

Conclusions and Recommendations

The Conclusions section summarises the key findings in the surveyed countries, broadly following the same structure as that adopted for the country reports (status of information systems → NGO reaction → challenges → future priorities and national action plans). It highlights trends among the countries so as to remain brief. The Recommendations section reflects on the priorities identified, and outlines future activities that must be undertaken to further the development of environmental information systems in South Eastern Europe. The section is based on the results of the project's Wrap-up/Training workshop held on June 19-20, 2003, in Sofia, Bulgaria, which reflected on the strengths and weaknesses of the assistance provided over the course of the project, and the opportunities and threats regarding its continuation (as part of a SWOT analysis).

Conclusions

Status of Environmental Information Systems

The long-term goals for all South Eastern European countries and territories remain integrated information systems (meaning comprehensive networks for environmental assessment), standardised reporting mechanisms and well-established channels for the processing, publication and distribution of environmental information. However, the provision of useful information to the public and to decision makers depends on access to reliable and up-to-date environmental data — increasingly in electronic formats — for ease of manipulation.

This assessment has shown that countries' environmental monitoring networks and data collection mechanisms vary in their level of development. In Bosnia and Herzegovina, there is no systematic collection, storage or reporting of water and air quality data, in any format, in either of its entities. In Kosovo (territory under UN interim administration), data is collected but was noted to be of limited value. In Albania, data collection occurs for a range of issues but in selected regions, and storage remains chiefly non-electronic. In Serbia and Montenegro, data is stored in both electronic and non-electronic formats, and in Bulgaria as much as 40 percent remains on paper. In a number of countries (Bulgaria, Croatia, FYR Macedonia, Romania), monitoring networks are well developed, but data is being transferred manually from paper to electronic format (FYR Macedonia), or is stored in a variety of formats according to institutions' own standards. In Serbia and Montenegro, for instance, monitoring networks cover all media, but geographic coverage is deemed inadequate. Many institutions are involved in data collection, sometimes with overlapping responsibilities and with limited coordination amongst them.

All South Eastern European countries and territories consider integrated information systems a long-term goal

The lack of harmonised reporting formats and the diverse range of technical platforms means cooperation and the exchange of data among institutions within all countries is severely constrained, as is data integration. This impacts upon the use of environmental information in the decision-making process. It can be said that no systematic approach exists for data storage and exchange, though some attempts are being made to introduce indicator-based reporting (e.g. in Albania). A clear trend is emerging for establishing agencies or information/thematic centres to coordinate reporting (Bulgaria, Bosnia and Herzegovina, Croatia, Kosovo, FYR Macedonia, Romania, the republics of Serbia and Montenegro) and/or integrated monitoring systems development (Croatia, Romania). Inter-sectoral cooperation and information exchange remains the exception, although interest is increasing in state-of-the-environment reports.

Efforts to ensure environmental information distribution are still largely left to those institutions collecting and storing data. Some countries' institutions (Croatia, FYR Macedonia, Bulgaria) offer a range of documentation through different channels: state-of-the-environment reports, monthly bulletins, Internet portals, information service centres and monthly meetings. New laws in Bosnia and Herzegovina, Romania and Kosovo bind the provision of environmental information upon request, at little or no cost, but in both republics of Serbia and Montenegro no legal basis yet exists to ensure citizens' rights to access environmental information. In some countries electronic mechanisms (e.g. websites) are not yet utilised (but are planned) to disseminate official information (Albania, Bosnia and Herzegovina, Kosovo, Republic of Serbia).

NGOs on Information Access, Quality and Reliability

From the limited number of questionnaire responses received from NGOs on the accessibility, quality and reliability of information, the trends identified remain tenuous. However, from the sentiments contained within the comments submitted, it has been possible to draw some limited conclusions. The summary below provides a broad interpretation and highlights specific observations from various countries and territories.

NGOs request information in a variety of ways (see the figure on page 9), most typically "in person" in Albania and Kosovo (where telecommunications infrastructure was noted to be poor), in Croatia and Romania (where the telephone was the second most popular method) and in Serbia and Montenegro (where post was the second most popular means). By contrast, 90 percent of NGO requests in FYR Macedonia were submitted by e-mail or over the Internet (in 2003). In Bosnia and Herzegovina, fax was narrowly more popular than "in person" requests, and in Bulgaria telephone was narrowly more popular than post.

In all countries, NGOs (ranging from 60 to 90 percent) felt "inadequate" responses to information requests were received from authorities and that these needed improvement (specifically regarding content). In Bulgaria, Romania, and Serbia and Montenegro, NGOs also commented on the unfriendly nature of staff, and in another country that "staff are not specifically interested or motivated to provide information." In all countries, procedures were considered to be too complex. In FYR Macedonia, one NGO noted the importance of personal contact in order to acquire information,

In all countries, procedures for requesting environmental information were considered by NGOs to be too complex

while only in Kosovo did NGOs state they had paid for information, specifically to cover the costs of processing.

Where information was not available from the ministry, in Bosnia and Herzegovina and Croatia, for example, NGOs relied on data related to their field of interest which could be obtained from other NGOs or via the Internet. NGOs also rely on libraries and bookshops, although in Romania these were found not to be reliable sources for environmental information. In Croatia, it was noted that local level access was poor. In the future, NGOs wish to be able to acquire information via simpler procedures and via the web (e.g. via search tools, in PDF formats, and via the websites of regional environmental inspectorates, as in Bulgaria). NGOs also called for the more proactive dissemination of information by authorities, via e-mail/fax updates (in Bosnia and Herzegovina, Croatia, Kosovo, FYR Macedonia, Romania, Serbia and Montenegro), and in hard copy format as part of a regular mailing list (Bulgaria, Croatia, Serbia and Montenegro).

Typically around half of the NGOs surveyed noted the limited range of topics and documentation accessible to them, this figure rising to 83 percent in Albania. Only in FYR Macedonia did NGOs rate positively the ministry's provision of information (quantity, currency, presentation). Otherwise, the regions' NGOs called for better access to all kinds of environmental data, with biodiversity and pollutant emissions data frequently cited (Kosovo, FYR Macedonia, Serbia and Montenegro) along with traffic emissions (Romania). Better documentation on decision-making processes and events (e.g. Natura 2000 network development) were also requested, as were access to contacts, local planning information and environmental impact assessments.

A common trend regarding the quality of information was "poor presentation," noted in Albania, Croatia, Romania and Serbia and Montenegro. In Bosnia and Herzegovina, one NGO asked for official information to be "written in a common language," while in Albania, and Serbia and Montenegro clear explanations of facts and figures, and consideration of the end user were requested. In Albania, Croatia, and Bosnia and Herzegovina, NGOs and experts would like to be consulted on draft reports (a form of "participatory assessment") in order to assist in improving their quality and offset situations whereby "reports on the status of the environment and related problems do not reflect the realistic situation," as was mentioned in Croatia. Calls for regularly updated information were common to all NGOs, not only because of its importance for NGO actions, but also to ensure synergy between government initiatives.

Challenges

Future system development will be determined by a number of factors. In the first place this depends on the current status of the system (e.g. geographic extent of monitoring networks, use of IT equipment, systems' integration, gaps, etc.), in much the same way as the current state of the environment, for instance, drives future priorities for its protection. System development is also dependent on the overarching information-related targets or goals of the relevant ministries, usually to improve access to environmental information, so as to be able to determine, in consultation with all relevant stakeholders, appropriate measures for environmental protection.

This assessment has also revealed various factors that can be considered as internal and external determinants of progress, and may be characterised according to a

In Bosnia and Herzegovina, one NGO asked for official information to be 'written in a common language,' a sentiment echoed elsewhere in the region

Both internal and external factors determine the development of information systems. Internal factors include framing conditions, such as legal frameworks, while external conditions can be viewed as driving forces, such as telecommunications and IT infrastructure

number of traits. Internal factors, or “framing conditions,” determining current status include the:

- legal framework upon which a system is based;
- clarity of participating institutions’ responsibilities;
- availability of qualified expertise; and
- level of importance assigned at the senior management level (and therefore availability and certainty of funding and other resources, such as institutions).

These conditions can be addressed (to a degree) by those responsible for information systems, and response measures can become part of a broader strategy for future system development.

External factors tend to be “driving forces” that are less within the control of those responsible for system development, and include:

- a country’s economic progress (which determines available funding as well as the cost of equipment);
- national telecommunications and IT infrastructure (which impacts upon the ability to exchange information and affects the related costs);
- regional integration in South Eastern Europe (which influences political stability, economic progress and donor assistance);
- EU and European Environment Agency (EEA) accession (determining overall goals and targets, and influencing internal structural changes, e.g. government rationalisation in Romania);
- the availability of international assistance (e.g. funding programmes such as those of the European Agency for Reconstruction, REReP, the European Commission);
- the demands of the emerging information/e-society (and within this the environmental NGO sector); and
- the drive towards online and environmental “good governance” and, in this context, the adoption of democratic principles.

Countries have highlighted these issues as challenges to varying degrees, depending on their current status and the level of importance attached to them.

Future Priorities

The table overleaf summarises countries’ priorities for information system development. It is based on the findings presented in the Needs and Priorities section of the country reports, and shows that they broadly correspond across the region. They have been grouped according to five key categories. Following, the most common needs within each category are discussed, beginning with the most popular.

The most common priority was investment in technological infrastructure, which, used effectively, can derive multiple benefits (i.e. yield the necessary data for environmental assessment, support data exchange and dissemination). Proposed investments ranged from monitoring equipment to improved data collection, such as mobile and automated monitoring stations (Kosovo, Serbia and Montenegro, Albania, FYR

Overview of priorities for environmental information system development in SEE countries and territories

	Legal Frameworks	Capacity Building	Technological Infrastructure	Demo Projects & International Cooperation	Services & Products	Local Consultations
Albania	•	•	•	•		
Bosnia and Herzegovina	•	•	•		•	•
Bulgaria		•	•		•	
Croatia	•	•	•	•	•	
FYR Macedonia	•		•	•	•	
Romania	•		•	•	•	
Serbia and Montenegro	•	•	•	•	•	•
Kosovo	•	•	•	•	•	

Macedonia) to networking technologies (e.g. local and wide area networks), to improved data exchange between organisations (Albania, Bosnia and Herzegovina, Bulgaria, Romania). Tools to manipulate and store data were also highlighted, including GIS, relational database management systems, and publishing apparatus (Kosovo, Croatia, Bulgaria, FYR Macedonia, Serbia and Montenegro). Platform and database upgrades, servers and Internet access to enhance the ability to store, shift and access data were also frequently mentioned.

Technological infrastructure was followed by developing and improving information management mechanisms and public services. In this regard, countries considered it important to establish institutions to assist in the management and provision of information (environmental agencies, data repositories, clearinghouses or sub-national information centres in Bosnia and Herzegovina, Bulgaria, Croatia, Kosovo, Romania, Serbia and Montenegro). Management tools such as easily modifiable catalogues (or directories) of data sources were also highlighted (by Bosnia and Herzegovina, Bulgaria, Croatia, FYR Macedonia), particularly as a means to identify gaps in existing reporting mechanisms, link sources of data, enhance decision-maker access, and to list European Union directive compliance reports. Regarding information products, investing in Internet portals were deemed popular (in Albania, Bulgaria, Bosnia and Herzegovina, Kosovo, Serbia and Montenegro) for ensuring access “any time, any place.” Other mechanisms include regular newsletters and educational and information programmes (Kosovo, FYR Macedonia). Romania highlighted the widespread publication of useful reports of environmental information in easy-to-understand formats for the general public, containing explanations of the data presented, the potential consequences on health and use of simple terminology.

Developing legal frameworks, standards and methodologies for environmental

The most common priority was investment in technological infrastructure, which includes monitoring equipment and networking technologies to improve the collection and exchange of data

In order to implement the Aarhus Convention trainings were requested on how to access and utilise information, deal with the public, the media and teachers and how to host community meetings

data collection by the relevant agencies (regarding the type, manner, format and time-line of data sampling, submission and reporting) were common to all countries. The country report for FYR Macedonia noted that practices “must be standardised and should reflect those set in international legislation (the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters) and EU legislation on Public Access to Environmental Information (2003/4/EC) and on reporting (91/692/EC), and those standards applied by the European Environmental Agency.” The Kosovo report highlighted a need to “harmonise approaches to data collection, ensure the results complement each other, and enable exchange and cooperation,” to “reinforce the value of a centralised data storage system, and the consequent publishing of environmental status reports.” Assigning clear roles, responsibilities and procedures were considered critical (in Albania, Bosnia and Herzegovina, Croatia Romania, Serbia and Montenegro) for avoiding overlap and enhancing cooperation.

Capacity building covered a spectrum of needs, spanning from data processing to information dissemination. Training was called for on data validation (Albania, Bulgaria), interpretation (Kosovo), storage and database management (Albania, Romania), and on data manipulation for generating and publishing useful information (Kosovo, Romania) compliant with EEA as well as user requirements. Of particular importance was providing this training to regional and local inspectorates, agencies and authorities dealing with local data. In order to implement the Aarhus Convention, and respond to increasing public (“customer”) demands for information, trainings were suggested on how to access and utilise information (Serbia and Montenegro), deal with the public (Romania), the media and teachers, and how to host community meetings (Albania). Technical trainings on IT installation, network maintenance, computer usage and Internet programming were also mentioned (in Bosnia and Herzegovina and Croatia).

The importance of international cooperation was highlighted as a means to access expertise and guidance (e.g. from the EEA), as well as an opportunity to share know-how, experience and best practices, and foster regional cooperation and integration.

Two countries reflected on the importance of hosting workshops and discussions with a broad range of stakeholders to understand user needs when developing information products and services, assess interests in planning for the future development of systems, and identify capacities to define future roles and responsibilities.

Following the identification of these priorities, national action plans for the practical development of information systems were drafted by country representatives in conjunction with international experts and representatives of the NGO community (the full plan is included in the country reports). These built upon and expanded the above priorities into concrete steps, while identifying required resources, indicators of success and a time line, among other things, to ensure development over a five-year period and until 2006 in five key areas. Namely, the system’s institutional structure; its legal basis; the mechanisms for data collection/management and dissemination; and the subsequent use of the information in decision-making processes. Priority actions in each of these areas are summarised in the table on pages 112-113, along with those elements funded by this project (highlighted and detailed in the case studies in the respective country chapters). This information offers ready reference to SEE countries’ plans for system development and provides a clear roadmap and framework for future activity.

Recommendations

The national action plans drafted by each country provide a framework for environmental information system development until 2006, of which the responsibility for implementation rests chiefly with countries themselves. The plans seek to ensure that decision makers and citizens in each country can access useful, reliable and timely environmental information, thereby facilitating public participation in decision-making processes, and the development of civil and information society.

However, the two-year “quick start” project that has helped to begin realising these plans through the provision of diverse technical assistance will conclude in December 2003. For this reason, project beneficiaries and environmental information system experts from across the region gathered in June 2003 in Sofia, Bulgaria to review the strengths and weaknesses of the assistance provided over the course of the project, and to identify the opportunities and threats for its possible continuation, if desired.

The participants (numbering 50) included experts from SEE governments and NGOs and international organisations including the EEA, the REC and the Austrian Federal Environmental Agency. These attendees were joined by experts in knowledge management and e-society development from the International Federation of Library Associations/Freedom of Access to Information and Freedom of Expression Office, and the World Bank.

During the Wrap-up workshop, participants welcomed the assistance to date and endorsed the national action plans as a strong foundation and roadmap for addressing future key challenges in each country. At the same time they agreed that the following activities should be implemented within the context of a follow-up project.

First, given the internal restructuring and shifting priorities within SEE countries — driven, among other things, by EU integration and *acquis* approximation, EEA accession and Aarhus Convention implementation (Romania being most notably affected as this publication went to press) — national action plans should be reviewed and updated. This would enable countries to check current status, reprioritise activities and highlight emerging needs, without undertaking an entirely new assessment. This approach was favoured by several other territories, including the Republic of Montenegro, where political changes have led to greater autonomy. Furthermore, the simple but comprehensive structure of the plans would enable other countries not involved thus far (e.g. Greece and Turkey) to develop similar roadmaps and be integrated relatively quickly into regional developments. The development of municipal-level local action plans was highlighted as the next logical step, based on interest in improved local access to information.

Second, greater emphasis was placed on addressing specific needs at the national level. This includes offering training assistance to national, regional and local level bodies, and capacity building to ensure compliance with international obligations such as the new EC Directive on Public Access to Environmental Information (2003/4/EC). The integration into Reportnet/EIONET, the EEA’s European environmental information system, was also noted, because it does not typically incorporate specific in-country support for understanding and applying indicator-based reporting principles. The techniques for monitoring and sampling, data collection, processing, management and updating need to be well understood by national bodies to enable the effective set up and development of the European monitoring systems (which rely on the national networks). Integrating air quality monitoring and data management

Responsibility for implementing the national action plans rests chiefly with the countries themselves

The countries have agreed on a set of priority activities that should be implemented within the context of a follow-up project

was highlighted as an example. National meetings and trainings that would inhelp develop domestic systems and provide assistance in the local language were welcomed. The REC's complementary assistance in supporting content development and handling in-country logistics was welcomed both by the EEA and the region. Other countries, including those already well integrated into Reportnet, highlighted the need for trainings to be administered for regional and local environmental protection inspectorates to introduce the requirements of the Aarhus Convention. This would incorporate sessions on how to handle and respond to information requests from the public, build and operate help desks and information centres, and so on. Other training topics included introducing geographic information systems and compatible software to manage spatial data, and utilising the available tools and software for storing and exchanging data and information (e.g. Web portals, Intranet systems, Catalogue of Data Sources, relational database systems). A short quantitative assessment should be made for each country, in order to tailor training courses to national needs.

Third, countries highlighted the need for further investment in technological infrastructure and in its development (of both hardware and software), in accordance with the priorities identified in the national action plans. While the start-up project has provided a direct and flexible response to each country's needs (through seed funding worth approximately EUR 25,000 per country and EUR 150,000 for Croatia), much more still needs to be done. Technology investments should be accompanied by training activities to ensure effective technology transfer and implementation. Workshop participants also highlighted the need to explore the availability and usability of open source software (that which is free or inexpensively available via the Internet), as one activity that could provide benefits and offset costs.

Fourth, almost all countries have begun, or at least proposed, the establishment of agencies or central offices to coordinate, pool and manage environmental data on the national level. Such agencies typically monitor environmental progress, support policy development and meet reporting obligations to the public and international agencies. Support for the development and/or establishment of environmental agencies was requested and can be realised through various capacity-building exercises such as twinning arrangements with environmental agencies in other countries, staff exchanges, study tours, and through working groups supported by international experts focused on specific issues (e.g. passive and proactive information dissemination, web portal development, networks of information centres/libraries, etc.). The England and Wales Environment Agency, for instance, has hosted experts in the past from countries in transition for periods of up to one month to demonstrate and impart know-how in collecting, storing, and managing data, and manipulating and disseminating useful information. The newly established Greek National Center for the Environment and Sustainable Development has successfully relied on a multi-stakeholder working group to look at how to make useful information available to the public. Cooperation with these and other agencies from across Europe will be explored so as to enable experts from South Eastern Europe to access national expertise, and learn and replicate best practices.

Within all future activities, the countries expressed a desire to continue involving a wide range of stakeholder groups including NGOs, which thus far has helped to ensure transparency and solid progress based on common interests. They also

endorsed the Regional Environmental Reconstruction Programme for South Eastern Europe (REReP) as an innovative approach to regional cooperation and knowledge exchange, and welcomed the contribution made by the project's steering committee. Countries highlighted the fact that a dedicated network of experts has been established through this project, which included all participating countries. This had provided an opportunity for know-how exchange and should be built on in future activities. The project was also commended for having provided a foundation for future system development, e.g. for establishing pollutant release and transfer registers, web portals, integrated data collections, etc.

Workshop participants noted their concern, however, regarding the uncertain future of REReP, "donor fatigue" and financial uncertainties which could endanger reaping the full benefits of the project to date. They also highlighted shifting domestic priorities and political support with respect to the environment resulting in considerable instability and uncertainty, weak legal frameworks and institutions, poor enforcement, and high staff turnover within their ministries as threats to the future development of environmental information systems. The threat posed by weak telecommunications infrastructures and the "digital divide" was also a concern. Participants therefore urged the donor community to continue its support to the region, REReP and for this project, in view of the priorities highlighted above.

The region's countries invited FYR Macedonia to lead the project in its second-phase (between 2004-2006), following hand-over by Croatia in December 2003. This invitation was made based on the country's years of experience in developing its environmental information system from almost nothing. The facts that FYR Macedonia has won the backing of decision makers within the environment ministry, as well as international praise, and enjoys a close level of cooperation with a satisfied NGO community, were also noted. FYR Macedonia accepted the invitation, a decision that was welcomed by other countries, particularly those embarking on the development of information systems (e.g. Bosnia and Herzegovina, and Albania,). The support of more experienced EU candidate countries (Romania and Bulgaria) was also welcomed, in view of their experiences in grappling with *acquis* approximation and EU integration.

The REC will work together with FYR Macedonia to elaborate the project's terms of reference and to leverage financial support, by targeting both bi-lateral assistance mechanisms (e.g. the Netherlands development cooperation funding and its Matra Programme, tentatively planned for extension to FYR Macedonia and Albania), and international sources (e.g. REReP, the Community Assistance for Reconstruction, Development and Stabilisation Programme [CARDS] and the German Agency for Technical Cooperation [GTZ]). The range of proposed activities at both the national and regional levels enable co-financing options to be explored in continuing environmental information system development. Cooperation with the European Environment Agency's continuing support to Balkan countries' initiative within the framework of the CARDS programme (2004-2006) will also be pursued. EUROPAid assistance for the development of the Turkish environmental information system will ensure its involvement in future regional activities. The Greek National Center for the Environment and Sustainable Development has expressed its interest in participating in a follow-up activity and sharing its experiences.

Funds of EUR 750,000 would ensure the continued assistance of international organisations, technological investments, training, international meetings, and national agency development for the period 2004-2006.

The region's countries invited FYR Macedonia to lead the project in its second-phase. Funds of EUR 750,000 would ensure its continuation, and further technological investments, training, international meetings, and national agency development for the period 2004-2006

Priority actions for environmental information system development in SEE countries/territories

	Institutional Structure	Legal Frameworks
Albania	<ul style="list-style-type: none"> • Design/install an electronic exchange system, including a front-end portal based on user needs 	<ul style="list-style-type: none"> • Legislate environmental monitoring • Adopt EU/EEA reporting standards • Enforce laws pertaining to EIS
Bosnia and Herzegovina	<ul style="list-style-type: none"> • EIONET and IT training • Install a Wide Area Network linking both entities • Found an environmental agency 	<ul style="list-style-type: none"> • Assign jurisdictions in the field of monitoring, collection, information processing and dissemination, harmonised with EU legislation • Ratify the Aarhus Convention
Bulgaria	<ul style="list-style-type: none"> • Strengthen communication links • Integrate databases • Host expert/NGO training at the regional level based on information available at the Executive Agency 	<ul style="list-style-type: none"> • Ratify the Aarhus Convention • Train municipalities and NGOs on environmental information sources and their accessibility
Croatia	<ul style="list-style-type: none"> • Map environmental data flows • Establish an environmental protection agency to synthesise data and coordinate providers 	<ul style="list-style-type: none"> • Identify and transpose relevant EU legislation for monitoring and reporting
FYR Macedonia	<ul style="list-style-type: none"> • Establish intersectoral working group to define reporting standards and methodologies • Eliminate manual state-of-environment data reporting • Launch data processing system 	<ul style="list-style-type: none"> • Harmonise legislation with EU directives and EEA reporting standards • Adopt regulations regarding data collection and management processes • Implement the Aarhus Convention
Romania	<ul style="list-style-type: none"> • Agree on monitoring system parameters for authorities • Involve NGOs to ensure public information demands are met 	<ul style="list-style-type: none"> • Enact a law/regulation to provide a legal basis for monitoring practices and responsibilities
Serbia and Montenegro	<ul style="list-style-type: none"> • Complete a feasibility study for system development • Establish a modus operandi • Establish environment agencies in each republic and train staff 	<ul style="list-style-type: none"> • Draft EU-compliant laws on information systems and access in both republics • Introduce draft laws to the public and adopt and implement them • Promote the Aarhus Convention
Kosovo	<ul style="list-style-type: none"> • Law enforcement training • Strengthen monitoring networks • Build capacity to interpret and report data 	<ul style="list-style-type: none"> • Extend legal frameworks to include data collection standards

NB: Text in green highlights those components partially funded by this REReP project.

Data Collection & Management	Information Dissemination	Ensuring Usage in Decision Making
<ul style="list-style-type: none"> Review and improve national monitoring practices Standardise laboratory sampling, data storage and reporting 	<ul style="list-style-type: none"> Establish a system for timely delivery of key information to NGOs, media and public 	<ul style="list-style-type: none"> Ensure preparation of EIA and SEA statements Provide useful information to all levels of administration
<ul style="list-style-type: none"> Extend monitoring practices Training on data management Integrate databases and establish data collection centres 	<ul style="list-style-type: none"> Launch user-driven web portals Host training in both entities for web design/maintenance 	<ul style="list-style-type: none"> Fully adopt indicator-based approaches to ensure targeted and useful information for decision makers
<ul style="list-style-type: none"> Upgrade software and networks to improve data processing and access Full electronic data storage Host training on international reporting requirements 	<ul style="list-style-type: none"> Establish regional information centres Enhance a national web portal Develop a catalogue of data sources 	<ul style="list-style-type: none"> Develop indicator-based reporting systems for environmental assessment Train staff on statistical analyses, reporting and GIS application
<ul style="list-style-type: none"> Conduct gap analysis against EEA reporting requirements Establish an office for information management and accurate reporting 	<ul style="list-style-type: none"> Produce a meta-database of information sources and producers Train civil servants on environmental reporting Develop coastal waters GIS 	<ul style="list-style-type: none"> Identify information users' needs and expectations Develop "user friendly" reporting formats
<ul style="list-style-type: none"> Install new monitoring stations (enhance geo/thematic coverage) Harmonise data collection formats and processing standards Purchase relational database management system 	<ul style="list-style-type: none"> Produce targeted, relevant and useful reports for users Maintain an open library and improve request responses Buy publishing equipment and improve online accessibility 	<ul style="list-style-type: none"> Adopt policy-indexed, indicator-based reporting Raise authorities' environmental awareness through useful reporting Host public hearings to ensure a participatory assessment
<ul style="list-style-type: none"> Buy PCs for data acquisition by local inspectorates Train monitoring officers in the use of the automated system Purchase network and IT apparatus for data exchange 	<ul style="list-style-type: none"> Data synthesis and repackaging in useful formats for the public, including Web interface Publish stakeholder-driven hard-copy reports and materials 	<ul style="list-style-type: none"> Present environmental trends in easy-to-understand formats (e.g. GIS)
<ul style="list-style-type: none"> Develop comprehensive, integrated monitoring networks Purchase five or six automated measurement stations Develop a catalogue of data sources 	<ul style="list-style-type: none"> Technical trainings on tools for user-driven information dissemination Establish a state web portal Training for staff and NGOs on information access 	<ul style="list-style-type: none"> Identify and respond to decision makers' information needs Adopt EEA reporting standards
<ul style="list-style-type: none"> Design monitoring network and define objectives Report on hotspots and gather health-related data Define data exchange procedures 	<ul style="list-style-type: none"> Incorporate existing data into useful publications Prepare regular state-of-the-environment reports Complete the web portal 	<ul style="list-style-type: none"> Ensure use of environment reports in policy planning Host multi-stakeholder forums to discuss environmental concerns in decision-making processes

