



**ECONOMIC COMMISSION FOR EUROPE
UNITED NATIONS**

***UNECE Working Group on Environmental Monitoring
Task Force on Tools and Guidelines***

***in cooperation with the Scientific Production Association "Typhoon",
Russian Federation***

and with the financial assistance of the European Community



Workshop on
**ENVIRONMENTAL NETWORKING AND INFORMATION
SYSTEMS**

2-3 June 2003, Obninsk, Russian Federation

Workshop Report

1. The Workshop on ENVIRONMENTAL NETWORKING AND INFORMATION SYSTEMS took place on 2-3 June 2003 in Obninsk (Russian Federation) in the Scientific and Production Association "Typhoon" of the Russian Federal Service on Hydrometeorology and Environmental Monitoring.
2. The objective of the workshop was to consider the following issues:
 - Creating or strengthening the reference centers possessing information about sources of environmental data in the EECCA countries and conducting environmental monitoring, gathering and presentation of environmental data on priority areas, using the experience resulting from collection of data for the Kiev report and as part of implementation of the UNECE/EEA project;
 - Developing contacts with specialized environmental organizations at the national level;
 - Arranging flows of environmental data on priority themes within the country;

- Familiarization with the EEA experience in network exchange between countries involved and software;
- Loading environmental metainformation into Internet using the available national environmental portals and the UNECE web-site connected with the EEA portal;
- Material and methodological support to the national reference centers from the UNECE and EEA;
- Developing an agreed action plan and schedule to be implemented in the EECCA countries by the end of 2003.

3. Participating in the Workshop were national experts from EECCA countries, representatives of UNECE, EEA and the International Centre for Scientific and Technical Information:

Armenia – Mr. Artur AGABABYAN, Leading Specialist, Information-Analytical Centre of Ministry of Nature Protection

Azerbaijan – Mr. Mamed JAFAROV, Head of Information-Archive Fund, Ministry of Ecology and Natural Resources

Belarus – Ms. Anna VYSOCHENKO, Director, Monitoring Department, Scientific and Research Centre “Ecology”

Georgia – Mr. Ramaz CHITANAVA, Consultant, Ministry of the Environment and Natural Resources

Kazakhstan – Mr. Nariman BITAKOV, Senior Specialist, Department of Environmental Monitoring, Ministry for Environmental Protection

Kyrgyzstan – Ms. Viktoria AFANASENKO, Senior Specialist, Department of the Environmental Monitoring, Ministry of Environment and Emergencies

Moldova - Mr. Petru KIRILE, Senior Specialist, Ministry of Ecology, Construction and Territory Development

Russian Federation –

Mr. Alexander GARYANTS, Deputy Director, Federal Environmental Emergency Response Centre, SPA TYPHOON

Mr. Valeriy KOSYKH, Head of Department, Federal Environmental Emergency Response Centre, SPA TYPHOON

Mr. Evgeniy SAMOTYESOV, Head of Centre, National Information Agency "Natural Resources"

Mr. Sergey FILIPPOV, Deputy Director, National Information Agency "Natural Resources"

Mr. Vyacheslav SHERSHAKOV, Deputy General Director of SPA "Typhoon", Head of Federal Environmental Emergency Response Centre

Tadjikistan – Mr. Eldar SHAFIEV, Senior Specialist on Information Technologies, Ministry for Environmental Protection

Turkmenistan – Ms. Amangul OVEZBERDIJEVA, Research Officer, Scientific-Production Centre for Ecological Monitoring, Ministry for Nature Protection

Uzbekistan – Ms. Tatiana EZHKOVA, Leading Specialist, Analytical monitoring inspection of the State Committee for Nature Protection

Ukraine – Ms. Nadejda MAKARENKO, Senior Specialist of IT Group, Ministry of Ecology and Natural Resources

United Nations Economic Commission for Europe

Mr. Mikhail KOKINE, Environment and Human Settlements Division, United Nations Economic Commission for Europe

Mr. Oleksandr SVIRCHEVSKYY, Consultant, United Nations Economic Commission for Europe

European Environment Agency

Mr. Stefan JENSEN, Project Manager

Mr. Adrian DASCALU, Finsiel, EEA Consultant

International Centre for Scientific and Technical Information

Mr. Alexey LOVTSOV, Head of Department, International Centre for Scientific and Technical Information

4. The meeting was opened by Vyacheslav Shershakov, SPA "Typhoon" and Mikhail Kokine, UNECE. They briefed on the goals and objectives of the meeting

and reported on conducted work on information technologies within the UNECE Task Force on Tools and Guidelines.

5. With the presentation of the experience gained by the National Information Agency "Natural Resources" in establishing environmental information systems and metainformation databases Sergey Filippov took the floor (NIA "Priroda"). He told about the creation and work of the ecological national portal "Priroda", informed about plans for development of the portal including support of a bilingual interface and automatic translation of the site content (Russian-English).
6. A review of the experience of the Ministry of Environment and Emergencies of Kyrgyzstan in the organization of the system of information support in environmental monitoring and the state of the environment was presented by Viktoria Afanasenko. She told about the work of the departments dealing with the monitoring studies and the existing problems in putting together and presenting environmental data.
7. On the experience of the Main Information and Analytical Centre of National Environmental Monitoring System of Belarus in the organization of information exchange and creation of the environment data bank spoke Anna Vysochenko. The reporter informed how the monitoring data were accumulated and how the Monitoring Department of the Scientific and Research Center "Ecology" progresses in setting up environmental monitoring databases and publication of the catalogue "Information Bulletin" and on the problems connected with the presentation of these data in the e-form.
8. The representative of the International Centre for Scientific and Technical Information Alexey Lovtsov reported on the experience of the ICSTI in information support and development of a database for estimating the state of the environment. He identified the organizational and technical aspects connected with the gaps and obstacles in the creation of the international networking for metadata exchange on the theme "Quality of Human Habitat: atmosphere, water, soil". The speaker also attracted the attention of the audience to the problem of determining the types of information sources and the structure of the metadata bases. He underlined the importance of the use of the tools developed by the European Agency such as the multilingual thesaurus "GEMET" for data classification. He informed on the ICSTI plans for the realization of environmental data exchange with the European Information and Observation Network (EIONET). The problems of legality arising at information acquisition and the ways of their solution were mentioned.
9. With a short overview on the use of the Internet technologies for the creation of information systems in the countries of Western, Central Europe and of EECCA the floor was taken by Oleksandr Svirchevskyy. He described in short the technologies and tools used in the European Environmental Information and Observation Network to create the portals and information storage. Then he

reviewed the current state of the web-sites (portals) of the Ministries (Commissions) on the Environment in the countries of Eastern Europe, Caucasus and Central Asia.

10. Valeriy Kosykh from the Russian Federation (Task Force on Tools and Guidelines) informed the participants on the application of the EEA software and information tools. He told in detail about the first and second meetings of the Task Force on Tools and Guidelines Working Group in 2002 and about their results. The speaker informed about the agreement made with the ICSTI and on the conditions of data exchange agreed including those obtained by the ICSTI at the implementation of the international program on the problem of "Quality of Human Habitat". Some examples were demonstrated on the application of the software WinCDS to create the Catalogue of Data Sources. The attention of the participants was attracted to the solution of the problem of the information reliability.

11. The representative of the EEA Adrian Dascalu told about the application of the EEA software: CIRCA, Zope, and EIONET Portal ToolKit. He informed the participants how the Portal Toolkit (PTK) applied by the EIONET users was installed and used to make a portal, on initiatives in this directions (CHM-PTK), then he demonstrated the PTK in work with a real on-line example. Also the speaker mentioned the software for joint efforts of Committees and Working Groups (CIRCA) and the services and resources provided.

Discussion

The discussion concentrated on the problems of multilingual support of the EEA software and application of the EEA software products including the All-European Multilingual Thesaurus on the Environment "GEMET".

12. With the report on the approaches and the experience of the European Environment Agency in the organization of information networks and the development of databases was Stefan Jensen. He presented the participants the information on the current state and development of the EIONET and Reportnet (network structure, reference centres, priority data flows, technology development); on participants of the network and on the EEA plans how to involve the EECCA countries into the EEA network for acquiring and presenting environmental information. In the report the speaker touched the problem of priority data flows used by the Agency and the state of the reports on these flows in different countries. The speaker mentioned the technical aspects of electronic means for accumulation, storage and search of Reportnet records. Finally he gave information on the future September 2003 EIONET (e-EIONET) meeting in Bulgaria and on the aims and objectives of this meeting.

13. Oleksandr Sverchevckyy reported on the strategy of Environmental networking and information systems development for assessing the environment state in the EECCA and practical approaches to its implementation. He presented the participants of the meeting the document "Development of Ecological Networking and Information systems in the EECCA countries". The beginning of the presentation was devoted to a conceptual structure of the strategy. The speaker considered the systems of national information resources, data sources, metadata information systems, ecological information services and the ways to create these systems. He underlined the importance of the creation of networks for data acquisition within the countries, determined the role of national coordinators. The priority criteria to choose the data and software to create the information resources, in particular, the "Catalogue of Data Sources", were considered. Much attention in the report was given not only to the process of data acquisition and the creation of the metadata bases but also to the interaction of partners via Internet. It was also said about a technical support to national coordinators from the UNECE and EEA, about the use of the UNECE technical potential.

Discussion

During the discussion the problems of determining the criteria for choice and stating priority data flows were considered. The problems connected with the construction of the information networking within the countries and the ways of their solution were spoken about. Stefan Jensen, EEA, demonstrated on a real example how similar networks were constructed in the EIONET countries. Also considered were the problems connected with the analysis of information reliability and the problems of legality arising in the process of presenting the data on information sources. The ICSTI representative Alexey Lovtsov indicated possible obstacles occurring at databases creation and the ways for their overcoming with the example of the cooperation of the ICSTI and International network APIN (Asia Pacific International Network). During the discussion all the participants of the meeting expressed their opinions.

14. The concluding document presented for the discussion to the participants of the Workshop was the document determining the Terms of Reference for making a contract between the UNECE and environmental ministries (Agencies) of the EECCA countries. It sets forth the plan of activities and the schedule of activities to be carried out in the EECCA countries over the period by the end of 2003 to gather and load environmental metainformation to Internet using the existing national environmental portals and web-site of the UNECE. The document was presented by Oleksandr Svirchevskyy.

Discussion

During the discussion components of the action plan and its time frame were discussed in detail. The participants of the meeting asked numerous questions related to problems

that may appear during implementation of the plan as provided by the time-schedule. Then ways of addressing these problems in specific EECCA countries were considered.

15. In conclusion Vyacheslav Shershakov, SPA "Typhoon" and Mikhail Kokine, UNECE, took the floor. The importance of the meeting was underlined, being a significant stage in the process of constructing and extending ecological networks and information systems in the countries of Eastern Europe, Caucasus and Central Asia.

16. The general conclusions of the Workshop on environmental networking and information systems are as follows:

- To continue efforts on the creation or strengthening the reference centres on environmental monitoring and environmental information producers in the priority areas (atmospheric air quality and pollution, water quality and quantity- surface, underground and coastal waters and their pollution, land resources and soils, protected areas and biodiversity, waste and waste disposal);
- To put together reference books with specialized organizations and contact points (organizations, addresses, names, telephone and fax numbers, e-mails)
- To build networks to exchange data on the priority areas within the EECCA countries;
- To start setting up environmental metadata bases – the "Catalogue of Data Sources" in the EECCA countries - with their future publication in the Internet using the available national ecological portals and the UNECE website and in conjunction with the EEA portal.
- To enter these databases with data provided for the Kiev report (waste, water, land)
- It would be useful to enter the catalogues and load in the Internet the national reports on the state of the environment, reports submitted to Secretariats of international environmental conventions and the Commission on sustainable development as well as action plans or environmental protection and sustainable development programs.