional requested data on station types
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance information delivered on time.
CDDA-1: Designated areas	Not applicable	Not applicable	$\odot \odot \odot \odot$	$\odot$	46 sites reported. About 85% have information on size, coordinates and IUCN category. None have information on altitude or habitats.
EWN-1: River quality	00	$\textcircled{\begin{tabular}{lllllllllllllllllllllllllllllllllll$	$\odot \odot \odot \odot$		Basic quality and impact data provided on time. All river stations identified. Long time series (13 years) of quality data available.
EWN-2: Lake quality		0	$\odot$	00	Basic quality data provided on time. About half of the lake stations identified. Some long time series available (covering 12 years). No impact data provided.
EWN-3: Groundwater quality	٢	000	000	00	Data provided on time. 5 important groundwater bodies identified. Data on pesticides and hazardous substances provided. Some additional information on the GIS is missing.
ME-1: Marine data	8	$\odot$	:	000	Data delivered on time. All requested data sets provided.
TE-1: CLC-2000 update	Not included in 2000				National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	Not applicable	$\odot$	$\odot$	Data provided in all requested categories. Delivery slightly delayed.

## Data Flow 2000 2001 2002 2003 Remarks AE-1: CLRTAP data Full time series. Additional data also provided. Delivery very delayed. $\odot$ $(\mathbf{R})$ $\odot$ $\odot$ AF-1b<sup>·</sup> NFC data Did not exist Did not exist No information by 23 June 2004. $\odot$ $(\mathbf{R})$ in 2000 in 2001 Full time series. Delivery delayed. AE-2: UNFCCC data $(\bigcirc)$ $(\mathbf{R})$ (:) $\odot$ AE-2b: EU GHG data Full time series delayed delivery. Previously evaluated together with $\odot$ AE-2: UNFCCC data flow. AQ-1: Eol data Data delivered with delay. $\odot$ $\odot$ $\odot$ $\odot$ $\odot$ $\odot$ $\odot$ AQ-2: Annual ozone data Not included Data delivered on time. $\odot$ $\odot$ $\odot$ in 2000 AQ-2b: Monthly ozone data Previously evaluated together with Exceedance information delivered on time. $\odot$ AQ-2: Annual ozone data flow. CDDA-1: Designated areas 602 sites reported. Approximately 75% have size and coordinates but $\odot$ $\odot$ $\odot$ $\odot$ only 55% have a valid IUCN category. Nearly 40% have information on altitude. None have information on habitats. EWN-1: River quality Quality data for Eurowaternet Data Collection 2003 delivered on time. $(\bigcirc)$ $\odot$ $\odot$ $\odot$ 78% of stations identified. Only short time series (1-10 years) available. No impact data delivered. EWN-2: Lake quality No data delivery in 2003. $\odot$ $\odot$ $\odot$ $(\mathbf{\hat{k}})$ EWN-3: Groundwater quality No data delivery in 2003. $(\bigcirc)$ $\odot$ $\odot$ $(\mathbf{R})$ ME-1: Marine data No data delivery in 2003. $(\dot{\sim})$ $(\mathbf{\dot{s}})$ $(\mathbf{R})$ $(\mathbf{R})$ TE-1: CLC-2000 update National project on schedule at 31/12/2003 and at least some Not included $\odot$ $\odot$ $\odot$ in 2000 preliminary data deliveries in national repository. Delivered on time. Data on expenditure not provided. TE-2: Contaminated soil Not included $\odot$ $\odot$ $\odot$ in 2000

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	8	00	00		Full time series. Additional information also provided. Delivered on time.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001		000	Time series for all pollutants delivered on time.
AE-2: UNFCCC data	$\odot$	$\odot$		$\odot \odot \odot \odot$	Full time series on time.
AE-2b: EU GHG data	Previously evaluated together with AE-2: UNFCCC data flow.				Full time series on time.
AQ-1: Eol data	000		$\odot$ $\odot$ $\odot$ $\odot$	000	Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000		$\odot \odot \odot \odot$	000	Data delivered on time. Additional requested data on station types
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance information delivered on time.
CDDA-1: Designated areas		000	000		5005 sites reported. 100% have coordinates and size but less than 50% have a valid IUCN category. Almost 90% have information on altitude but none on habitats.
EWN-1: River quality	00	00		00	Basic quality and impact data provided on time. Very long time series (up to 37 years) available. However, only 26% of river stations identified.
EWN-2: Lake quality	$\odot$	00		000	Basic quality, pressure and impact data provided on time. Nearly 75% of lake stations identified. Many long time series available (1983-2002).
EWN-3: Groundwater quality	$\odot$	000	$\odot \odot \odot \odot$	00	Data provided on time. 3 groundwater bodies identified. General descriptions and quality data available. GIS data provided.
ME-1: Marine data	$\overline{\mathbf{i}}$	00			Data delivered on time. Data provided on: riverine inputs, pressures, nutrients, hazardous substances in biota and sediments.
TE-1: CLC-2000 update	Not included in 2000	$\odot$	$\odot \odot \odot \odot$		National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000	$\odot$ $\odot$ $\odot$	$\odot$ $\odot$ $\odot$		Delivered on time.

# Table 3.32: Detailed data flow analysis for the United Kingdom

Data Flow	2000	2001	2002	2003	Remarks
AE-1: CLRTAP data	00	$\overline{\bigotimes}$	00	000	Full time series. Additional information also provided. Delivered on time.
AE-1b: NEC data	Did not exist in 2000	Did not exist in 2001	$\odot$	$\odot$	Time series for all pollutants delivered with delay.
AE-2: UNFCCC data	000			000	Full time series on time.
AE-2b: EU GHG data	Previously evaluated together with AE-2: UNFCCC data flow.			000	Full time series on time.
AQ-1: Eol data	000			000	Data delivered on time. Data on particulate matter available 2002.
AQ-2: Annual ozone data	Not included in 2000	000	$\odot$ $\odot$ $\odot$	000	Data delivered on time. Additional requested data on station types
AQ-2b: Monthly ozone data	Previously evaluated together with AQ-2: Annual ozone data flow.			00	Exceedance information delivered on time.
CDDA-1: Designated areas		000	000	$\overline{\mathbf{S}}$	7709 sites reported. 95% have information on size and coordinates but less than 10% have a valid IUCN category. 1% have information on altitude and none on habitats.
EWN-1: River quality	000	00	00	00	Basic quality and impact data delivered on time. All rivers stations identified under EWN criteria, but for England and Wales only. Many long time series.
EWN-2: Lake quality	000	$\odot$		$\odot$	Basic quality and impact data delivered with delay: 2004/03/02. Long time series available.
EWN-3: Groundwater quality	<u></u>	٢	000	٢	First (partial) data delivery on time, but final and additional data delivered with delay. 38 groundwater bodies selected for EWN. Descriptions, basic quality data and pesticide data provided. GIS data provided.
ME-1: Marine data	00	00	$(\dot{\mathbf{S}})$	00	Data on concentrations in water available via ICES.
TE-1: CLC-2000 update	Not included in 2000	00	$\odot$	000	National project on schedule at 31/12/2003 and at least some preliminary data deliveries in national repository.
TE-2: Contaminated soil	Not included in 2000		$\odot \odot$		Delivered on time plus a later revision.

# Table 4: Additional countries (participating in selected data flows only)

Country	Data Flow	2000	2001	2002	2003	Remarks
Croatia	CDDA-1: Designated areas	Country performance not evaluated in the period 2000-2002.			$\odot$	195 sites reported. More than 90% have IUCN categories and coordinates. Less than 20% have information on size or altitude. None have information on habitats.
Cyprus	CDDA-1: Designated areas	Country performance not evaluated in the period 2000-2002.			$\odot$	28 sites reported. 99% have information on size and coordinates. Less than 50% have valid IUCN categories. Less than 10% have information on altitude. None have information on habitats.
	ME-1: Marine data	Country performance not evaluated in the period 2000-2002.			000	Data delivered on time. Data on nutrients, riverine input loads and organic contaminants provided.
Monaco	CDDA-1: Designated areas	Country performance not evaluated in the period 2000-2002.			$\odot$ $\odot$ $\odot$ $\odot$	2 sites reported with 100% coverage of all required information.
Serbia and Montenegro			Country performance not evaluated in the period 2000-2002.			Data delivered with delay. Additional data provided.
	AQ-2: Annual ozone data	Country performance not evaluated in the period 2000-2002.			$\odot$	Data delivered with delay.
	CDDA-1: Designated areas	Country performance not evaluated in the period 2000-2002.			$\odot$	178 sites reported. More than 95 % have information on IUCN category and size. Less than 40% have information on coordinates and altitude. None have information on habitats.
Switzerland	AQ-2: Annual ozone data	Country performance not evaluated in the period 2000-2002.			$\odot$	Data delivered with delay. Additional data provided.
	CDDA-1: Designated areas	Country performance not evaluated in the period 2000-2002.				2190 sites reported. 98% have information on size, coordinates and IUCN categories. Less than 1% have information on altitude. None have information on habitats.
	TE-2: Contaminated soil	Country performance not evaluated in the period 2000-2002.			$\odot$	Partial data delivered with delay.
Turkey	CDDA-1: Designated areas	Country performance not evaluated in the period 2000-2002.			$\odot$	537 sites reported. Less than 40% have information on IUCN categories, size and coordinates.