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ECONOMIC COMMISSION FOR EUROPE

**MEETING OF THE PARTIES TO THE CONVENTION ON
THE PROTECTION AND USE OF TRANSBOUNDARY
WATERCOURSES AND INTERNATIONAL LAKES**

Working Group on Monitoring and Assessment

Tenth meeting
Bratislava, 10–11 June 2009
Item 4 of the provisional agenda

**ASSESSMENT OF THE STATUS OF TRANSBOUNDARY WATERS
IN THE REGION OF THE UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE**

**SECOND ASSESSMENT OF TRANSBOUNDARY RIVERS, LAKES AND
GROUNDWATERS**

Note by the secretariat*

Summary

This document was prepared pursuant to decisions taken by the ninth meeting of the Working Group on Monitoring and Assessment (Geneva, 17–18 June 2008; ECE/MP.WAT/WG.2/2008/2, paras. 7–34) and by the third meeting of the Working Group on Integrated Water Resource Management (Rome, 22–24 October 2008; ECE/MP.WAT/WG.1/2008/2). It reports on progress in preparation of the second Assessment of Transboundary Rivers, Lakes and Groundwaters in the UNECE region and describes the steps foreseen for future work, including organizational arrangements and fund-raising. A draft outline of the second Assessment is included in the annex.

* The present document was submitted late due to resource constraints.

I. BACKGROUND AND PROPOSED ACTION BY THE WORKING GROUP

1. This document is intended to facilitate discussion by the Working Group on Monitoring and Assessment regarding further preparation of the second Assessment. It is based on the relevant decisions taken by the ninth meeting of the Working Group on Monitoring and Assessment and by the third meeting of the Working Group on Integrated Water Resources Management. It also takes into consideration outcomes of the consultations of the Steering Group with respect to the second Assessment established by the Working Group on Monitoring and Assessment at its ninth meeting. The Steering Group is comprised of representatives of Finland (Chairperson), Georgia, Germany, Switzerland, Ukraine, the European Environment Agency (EEA), the International Water Assessment Centre (IWAC), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Organization for Security and Co-operation in Europe (OSCE), the secretariat of the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention) and the UNECE secretariat.
2. The Steering Group held two teleconferences to further define the work arrangements for the preparatory process (see chapter II) and to consider fund-raising for the programme (see chapter III). The Steering Group also commented on the draft outline of the second Assessment (see annex) and suggested potential background material and sources for information for the Assessment (see para. 14).
3. Furthermore, it was agreed that the first subregional workshop on transboundary water resources management in South-Eastern Europe (SEE) would be held in Sarajevo (18–20 May 2009) and would be jointly organized by the Regional Cooperation Council (RCC) and UNECE in cooperation with the Global Water Partnership Mediterranean (GWP-Med) and the International Sava River Basin Commission (Sava Commission). The workshop will contribute to the preparations of the second Assessment and at the same time will promote high-level discussions of key issues relating to transboundary waters and cooperation in SEE. The outcomes of the workshop, together with the main messages for the assessment of SEE, will be presented to the Working Group on Monitoring and Assessment in a separate informal document.
4. Delegates are invited to indicate their inputs to the preparation of the second Assessment and put forward proposals, as follows:
 - (a) How can the tasks included in the preparatory process benefit from relevant activities carried out by your organization?;
 - (b) What role is your organization ready to play in the actions foreseen for the preparatory process?;
 - (c) Do you have any other comments and suggestions?.
5. Delegates from SEE countries are invited to discuss and agree on how to finalize the draft assessment of transboundary waters in this subregion to ensure timely submission of the document to the fifth meeting of the Parties.

6. Delegates from countries of the Caucasus are invited to discuss the necessary steps for starting preparation of the draft assessment of transboundary waters in this subregion (e.g. nominating at least two experts per country (surface and ground waters) and sending the secretariat any background information in English that they wish to use for the second Assessment).

II. WORKING ARRANGEMENTS

7. As was the case for the first Assessment, the second Assessment will be the product of a broad cooperative effort of national and international organizations. It will both build on and contribute to the work of all partners involved.

8. UNECE will coordinate the overall preparation through a Project Coordinator based in the Convention secretariat. The Project Coordinator will be responsible for the overall management of the process, the coordination of different inputs, the organization of activities, the preparation of the text and its publishing and promotion.

9. The roles of the main partners involved in the process will include the following:

(a) EEA will cooperate on the preparation of the assessment of transboundary waters shared by EEA countries;

(b) IWAC will support the preparation of the assessment of transboundary waters in the European Union (EU) countries, including those waters shared with non-EU countries (with the support from experts from relevant non-EU countries), and will provide expertise in transboundary groundwaters;

(c) UNESCO/IGRAC¹ will support the assessment of transboundary groundwaters (general expertise as well as direct involvement for different subregions);

(d) The Ramsar Convention will support the preparations of assessments of wetlands related to transboundary waters;

(e) GRID-Arendal², UNESCO/IGRAC and others will support the production of maps;

(f) GWP-Med will support the preparation of the assessment of transboundary waters in SEE.

10. Additional partners may be identified in the further preparations. Partners will need to cooperate closely to ensure the integration of the different inputs and in particular the integration between surface and ground waters. This will require extensive exchange of comments on drafts and consultations.

¹ International Groundwater Resources Assessment Centre.

² GRID-Arendal is a collaborating centre of the United Nations Environment Programme (UNEP).

11. Subregional meetings will be used for collecting main data and for basic drafting. Consultations with country experts and negotiations during the meetings of the Working Group on Monitoring and Assessment will be the major vehicles for clearing the data.

12 For each subregional meeting, cooperation will be sought with additional relevant local and regional partners (e.g. OSCE, the Regional Environmental Centers (RECs), RCC, EEA, the Sava Commission, the United Nations Regional Centre for Preventive Diplomacy for Central Asia, SIC-ICWC³ and Bioforsk⁴).

13. A main tool for the preparation of the assessment will be the datasheet used to gather information on the transboundary waters. For each transboundary basin, the datasheet will aim to also collect information on the transboundary aquifers related to it. Additional transboundary aquifers that cannot be associated to a single specific basin will be dealt with separately. The draft datasheets will be presented to the Working Group in a separate informal document.

14. To simplify the tasks of focal points and other experts involved, the datasheets will be pre-filled with official reliable information. The level of completion of the datasheets will depend on the resources available. Possible sources to be used for this step include:

- (a) First Assessment of Transboundary Rivers, Lakes and Groundwaters;
- (b) EEA databases and reports;
- (c) Reporting under the EU Water Framework Directive;
- (d) Reporting under joint bodies;
- (e) Publication of the Almaty Capacity for Water Cooperation Workshop;
- (f) TACIS⁵ Project on Water Governance (Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova and Ukraine);
- (g) United Nations Development Programme work on integrated water resources management (IWRM) in Central Asia;
- (h) Assessment of the resources of the Caspian Sea and the Amu Darya River carried out under the Environment and Security (ENVSEC) Initiative;
- (i) Baltic Marine Environment Protection Commission (Helsinki Commission) and the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic;
- (j) Activities of the Global Environment Facility (GEF) and the World Bank in the

³ Scientific Information Centre of the Interstate Coordination Water Commission of Central Asia.

⁴ Norwegian Institute for Agricultural and Environmental Research.

⁵ Technical Aid to the Commonwealth of Independent States, under the European Commission.

Caucasus;

- (k) World Water Assessment Programme;
- (l) World Meteorological Organization;
- (m) Global Water Partnership publications;
- (n) Information sheets on Ramsar wetlands.

15. Table 1 illustrates the major steps in the preparatory process, the corresponding tasks and the possible main partners.

Table 1. Time frame, tasks and partners

Timing	Tasks	Possible main partners
18–20 May 2009, Sarajevo	Subregional meeting for SEE. Preparation of the assessment for SEE	RCC, GWP-Med, Sava Commission, World Bank, UNESCO/IGRAC, Ramsar Convention
10–11 June 2009, Bratislava	The Working Group on Monitoring and Assessment will provide comments on the main message of the assessment for SEE and agree on the next steps.	
10–12 November 2009, Geneva	The Meeting of the Parties will consider draft assessments, as available (e.g. draft assessment for SEE; draft datasheets for the Caucasus and neighbouring countries)	
December 2009, Tbilisi - tbc	Subregional meeting for Caucasus, including countries sharing waters with Caucasian countries (i.e. the Islamic Republic of Iran, the Russian Federation and Turkey). Preparation of the assessment for the Caucasus and neighbouring countries.	Ministry of Environment of Georgia, OSCE, IWAC, UNESCO/IGRAC, Ramsar Convention, REC Caucasus
March 2010, Bratislava	Subregional meeting for western EECCA ⁶ and neighbouring EU countries. Preparation of the assessment for western EECCA and neighbouring EU countries.	IWAC, UNESCO/IGRAC, REC for Central and Eastern Europe, EEA, Ramsar Convention

⁶ Eastern Europe, Caucasus and Central Asia.

Timing	Tasks	Possible main partners
May 2010	Subregional meeting for Central Asia, including countries sharing waters with Central Asian countries (e.g. Afghanistan, China, the Islamic Republic of Iran, Mongolia and the Russian Federation). Preparation of the assessment for Central Asia and neighbouring countries.	OSCE, United Nations Regional Centre for Preventive Diplomacy for Central Asia, SIC-ICWC, Ramsar Convention, UNESCO/IGRAC
September 2010 ⁷	Subregional meeting for Western Europe and the Nordic countries. Preparation of the assessment for Western Europe and the Nordic countries.	EEA, IWAC, Bioforsk, UNESCO/IGRAC, Ramsar Convention
November 2010	The Working Group on Monitoring and Assessment will provide comments on the drafts and will endorse them.	
November 2010–February 2011	Further drafting (including findings/recommendations derived from the Assessment), completion of the missing data, consultations with countries (if needed, small meetings)	All partners, as needed.
February–June 2011	Finalization of the text, proofreading, reproduction of maps, editing and publishing. Final negotiations on the Assessment within the preparation for the Seventh “Environment for Europe” Conference. Communication with countries and stakeholders to promote the Assessment.	All partners, as needed.
...2011, Astana	The Seventh “Environment for Europe” Ministerial Conference will consider the Assessment and take decision(s) on its findings/recommendations.	
November 2011	The Working Group on Monitoring and Assessment will consider the follow up to the related decisions by the Ministerial Conference	

III. ESTIMATED BUDGET AND FUND-RAISING

16. The total estimated costs for the preparation of the second Assessment have been revised taking into account experience gained so far in the preparatory process. The overall cost estimate amounts to about \$1,100,000 (up to 2011, three years). This sum covers personnel costs, organizations of subregional meetings, travel of staff, travel of participants (including to the meetings of the Working Group), consultancy fees for experts, editing, translation, layout and production of maps (table 2).

⁷ It is proposed to seek synergies with a relevant meeting organized under the EU Water Framework Directive.

Table 2. Estimated budget

Item	Sum in USD
Personnel costs: 1 extrabudgetary staff member for the period July 2009–December 2011	379,500
Personnel costs: 3 part-time UNECE budgetary staff members for the period January 2009–December 2011	180,000
Organization of 5 subregional meetings, including travel of staff and participants	200,000
Organization of 3 meetings of the Working Group, including travel of staff and participants	45,000
Consultancy fees: experts, editing, translation, design and layout	244,600
Production of maps	35,000
Total	1,084,100

17. The responsible extrabudgetary staff member (the Project Coordinator) was scheduled to start working on the preparation of the second Assessment from September 2008. At the time of writing, this post had not been filled. Three members of the UNECE secretariat have been working part-time on preparation of the second Assessment.

18. To date, the following contributions have been made to support this activity: \$3,000 by Georgia, €10,000 by the Netherlands, 180,000 CHF by Switzerland and \$124,414 by Sweden. Thus, the total amount of contributions constitutes about \$298,000. Leaving aside the in-kind contribution by UNECE, the funds still needed amount to \$606,000.

19. Several partners expressed their readiness to provide in-kind contributions to support the organization of subregional meetings and to assist in preparing draft assessments. Moreover, Finland, Germany and Switzerland expressed their willingness to co-fund this activity in the future.

Annex

DRAFT OUTLINE OF THE SECOND ASSESSMENT⁸

A. Draft outline of contents

MAPS

Maps will be divided into two types: (a) maps of surface waters and (b) maps of aquifers. This separation will be contingent on the feasibility of including surface waters and aquifers in a single map for a given subregion.

- Overview map of main transboundary surface waters and aquifers in Western and Central Europe (maybe split in more than one map)
- Overview map of main transboundary surface waters and aquifers in Eastern Europe
- Overview map of main transboundary surface waters and aquifers in South-Eastern Europe
- Overview map of main transboundary surface waters and aquifers in Caucasus
- Overview map of main transboundary surface waters and aquifers in Central Asia
- Possible thematic maps (on health aspects, climate change impact on water resources). It will be decided at a later stage whether maps will reflect vulnerability aspect or status.

I. OVERVIEW/SUMMARY

II. OBJECTIVES AND SCOPE OF THE ASSESSMENT

III. MAJOR FINDINGS OF THE ASSESSMENT

Compared to the first Assessment, conclusions will, as far as possible, have a further subregional focus highlighting differences between subregions.

Possibly as in the first Assessment, tables will be used to summarize problems, impacts and status.

- Chapter 1: LEGAL, POLICY AND INSTITUTIONAL FRAMEWORKS FOR TRANSBOUNDARY WATER MANAGEMENT
- Chapter 2: MONITORING OF TRANSBOUNDARY RIVERS, LAKES AND GROUNDWATERS
- Chapter 3: MAIN PROBLEMS, IMPACT AND STATUS
(Including specific issues such as climate change, health impacts, water-related ecosystems, as highlighted in the assessment of the different basins)
- Chapter 4: RESPONSES
- Chapter 5: THE WAY FORWARD
Trends and recommendations

⁸ Prepared by the secretariat in consultation with the Steering Group.

IV. FACTS AND FIGURES ON TRANSBOUNDARY RIVERS, LAKES AND GROUNDWATERS

A more detailed outline of the assessment of the different river basins is presented below.

- Chapter 1: DRAINAGE BASINS OF THE WHITE SEA, BARENTS SEA AND KARA SEA
- Chapter 2: DRAINAGE BASINS OF THE SEA OF OKHOTSK AND SEA OF JAPAN
- Chapter 3: DRAINAGE BASIN OF THE ARAL SEA AND OTHER TRANSBOUNDARY WATERS IN CENTRAL ASIA
- Chapter 4: DRAINAGE BASIN OF THE CASPIAN SEA
- Chapter 5: DRAINAGE BASIN OF THE BLACK SEA
- Chapter 6: DRAINAGE BASIN OF THE MEDITERRANEAN SEA
- Chapter 7: DRAINAGE BASINS OF THE NORTH SEA AND EASTERN ATLANTIC
- Chapter 8: DRAINAGE BASIN OF THE BALTIC SEA

Annex 1: Inventory of transboundary rivers, lakes and groundwaters

Annex 2: Inventory of existing legal and institutional frameworks for cooperation (e.g. transboundary agreements)

Annex 3: List of country codes

Annex 4: List of acronyms and units of measurement

Other annexes as needed

B. Draft outline of a section for a river basin/aquifer under part IV (Facts and figures)

- Each section should address in integrated way transboundary surface and ground waters.
- Assessment of groundwaters that cannot be associated to a specific river basin will be presented at the end of the relevant chapter, following the same outline.
- Information on climate change related impacts will be highlighted in the different chapters.
- For selected basins, there will be an assessment of a transboundary Ramsar site(s) presented in a separate box (see outline in section C below).

I. Description of the basin

II. Hydrology and hydrogeology (integrated overview on surface waters and the shared aquifers in the basin)

III. Main problems in the basin

For surface and ground waters, information on main problems likely to cause a transboundary impact, including as relevant, the following phenomena/activities:

- Geochemical processes or other natural pressure factors
- Natural water flow in the basin (e.g. extreme events, seasonality)
- Hydromorphological changes
- Crop and animal production
- Forestry
- Mining and quarrying
- Manufacturing
- Electricity supply (e.g. hydropower, thermal power, nuclear power stations)
- Sewerage (e.g. untreated/insufficiently treated urban wastewater)
- Waste management (e.g. controlled and uncontrolled dump sites)
- Transportation/navigation (e.g. roads, pipelines)
- Storage (including tailing dams for mining and industrial wastes)
- Industrial accidents
- Illegal discharges from industries
- Groundwater abstraction and use for drinking water
- Groundwater abstraction and use for thermal spas
- Tour operator activities/tourism
- Other (specify)

IV. Status and transboundary impacts

- 4.1 Water quantity and quality, including loss of biodiversity
- 4.2 Environment, including water-related ecosystems
- 4.3 Additional specific effects of climate change
- 4.4 Social, health and economic aspects

V. Response measures (including implemented measures, gaps and foreseen measures)

- 5.1 Legal and policy frameworks
- 5.2 Institutional framework
- 5.3 Non structural measures (e.g. IWRM plans, recently agreed transboundary actions)
- 5.4 Structural/technological measures
- 5.5 Monitoring of transboundary waters
- 5.6 Financing and investments
- 5.7 Involvement of stakeholders, including public participation and the private sector

5.8 Additional measures specifically related to climate change and its impact on water resources and water dependent sectors (at the national and transboundary levels)

- VI. Future trends
Foreseeable trends on the status, possibly including scenarios on water quality and water quantity taking into account drivers of change such as economic development, climate change, etc.

C. Draft outline of a section on the assessment of transboundary wetlands with designated Ramsar sites

- I. Description of the wetland area
- II. Hydrological functions of the wetland ecosystem and impacts on social development and key sectors of economy
- III. Biodiversity values of the wetland area
- IV. Cultural values of the wetland area
- V. Status of the wetland area
- VI. Response measures
- VII. Future trends
- VIII. Suggestions for decision(s) to be taken by the Meeting of the Parties to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes and/or its protocols and for decision(s) to be taken by the meeting of the Parties to the Ramsar Convention.
