UNITED NATIONS



Economic and Social Council

Distr. GENERAL

ECE/CEP/AC.10/2008/3 10 June 2008

Original: ENGLISH

ECONOMIC COMMISSION FOR EUROPE

COMMITTEE ON ENVIRONMENTAL POLICY

Working Group on Environmental Monitoring and Assessment

Ninth session Geneva, 4–5 September 2008 Item 5 (a) of the provisional agenda

PAN-EUROPEAN ASSESSMENT REPORTS ON THE STATE OF THE ENVIRONMENT AND ASSOCIATED ACTIVITIES

LESSONS LEARNED IN WORKING WITH COUNTRIES IN EASTERN EUROPE, CAUCASUS AND CENTRAL ASIA ON THE PREPARATION OF THE BELGRADE REPORT

Note by the European Environment Agency

Summary

The paper is submitted pursuant to a decision taken by the Committee on Environmental Policy ay its fifteenth session (ECE/CEP/148, para.22). It describes data sources used for data collection in the countries of Eastern Europe, Caucasus and Central Asia, novelties of the Belgrade report preparations compared to the approach used in the preparation of the preceding report and indicators used in the Belgrade report. The paper ends with some conclusions and recommendations.

The Working Group on Environmental Monitoring and Assessment is expected to comment on the report and provide some guidance to the European Environment Agency that might facilitate data collection for the next pan-European report.

CONTENTS

		Paragraphs	Page
Intro	oduction	1-4	2
I.	DATA COLLECTION FOR THE BELGRADE REPORT	5-25	3
	A. European Environment Agency data service	10-11	4
	B. International databasesC. Specific data and information sources for the	12-15	5
	Eastern Europe, Caucasus and Central Asia subregion	16-25	7
II.	NOVELTIES OF THE BELGRADE PROCESS	26-30	9
	A. Guidelines for the preparation of the Belgrade report	26	9
	B. Open consultation via an Internet-based tool	27-28	9
	C. National expert support for contributing to the writing of the report	29-30	10
III.	INDICATORS	31-36	10
IV.	CONCLUSIONS AND THE WAY FORWARD	37-38	11
	Annex		
Belg	grade report: an overview of data and information sources		
and	quality by chapter		13

Introduction

- 1. The Belgrade report (*Europe's environment: the fourth assessment*) was launched by the European Environment Agency (EEA) in October 2007 as an input to the Sixth Ministerial Conference "Environment for Europe" (Belgrade, 10–12 October 2007). The "Environment for Europe" process is a unique partnership of the 56 member countries within the UNECE region. Fifty-three countries (all the UNECE member countries except Canada, Israel and the United States of America) are covered in the Belgrade report defining the pan-European region. More than half of the area of the pan-European region is made up by the 12 countries of the Eastern Europe, Caucasus and Central Asia (EECCA) subregion (see table 1). It is a vast region that takes up most of Eurasia and covers several climate zones from the Arctic and tundra zones to the dry desert territories.
- 2. The previous EEA pan-European assessment, the Kiev report (*Europe's environment: the third assessment*), presented at the Fifth Ministerial Conference "Environment for Europe" (Kiev, 2003), addressed for the first time the EECCA subregion in a consistent and consolidated manner. Moreover, the Conference itself put the EECCA subregion into focus and one of the main outcomes was the adoption of the Environment Strategy for Countries of Eastern Europe, Caucasus and Central Asia (EECCA Strategy). EEA was again requested to prepare a further assessment report for the pan-European region, using the EECCA Strategy as one of the policy

pillars and to continue focusing attention on the environmental issues in EECCA. The use of indicators in evaluating progress since Kiev was also requested while producing the new report.

Main Group	Sub-group	Countries
Western and Central Europe (WCE)	European Union (EU-25)	Austria (AT), Belgium (BE), Cyprus (CY), Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (GR), Hungary (HU), Ireland (IE), Italy (IT), Latvia (LV), Lithuania (LT), Luxembourg (LU), Malta (MT), Netherlands (NL), Poland (PL), Portugal (PT), Slovakia (SK), Slovenia (SI), Spain (ES), Sweden (SE), United Kingdom (GB)
	European Free Trade Association (EFTA)	Iceland (IS), Liechtenstein (LI), Norway (NO), Switzerland (CH)
	Other European countries	Andorra (AD), Monaco (MC), San Marino (SM)
EECCA countries	Caucasus	Armenia (AM), Azerbaijan (AZ), Georgia (GE)
0001101	Central Asia	Kazakhstan (KZ), Kyrgyzstan (KG), Tajikistan (TJ), Turkmenistan (TM), Uzbekistan (UZ)
	Eastern Europe	Belarus (BY), Moldova (MD), Russian Federation (RU), Ukraine (UA)
South-Eastern Europe (SEE)	South-Eastern Europe	Albania (AL), Bulgaria (BG), Bosnia-Herzegovina (BA), Croatia (HR), Montenegro (ME) Romania (RO), Serbia (RS), The Former Yugoslav Republic of Macedonia (MK), Turkey (TR)

Table 1. Countries covered in the Belgrade report

- 3. As a consequence, the fourth assessment (Belgrade report) reflects the first results of EECCA Strategy implementation. The report is complemented by a policy relevant report, "Progress in Environmental Management in Eastern Europe, Caucasus and Central Asia", prepared by the Organisation for Economic Co-operation and Development. The focus of this report, also requested by the ministers in Kiev in 2003, was to assess progress in the implementation of the EECCA Strategy from the policy and governance perspectives.
- 4. The idea of a document looking into the "lessons learned" from the production of the pan-European assessment reports in relation to EECCA countries is not new. A document on similar topic was also produced at the end of the Kiev process, and served to assess the process of the information collection on the pan-European level as well as to draw conclusions and to make suggestions regarding the way forward. The present document has the respective aim of analysing the process of the Belgrade report preparation with respect to collecting, processing and presenting data from the EECCA subregion, with the further aim of drawing lessons for future cooperation at the pan-European level.

I. DATA COLLECTION FOR THE BELGRADE REPORT

5. The preparation of the Belgrade report started in mid-2005 (concept development) and continued throughout 2006, when the data gathering took place.

- 6. When beginning work on the Belgrade report, there was already a substantial time gap (about three years) with regard to working with the EECCA countries; that is, after the Kiev report was finalized, activities related to this subregion were interrupted due to the end of the EU/TACIS-funded project.
- 7. The main principles of data collection for the Belgrade report were to use the available international databases, update the data used for the Kiev report, and in so doing, avoid sending out questionnaires to the countries. (EEA was specifically asked by the EECCA countries at the end of the Kiev process not to use the thematic questionnaires when preparing the new report.) Therefore, the country burden regarding the data collection was reduced and available information reported by countries to various international organizations was used. However, the process often created frustrations for EECCA officials due to low national involvement of the country experts in the process of data collection (this finding stems from interviewing some members of the Working Group on Environmental Monitoring and Assessment (WGEMA)), even though the wide consultation process organized by EEA provided all countries with a good opportunity to participate in the production of the report (e.g. with assessments, additional materials and information, etc.).
- 8. Although useful and effective, international databases were not always able to provide complete and up-to-date information. This was mainly due to:
 - (a) The lack of timeliness of national reporting to various international obligations;
 - (b) The diversity and complexity of the issues addressed in the report;
 - (c) The novelty of some topics;
 - (d) The quality and completeness of available time series, etc.
- 9. These aspects related primarily to EECCA and partially to the SEE subregion. Therefore, additional specific information sources from the EECCA subregion had to be identified and used to ensure that most of the data and information needed were available (figure 1).

Figure 1. Sources of information for the Belgrade report (EECCA countries)



A. European Environment Agency data service

- 10. Much of the data and statistics available (and updated) in the EEA data service (http://dataservice.eea.eu.int/dataservice) were used for the Belgrade report. They were provided by various national and international organizations:
 - (a) Priority data came from EEA member countries and the SEE subregion;
 - (b) Thematic information was available through EEA and the European Topic Centres;
- (c) Socio-economic data was available from Eurostat, United Nations Statistics Division and the World Bank;
- (d) Thematic data was available from other international organizations with which EEA has agreements for data-sharing (e.g. International Energy Agency, OECD and UNECE).
- 11. In the particular case of EECCA countries, little new data have been made available since Kiev in the EEA data service as compared with the regular information flows from EEA countries. For the period after 2003, only national socio-economic statistics (used for chapter 1), coming from international organizations and updated for the Belgrade report, were available from the EEA data service.

B. International databases

12. For many issues addressed in the Belgrade assessment, the information was taken directly from the databases of various international organizations to which EEA has access. The most relevant are:

At the European level (EU/EEA member countries – and SEE in some cases):

Eurostat – Statistical Office of the European Communities;

ETCs – European Topic Centres:

ETC on Water;

ETC o Land Use and Spatial Information;

ETC on Biological Diversity;

ETC on Resource and Waste Management;

ETC on Air and Climate Change.

At the regional level:

OECD – Organisation for Economic Co-operation and Development;

ECMT – European Conference of Ministers of Transport;

UNECE - United Nations Economic Commission for Europe.

At the local level:

FAO – Food and Agriculture Organization of United Nations, especially FAO Forestry;

WB – World Bank;

IEA – International Energy Agency;

UNSD – United Nations Statistics Division;

UNWTO – United Nations World Tourism Organization:

- 13. Using the information collected through questionnaires by other European and international organizations (UNSD, Eurostat, ECMT, OECD and others) proved to be very useful for the EECCA subregion. All recent data available in the above-mentioned databases have been accessed and the most relevant ones for the scope of the report have been uploaded and made accessible through the EEA data service. The data-sharing arrangements which EEA has with these key organizations have proved beneficial, in particular for the pan-European coverage (beyond EEA member countries), and for a pan-European assessment.
- 14. EEA cooperation with UNSD led to substantial input towards the Belgrade data collection. Every four years, UNSD sends out questionnaires with a global thematic relevance to update existing information and to fill in data gaps in international databases. The Questionnaire 2006 on Environment Statistics was part of the biennial UNSD/UNEP¹ data collection process covering all countries except those covered by the joint OECD/Eurostat questionnaire. Two thematic questionnaires on waste and water were sent to the high-level officials of the five SEE countries and 12 EECCA countries. EEA and the ETCs provided support for the translation of the questionnaires into Russian as well as in checking the quality of the data provided. The responses from the countries were provided to EEA well in advance (before all aggregations and final checking took place) in order to serve as input to the report and to comply with the deadlines set for the production. The information received has been used in the chapters on inland water and sustainable production and consumption.
- 15. In using the various international databases, the following problems have been encountered:
- (a) Lack of data comparability between the EECCA subregion and the other European countries. Data requested by international organizations in questionnaires often do not match the information available at the national level (data not collected, method of calculation, aggregation, various national bodies involved in reporting obligations towards international bodies, etc.). As a result, questionnaires come back incomplete or contain different data and information from what was requested;
- (b) **Discrepancy between datasets** covering the same topic and available in various international organizations (e.g. in the section on transport, data on certain issues from the UNECE Transport Division differ from the data from ECMT);
- (c) **Timeliness of data** ranges between two and three years due to the different intervals in updating the international databases with information from EECCA countries (in some cases, e.g. the FAO datasets on pesticides, the time gap is almost five to six years and is related to changes in the methodology for calculating and reporting these data);
- (d) **Lack of information.** Data available from international databases do not cover all the topics addressed in the Belgrade report (e.g. many issues from the sections on marine environment, soil and chemicals);
- (e) **Discontinuity of working with EECCA countries.** This is a general problem encountered in the production of the pan-European reports. Much effort was put into the preparation of the Kiev report, including working directly in the subregion, developing a draft methodological guide for the creation of an EECCA core set of indicators and developing a

-

¹ United Nations Environment Programme.

network of experts in the region. But after an interruption of three years, it was extremely difficult to restore the contacts and information sources and gather all the data necessary for the missing period and for the Belgrade process.

C. Specific data and information sources for the Eastern Europe, Caucasus and Central Asia subregion

1. National and regional databases from Eastern Europe, Caucasus and Central Asia subregion

- 16. Among the new information sources used for the Belgrade report, it is particularly relevant to mention the database of the Interstate Statistical Committee of the Commonwealth of Independent States (CIS STAT), which cover all 12 EECCA countries (www.cisstat.com). The CIS STAT database is updated every year (it includes all EECCA countries except Tajikistan, Turkmenistan and Uzbekistan) and is publicly available on CD-ROM or as a yearbook. As with other international databases, we note following drawbacks:
 - (a) Lack of timelines:
 - (b) Gaps in data and information;
 - (c) Limited information on environmental issues.
- 17. Examples of other new databases which have been discovered during Belgrade process:
- (a) The database on indicators for sustainable development, which is available on the environmental Web portal of Central Asian countries (www.eco-portal.kz);
 - (b) The database of environmental indicators of Uzbekistan (<u>www.eis.uznature.uz</u>).
- 18. These databases contained the most recent and complete information for the relevant country/subregion (for Central Asian countries, especially Uzbekistan and Turkmenistan). Unfortunately, these sources were identified late in the process and therefore could not be used to their full extent. Another problem is in the irregularity of the websites: at the time of finalizing the present document, both Web portals were not operating. For future reports, EEA should strongly consider working further to identify online national databases for EECCA countries and cooperating with organizations such as CIS STAT and the national statistical offices.

2. Reporting obligations to conventions

- 19. The official data and information from the EECCA subregion delivered as part of the national reports towards various conventions (e.g. national reports, national communications) have been used mainly for chapters such the ones as climate change, air quality, biodiversity and soil, and to a lesser extent for other chapters. The EECCA national contact points (NCPs) and the TACIS project components assisted in the gathering of this information and the related documents, which contain both data as well as qualitative assessments at the national level for the specified topics.
- 20. The EECCA countries' reporting obligations towards the following conventions have been used as information sources:

- (a) United Nations Framework Convention on Climate Change (UNFCCC): all EECCA countries are Parties to the Convention;
- (b) Convention on Long Range Transboundary Air Pollution: nine EECCA countries (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation and Ukraine) are Parties to the Convention;
- (c) Convention on Biological Diversity (CBD): all EECCA countries are Parties to the Convention:
- (d) Stockholm Convention on Persistent Organic Pollutants: six EECCA countries (Armenia, Belarus, Georgia, Kyrgyzstan, Moldova and Tajikistan) are Parties to the Convention;
- (e) United Nations Convention to Combat Desertification(UNCCD): all EECCA countries are Parties to the Convention:
- (f) Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal: all EECCA countries (with exception of Tajikistan) are Parties to the Convention.
- 21. However, reporting to conventions still remains a minor source of information because:
 - (a) Not all the countries are parties to conventions;
- (b) Information from countries is often outdated or missing (e.g. the latest information from the Russian Federation on the Convention on Biodiversity is from 2004);
 - (c) Information is not always available in English.

3. National reports and statistical yearbooks

22. National reports and statistical yearbooks were used for obtaining up-to-date and specific information, e.g. for filling gaps. This includes national reports for UNEP/ENRIN, national biodiversity action plan reports, national environmental performance review reports and national state-of-the-environment reports. The problem here relates to the large volume of information to be processed and its accessibility, as most of the reports are in the national languages. The use of these sources is time-consuming and requires additional funding and time for translation.

4. Scientific literature

23. Many recent publications have been used to cover certain specific issues or as a source for case studies (e.g. for the chapters on marine environment and health, due to the need for more detailed and specific assessments and the lack of information from other sources).

5. Expert inputs

24. For preparation both the Kiev and Belgrade reports, substantial support was provided by the WGEMA: from developing the list of contents and the outline of the chapters up to the input provided during the consultation process organized for the draft report. Experts from the EECCA subregion (including NCPs and WGEMA members) were involved in the production of the report or used as advisors for better understanding and reflecting the EECCA-specific realities.

Non-governmental organizations (NGOs) and Regional Environmental Centers (RECs) from the EECCA also provided substantial inputs to the report preparation. Although data as such were not provided, many qualitative assessments and additional materials were provided, and in some areas effective written contributions were made. In particular, this was the case for environment and health as well as education for sustainable development, but also for thematic areas such as biodiversity, water and air quality. The dedicated consultation meeting organized for NGOs and RECs in November 2006 proved to be a very good platform for checking and assessing the quality of the resulting assessments, as well as for building long-term partnerships in some areas where EEA expertise was limited.

25. A brief overview of data sources used in chapters is presented in annex. It is the result of interviews carried out with the authors of the assessment and other experts involved in the data collection and report-writing processes, e.g. consultants, thematic experts and national representatives.

II. NOVELTIES OF THE BELGRADE PROCESS

A. Guidelines for the preparation of the Belgrade report

26. In order to assist everyone involved in the preparation and production of the Belgrade report (authors and contributors, commenters, designers, translators, printers), a comprehensive guidebook was developed by EEA with support from the Danish National Environmental Research Institute and UNEP/Grid-Arendal. The document provides information about the relevant political processes currently taking place at the pan-European level. It contains a detailed outline of each chapter and the relevant data requirements, the instructions and hints on how to write the chapters of the report as well as an overview of data sources. The Belgrade guidelines can be seen as a long-term support document for the countries and regions, especially in the EECCA subregion, for further developing state of environment reports in a consistent and comparable format.

B. Open consultation via an Internet-based tool

- 27. One of the most successful novelties of the Belgrade process was the open internet-based consultation with national experts and other interested communities across the pan-European region. The aim was to help EEA to improve and complete the draft report, in particular concerning EECCA coverage. A Web tool was developed as a platform for a wide consultation process, similar in nature to the one used for the UNEP GEO-4 report. The review tool was also used for the dissemination of the draft report. Consequently the countries could access the draft report without delay and put their comments online. The web consultation was conducted in both English and Russian; the draft report was available in both languages and the comments received were also in both languages. All comments received in Russian were translated into English and organized thematically for further use in the writing and finalization of the report. Feedback on how these comments were taken into account by the authors was also provided online.
- 28. All the EECCA countries participated in this consultation process, with the most contributions received from Belarus, Georgia, Moldova and Turkmenistan. More than 3,000 comments on the various chapters from governmental l and non-governmental organizations were received and processed, feeding into the content of the draft report.

C. National expert support for contributing to the writing of the report

- 29. Many local experts were involved directly in the writing of the Belgrade report (for chapter 1, covering education for sustainable development, for the chapter on agriculture, covering specific aspects related to the EECCA subregion, and for the chapters on chemicals and nature and biodiversity). This opportunity was came mainly thanks to the TACIS support process, but it was also the outcome of the Web consultation, as well as of the review meetings organized by EEA, as follows:
- (a) Presentation of the Belgrade report development and start of the consultation phase, UNECE Committee on Environmental Policy and the Working Group of Senior Officials, 9–13 October 2006, Geneva;
- (b) Review meeting with NGOs and other bodies, 16–17 November 2006, Copenhagen (to discuss the draft report with EECCA experts from various NGOs, RECs, etc.);
- (c) The WGEMA special session, concerning the review of the draft Belgrade report, Geneva, 29–30 November 2006.
- 30. The open and wide consultation at the pan-European level provided substantial input to the Belgrade report. The main achievements of the consultation were the expert evaluations of draft material provided directly to the authors, the support in data gap filling for some countries by the provision of links to the relevant national reports and latest publications; and improved assessment based on better knowledge of local conditions.

III. INDICATORS

- 31. During the period 2002–2004, and in parallel with the Kiev report development, the EECCA countries discussed the development of a core set of indicators for the subregion. This core set is closely related to the EEA core set of indicators. During the years following (2005–2006) the work on EECCA indicators was discontinued due to the end of the TACIS dedicated funding. The 2007 Belgrade report and the new TACIS funding (2006–2007) provided the opportunity to finalize the methodological guide, *Guidelines for the Application of Environmental Indicators in Eastern Europe, Caucasus and Central Asia* (a joint effort of EEA, UNECE and the EECCA countries) and to produce a trial compendium of indicators (joint effort comprising EEA, UNEP and EECCA experts).
- 32. The trial EECCA Core Set of Indicators Compendium is a selection of indicators contained in the methodological guide, effectively produced for the EECCA countries and using the data available in the international databases (15 indicators). The assessment part was open for country comments so to better reflect the specific situation in the subregion. The final draft was submitted to the WGEMA in June 2007 and will be available for use alongside the abovementioned EECCA methodological guide. It was only possible to produce 10 indicators in the end, and they are available for use by countries via the EEA Indicator Management System: http://ims.eionet.europa.eu/IMS/ISpecs/list_content?listtype=ISpecification&filter_code=EECCA.
- 33. Nevertheless, data for environmental indicators from the EECCA subregion which are comparable with the data from EEA countries are still very hard to obtain (the methodology for

production is also slightly different for some indicators, reflecting the specific monitoring conditions in EECCA). Therefore, the EECCA indicators could not be used as such in the Belgrade report. Only the available assessments were of use in some limited cases in improving the overall quality of the final assessment. It is expected that the EECCA indicators activity will be continued and therefore EU funding under the two new mechanisms – the European Neighbourhood and Partnership Instrument East and the Development Cooperation Instrument for Central Asia – is urgently needed. EEA will pursue this issue and support from the EECCA countries will hopefully accelerate this process.

- 34. Therefore, we may conclude that creating a pan-European core set of indicators is a long process requiring close collaboration with the countries to gradually adjust both methodology and national monitoring systems to the new demands. There are also needs to build capacities in the field of reporting and indicators and to encourage the use of the work for other requirements, such as national or regional benchmarking. The draft compendium, together with the *Guidelines* mentioned above, provide a useful platform for further cooperation between EEA and EECCA countries. At the same time, it is extremely important and urgent for EECCA countries to start using in practice this methodological guide and, based on this, to gradually adjust their national monitoring systems and priority data flows. Moreover, it is expected that future reporting exercises from the national to pan-European level will be effectively based on the indicators produced and on related data flows, ensuring better aggregation between the various levels, leading also to the production of the next pan-European assessment report. In terms of building further national expertise in this area and creating a pool of experts implementing this activity on a regular basis, we see the need for a more consistent engagement (including appropriate funding) from the national authorities alongside the various international projects.
- 35. The gradual expansion of the Shared Environmental Information System (SEIS) concept and implementation through pilot projects in the EECCA subregion could represent the broader platform for future action, where the indicator production, the related priority data flows and further capacity-building should be continued and developed. It is also the area where the EEA-EECCA partnership has a substantial niche for development and strengthening in the coming years.
- 36. In terms of policy relevance, the environmental indicators are extremely important at all levels, from national to regional to global. Working further on streamlining information and producing a core set of comparable indicators across Europe will enable decision makers to compare and assess their performance in a more effective way, to set clear priorities and to focus limited human and financial resources on addressing the key areas.

IV. CONCLUSIONS AND THE WAY FORWARD

37. There has been a certain amount of progress made since the publication of the Kiev report in terms of data availability and quality, mainly due to the work carried out by the EECCA countries in implementing the various legal instruments (national and international) and in improving environmental legislation and as a result of a multitude of (international) assistance projects taking place at all levels (local, national, regional, cross-border). Nevertheless, the problem of obtaining qualitative data from the EECCA subregion still remains. Among the reasons, we can identify following:

- (a) Some EECCA countries are not yet party to relevant international conventions or do not fulfill their reporting obligations in a timely manner;
- (b) There are still considerable differences in the standards and methodologies used for data collection and reporting, making comparisons or aggregation at the pan-European level impossible;
- (c) There are several environmental parameters not systematically monitored in the EECCA subregion (e.g. PM_{2.5});
- (d) There are many environmental information sources in the region (many are derived from various projects being carried out which have a limited geographical coverage), but they are sparse and in many cases they remain unknown to the international partners;
- (e) Most of the information available is in Russian and requires considerable effort regarding translation and use;
- (f) EEA does not have a continuous system of environmental information exchange with EECCA countries, making the process difficult and extremely labour-intensive.

38. The following suggestions can be made:

- (a) In general, there is a need for **systematic data exchange** (every year as a minimum) with EECCA countries, based on growing understanding of the demands and possible use of data. During collaboration on indicators and reporting, the methodological problems can be identified and solved, leading to comparable and timely information across Europe (e.g. EEA priority data flows should be gradually expanded to EECCA countries, building on the experience with EEA member countries and the SEE subregion);
- (b) There is a need to strengthen the **cooperation and partnership between international organizations** in terms of working together to obtain good environmental information, sharing the information available, and better coordinating their information demands towards countries. In this respect, the proposed SEIS for Europe represents a potential platform for sharing available information, as it would allow for multiple uses by national and international stakeholders. This will help to avoid an unnecessary burden on the countries regarding data collection and reporting, and will ensure more consistency of the available data stored in various databases;
- (c) Continuation of UNECE/WGEMA activities on a more regular basis could help to improve the collaboration and dialogue with EECCA countries and consequently improve the data collection process for the next pan-European assessment report;
- (d) There is a need for improved cooperation with the regional organizations active in the field of environmental information collection and analysis (such as statistical offices) which provide **links/access to existing national databases on indicators** (such as CIS STAT) from the region. This line of action has a large potential for the future and it should be more systematically followed in the coming years;
- (e) Further use and development of good experience achieved by running **open consultations** with the countries during the different stages of the report preparation is needed.

Annex
BELGRADE REPORT – AN OVERVIEW OF DATA AND INFORMATION SOURCES AND QUALITY BY CHAPTER

Chapter	Section	Data sources	Timeliness	Data quality and availability
1. Europe's environment in an age of transition		- International databases (available and updated through EEA data service) WB, WHO, UNSD, - Latest available publications of international organizations.	2006-2007	This is a complex area presenting an overview strongly linked with other chapters. It was the result of direct cooperation on different levels: from partners working at global level through to national organizations, e.g. contributions of countries, NGOs and RECs were very useful for writing about education for sustainable development.
2. Environment and health and the quality of life	Air quality	 National reports and statistics. Very little use of international databases. Official data gathered from EECCA countries within the framework of the TACIS project. 	Most data are 2 years old	-The lack of data of sufficient quality, -No information on monitoring station types, -Missing mechanism for exchanging air quality monitoring data in EECCA countries (such as exists in the EEA member countries). All this precludes an in-depth assessment of the state of air quality in the region although it has been monitored in all countries for many years.
	Health	- International databases (WHO, UNICEF), EEA data service, - Regional statistics from EECCA countries, case studies/	Most data are 2-3 years old	 Assessment and messages underpinned mostly by case studies or findings from research projects; these were identified via the networks used during the Belgrade process and via literature research, Data quality is an issue; e.g. inconsistencies between national and international databases; under-reporting of health issues of interest for the report; differences in definitions between countries.
	Inland water	- UNSD database (questionnaire), - CIS STAT data sources.	2 years old or older	- Information on <u>water abstraction</u> from EECCA subregion is more complete than from EU countries. CIS STAT gives recent and complete information on this issue, - Little information on <u>drinking water quality</u> and <u>pollution and water quality</u> . Water monitoring is still not adequate enough to obtain a clear picture of the status and trend in water resources.
	Soil	- Reports from national and international organizations and conventions (e.g. UNCCD, UNECE and OECD environmental performance reviews (EPRs), national	- The data on contaminated sites are from 2006 - Other	 Partial coverage of geographical areas, Lack of recent data for many soil threats, Problem of data comparability - the data used in the report are compiled from many different sources and information on methodology (metadata) is often not available,

	state-of-the-environment reports (SoE) reports, UNEP), - International databases (e.g. EM-DAT, FAO, OECD, WB).	information varies from 1998 to 2005	- Most information is available only in the national language.
3. Climate change	Only official sources used: - EEA data service (priority data flows), - Intergovernmental Panel on Climate Change (IPCC), - Netherlands Environmental Assessment Agency, - National communications to UNFCCC.	Most data are from 2003 to 2004	Information from many EECCA countries is not always up-to-date and comparable with the rest because of different reporting requirements (e.g. methodology), taking into account that North West Europe and countries that have commitments to the Kyoto Protocol have to report annually with detailed requirements.
4. Nature and biodiversity	- Data from European Topic Centre on Biodiversity using official reports (Environmental reports, UNEP and national country reports to CBD and UNEP/World Conservation Monitoring Centre, - the best and most accessible data are for birds (Birdlife International database), - ETC/B (ECNC) - special project for EECCA carried out for EEA, - FAO database on forestry.	Data ranges from 1997 to 2002	 Lack of up-to-date information because of time lag in the reporting to international organizations/conventions, Possible reason: biodiversity monitoring is not a high priority for most EECCA countries and often does not follow international standards, Data on species and habitat distribution and trends thus tend to be rather poor.
5. Marine and coastal environment	- Main source: European Topic Centre on Water based on official reports - international (GIWA) and regional reports, - International databases (FAO, Eurostat, ICES) used for fisheries International Tankers, Organization for oil spills in the Black Sea, - In addition, for seas covered by conventions reporting and analysis at the regional level was used, - Scientific papers.	- Data from 2005-2006 for a few issues, e.g. fisheries, climate change, - Other information is from 2002.	 General: sparse data on most issues (except information from international databases on fisheries), Lack of data and, when this exists, of comparable data and also indicators at the pan-European and regional levels, No or limited accessibility to the information (e.g. northern seas) from regional conventions, Oil and hazardous substances pollution information is generally poorly covered.

6. Sustainable production and consumption		- For the topics "Production and resources use" and "Consumption": mainly international databases: The World Bank, UNECE, ETC database (COMEXT), MOSUS project, - For "Waste": UNSD questionnaire on waste, CIS STAT, Eurostat, national reports.	- Up to 2003 ("Production and resources use" and "Consumptio n"), - Up to 2005 ("Waste").	- General problem: irregular data flows and very little data and information on sustainable production and consumption (the topic is rather new), - Many EECCA countries have made progress regarding waste data but the data are often available only in national SoE reports and not in the statistical publications.
7. Sectors that drive environmental change	Agricultur e	-FAO as a main source, -Eurostat statistics.	Varies from 2002-2005.	Main problem – old data: - Fertilizer input per hectare of agricultural land - latest data are from 2002, - Total pesticide consumption per hectare of agricultural land – information is from 1990–2001. Data after 1997 from EECCA countries are insufficient. Missing data: - The average irrigated land area and trends in cattle numbers by country group: no data for 1990–1991.
	Energy	- IEA - for energy consumption, production and all projections - Data sets from EEA data service - for the emissions of greenhouse gases.	Most data are from 2004.	Data quality is sufficient for energy consumption. For the greenhouse gases emissions – gaps for some countries: data only for some sub sectors.
	Tourism	- World Tourism Organization - World Travel and Tourism Council (WTTC) - National data sources.	2004-2005, some preliminary estimates available for 2006.	- Information from international databases is sufficient in representing national level but to properly assess the impact of tourism it would be important to gather information at regional and possibly subregional level and for specific periods (on a seasonal or monthly basis), - Administrative units' datasets are not easily available in a GIS format and had to be retrieved through different sources.
	Transport	 - Mainly: Transport Division of UNECE and UNSD - World Bank - For some specific issues - European Bank for Reconstruction and Development (EBRD) and some information from reports of ECMT. 	From 1998 to 2004 or older for some issues.	 Data varies between different international sources (data on certain issues from UNECE were not consistent and comparable with data from ECMT). Availability of qualitative data it is still limited because of methodological problems and lack of systematic data collection in the international databases.