MONITORING AND ASSESSMENT OF TRANSBOUNDARY WATERS

STRENGTHENING CAPACITY FOR DATA ADMINISTRATION AND EXCHANGE FOR MONITORING AND ASSESSMENT OF TRANSBOUNDARY WATER RESOURCES IN EASTERN EUROPE, CAUCASUS AND CENTRAL ASIA

PROPOSAL FOR A PILOT ACTIVITY

Note by France

Summary

This document summarizes proposed future work to improve data administration for the monitoring and assessment of transboundary water resources in Eastern Europe, Caucasus and Central Asia. It describes the proposed activity’s scope, objectives, actions and expected outcomes, and is hereby submitted to the Meeting of the Parties for its decision.
I. BACKGROUND AND PROPOSED ACTION BY THE MEETING OF THE PARTIES

1. Reliable, up-to-date and easily accessible information about water resources is essential for effective water governance. This is particularly important for the management of transboundary waters, as information about different parts of the same basin needs to be shared continuously among riparian countries. Experts from Eastern Europe, Caucasus and Central Asia (EECCA) strongly supported this statement at the Tbilisi workshop on joint monitoring and assessment of shared water basins¹, and suggested developing interactive means for accessing information about transboundary waters.

2. This stimulated the Parties to the Convention to take a decision at their fourth session (Bonn, Germany, 20–22 November 2006) on the development a metadata database to strengthen capacity for data administration of monitoring and assessment of transboundary water resources, which would complement similar information tools existing in the region (see ECE/MP.WAT/19/Add.2). The International Office for Water, invited to lead this activity on behalf of France, prepared a project identification form (fiche) related to the subject in collaboration with the secretariat, the International Water Assessment Center (IWAC) and the French Ministry of Ecology, Energy, Sustainable Development and Sea. The project identification fiche was submitted for consideration and potential funding to the French Global Environment Fund (FFEM).

3. The Working Group on Monitoring and Assessment discussed the proposal and agreed at its tenth meeting (Bratislava, 10–11 June 2009) to include it in the next workplan. The Working Group decided that it would focus on two pilot basins in EECCA and requested the proposal to be presented at the fifth session of the Meeting of the Parties (ECE/MP.WAT/WG.2/2009/2, paras. 64–69). Countries sharing the basins concerned and willing to participate in the project were invited to inform the secretariat about their interest in the activity.

4. At its meeting on 3 July 2009, the Steering Committee of FFEM accepted the project identification fiche for a further feasibility study. The current document, containing a summary of this proposal, was prepared by the French Ministry of Ecology, Energy, Sustainable Development and Sea in collaboration with the International Office for Water, IWAC and the secretariat. The French Ministry of Ecology, Energy, Sustainable Development and Sea also financially supported the preparatory work.

¹ Workshop on joint monitoring and assessment of shared water basins organized under the auspices of the Convention with the framework of the Capacity for Water Cooperation (CWC) project in Tbilisi from 31 October to 2 November 2005. For more information, please see: http://www.unece.org/env/water/cwc/monit_assess.htm.
5. The Meeting of the Parties may wish:

(a) To restate the importance of effective data and information management for water governance, particularly in the context of transboundary cooperation;

(b) To thank France for supporting this activity and invite it to continue backing it in future;

(c) To thank the International Office for Water for leading this important area of work and to entrust it to implement, as appropriate, the future project in cooperation with IWAC;

(d) To call upon candidate countries for the project to strongly commit to the foreseen work and to ensure good results of this important exercise.

II. SCOPE AND OBJECTIVES OF THE PROJECT PROPOSAL

6. An important assumption of the project proposal is that establishing a metadata database will be more efficient if its development is considered as an integral part of the general process of data management. Moreover, this activity should be implemented through a number of pilot basins and further replicated throughout the EECCA subregion. The project will particularly focus on two pilot basins and will have at the same time a component aiming at dissemination of tools and results at the regional level.

7. The overall aim of the project is to build capacity in data administration in the relevant national and local authorities and joint bodies\(^2\), as appropriate, thereby supporting both policies and actions related to transboundary water management.

8. The particular focus will be on building capacity to identify existing data, and on developing the production and sharing of homogeneous and consistent information necessary for water resource management, whether at the national or local levels, or for regional assessments. The latest will be an important asset for preparation of future editions of the Assessment of transboundary rivers, lakes and groundwaters.

III. FORESEEN ACTIVITIES AND EXPECTED RESULTS

9. If funded, the project may be carried out in less than two years, from May 2010 to December 2011. The feasibility study will take place during November 2009–February 2010 and will be devoted in particular to the identification of the two pilot basins among the following seven transboundary basins. These basins were pre-selected after considerations of past and ongoing activities, current capacity and opportunities for cooperation:

(a) Daugava (Belarus, Russian Federation (Kaliningrad oblast))\(^3\);

\(^2\) “Joint body” means any bilateral or multilateral commission or other appropriate institutional arrangements for cooperation between the Riparian Parties; see article 1, paragraph 5, of the Convention.
(b) Neman (Belarus, Russian Federation (Kaliningrad oblast))
(c) Pripyat (Belarus, Ukraine);
(d) Seversky Donets (Russian Federation, Ukraine);
(e) Dniester (Republic of Moldova, Ukraine);
(f) Prut (Republic of Moldova, Ukraine);
(g) Transboundary waters in Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan).

10. In addition to the selection of the two pilot basins, this phase should allow for (a) formal confirmation of commitments by the countries involved in the pilots and (b) further definition of the project proposal, taking into account the specificity of the two basins.

11. The proposed activities, as planned at this stage, are grouped into the two main components.

Component 1: Actions to be undertaken at the level of a pilot transboundary basin

12. The aim of this component is to build up administrative and data-sharing capacity in the two pilot basins, using methods and approaches that can be replicated in other transboundary basins in the EECCA subregion. The work will be done in close cooperation with the relevant national and local authorities as well as the relevant institutions of the countries involved.

13. The following activities will be carried out simultaneously in each of the two pilot basins:

(a) Strengthening the cooperation between the relevant actors in data and information administration, including the preparation of a draft plan for water data management in the basin;

(b) Supporting the development of tools to be used for the data administration, in particular:

(i) Defining and adopting common rules for producing metadata;

(ii) Setting up tools for managing metadata (e.g. servers and software) in each basin, and/or at national level, depending on the case, and developing a metadata catalogue;

(iii) Identifying and supporting the development of complementary tools (e.g. servers, databases/geographic information systems (GIS), depending on

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3 Latvia and Lithuania, which also share the basin, are outside of the scope of the project.
4 Latvia, Lithuania and Poland, which also share the basin, are outside of the scope of the project.
5 Romania, which also shares the basin, is outside of the scope of the project.
the means available) with the aim of building data exchange capacity related to identified priority themes.

(c) Setting up procedures and tools for sharing information and data through:

(i) Developing and adopting common rules for sharing data that respect the rules of confidentiality defined by the data producers;

(ii) A case-by-case characterization of the exchange scenarios and exchange procedures (i.e. who supplies what to whom, why, how, when and in what format);

(iii) Reinforcement of system interoperability, both from a semantic angle (i.e. common language, common frames of reference) and a technical angle (i.e. format and exchange procedures), in order to limit the manipulation of data during exchanges;

(iv) Implementing exchanges on priority themes, including setting up the first cartographic Web services.

(d) Supporting production of the sought-after information, with:

(i) Support for defining what information to produce to meet management needs (i.e. content of maps, calculation methods for statistics and indicators);

(ii) Support for the actual production of maps, statistics, progress reports and indicators sought.

Component 2: Actions to be undertaken at regional level

14. These actions aim to organize a first regional catalogue promoting metadata and information produced by the two pilot basins, as well as to disseminate results of the project to other transboundary basins in the EECCA subregion and receive feedback.

15. To this end, the following is planned:

(a) Creating and setting up a regional metadata catalogue (server software). This catalogue would be hosted on a server at IWAC and would constitute a single point of entry for identifying all or part of the data described in the pilot basins’ metadata catalogues, plus other national or regional catalogues;

(b) Producing and disseminating leaflets presenting the policies and techniques of the project’s results;
(c) Organizing a side-event during the Seventh “Environment for Europe” Ministerial conference (scheduled for 2011 in Astana), to present the progress made in the project and potential uses for the results in other subregions;

(d) Other communication initiatives, in particular for disseminating results internationally and promoting procedures to other transboundary basins in the EECCA subregion.

16. To conclude, this two-year project should ultimately allow each of the two pilot basins to achieve the following:

(a) The constitution (or strengthening) of an institutional cooperation network for managing water-related data;

(b) The production of a guiding document along the lines of a “water data management plan”, approved by the various actors involved;

(c) The setting-up of a metadata catalogue of the data sources used to manage transboundary waters, with direct inputs from the actual producers, where possible;

(d) Identification of the principal data management partners’ needs for capacity-building in data administration, with implementation of priority reinforcement operations;

(e) Definition of rules for data-sharing, with respect to conditions of confidentiality;

(f) The development of tools and procedures for sharing data, and their application to some priority topics;

(g) Support for the production of information useful for assessing transboundary waters, and an improved quality of previously produced information.

17. The following is expected to be achieved at the regional level:

(a) The setting-up of a first regional-level metadata catalogue, with a particular emphasis on information collected on the two pilot basins;

(b) The organization of events and the development of policy-based and technical information media for disseminating feedback, in particular to organizations and national authorities involved in managing transboundary waters in other basins in the region.