

CHAPTER 4

UN/ECE Strategies for Protecting the Environment with Respect to International Watercourses: The Helsinki and Espoo Conventions

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BACKGROUND AND ISSUES OF UN/ECE ENVIRONMENTAL CONVENTIONS

New Borders and New Potential for Transboundary Environmental Problems

The current process of changes in Europe is posing new and compelling challenges to regional cooperation in general, and to cooperation in the fields of the environment and the security in particular. Between 1990 and 1995, the United Nations Economic Commission for Europe (UN/ECE) membership increased from 34 to 55 countries, including 27 countries in transition from a centrally planned to a market economy. With the emergence of new countries with economies in transition, new frontiers are cutting through the region, creating more transboundary situations and issues.

Environmental protection, sustainable development and a rational use of natural resources represent problems mostly transboundary in nature. They include: fresh and sea water use and protection; (long-range) air pollution; desertification or flooding; dangerous waste; transport; nuclear risks; and impact of military activities.

The fact that a growing number of countries in transition are at the level of developing countries increases the diversity of socio-economic and environmental backgrounds and therefore the challenges in the field of environmental security.

Environmental Legacies of the Past in Countries in Transition

Two recent overview reports, "Europe's Environment - The Dobris Assessment"¹ and "Concern for Europe's Tomorrow"², give a consistent picture of environmental risks and problem findings which are specific or especially pronounced

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¹ EUROPE'S ENVIRONMENT - THE DOBRIS ASSESSMENT (David Stanners & Philippe Bourdeau eds., 1995).

² WHO CENTRE FOR ENVIRONMENT AND HEALTH, CONCERN FOR EUROPE'S TOMORROW: HEALTH AND THE ENVIRONMENT IN THE WHO EUROPEAN REGION (1995).

in the countries in transition (CIT), comprising the countries of Central and Eastern Europe (CEE) and the Newly Independent States (NIS) which emerged from the former USSR.

The main economic sectors and source activities responsible for environmental risks in the countries in transition are industry, energy and agriculture, to which must be added inadequacies and deficiencies of infrastructure, e.g. water supply, waste water treatment and solid waste management.

Manufacturing *industry* contributes nearly 50% to GDP in some CEE countries and NIS, twice as much as in the European Union (EU). The centrally planned economy of the former USSR in particular resulted in large industrial conglomerates with interacting industries located near each other. Overwhelming priority used to be given to productivity, and less attention paid to emission control or waste disposal. Air pollution has become a substantial problem in many industrial areas, and is associated with increased morbidity from respiratory diseases and allergies, particularly in children. Widespread soil and water contamination resulted from storing liquid industrial waste in uninsulated ponds and/or simply dumping solid industrial and municipal waste in the ground.

The combustion of fossil fuels for *energy production* in power plants, industry and transport is still a major source of urban ambient air pollution with suspended particulate matter, nitrogen oxides (NO_x), carbon dioxide (CO₂) and sulphur dioxide (SO₂). The levels of SO₂ emissions in CEE are very high in comparison to the scale of energy consumption because of their dependence on poor quality coal, along with the lack of control technology; the domestic use of coal also contributes. Centrally planned economies had little incentives for energy efficiency improvement.

Intensive *agriculture and livestock farming*, combined with excessive use of chemicals, add an enormous pressure on the aquatic environment from non-point sources. The area of irrigated land has considerably increased, particularly in the semi-arid regions of the CEE and NIS. The adverse environmental effects of irrigation include the depletion of water supplies from upland areas, rivers and local artesian sources, and the salinisation and alkalization of soils by mobilisation from deeper levels, which makes them unfit for agriculture and grazing. The area around the Aral Sea provides a clear example of what can be wrong with irrigation schemes, and what may result: desertification, loss of two thirds of the water inflow to the Sea, and the eradication of local fishing.

Reliable, piped supplies of *drinking water* are lacking for 86 million people in the NIS. These basic inadequacies in supply are aggravated by poorly maintained distribution systems, with resulting interruptions in supply, leakage and contamination. Sewage is inadequately treated in many areas.

The above-mentioned legacies of the past have led, and still lead, to serious problems for transboundary waterways. They are too numerous to be listed in an exhaustive manner, but a few of them are worth mentioning. Apart from the notorious pollution of open seas, huge land-locked inland waters like the Caspian and Aral Seas, and small and medium-sized lakes like Peipsi, Ohrid and Dojran have been affected. When speaking about the pollution of international rivers, the effects of transboundary accidents should not be forgotten. The application of environmental impact assessment methodology in the transboundary context is a challenge for the future.

Response to Environmental Challenges

Whereas many international, supranational, regional and subregional cooperation structures exist to cope with economic, security and other issues in Europe, UN/ECE is still the sole pan-European forum for environmental cooperation and sustainable development. Apart from servicing the "Environment for Europe" process, the tasks of ECE are threefold: developing policies, standards and guidelines including binding international instruments; analysing and reviewing policies of the member states through Environmental Performance Reviews; and contributing technical assistance to the member states through Advisory Services.

In order to contribute to the solving of transboundary problems, the UN Economic Commission for Europe promotes transboundary cooperation by developing institutional and legal frameworks which are applicable at the regional level but can serve also as a model for solving transboundary environmental issues in other regions. The following regional environmental conventions have been adopted so far:

- Convention on Long-range Transboundary Air Pollution (signed 1979, in force since 1983) with five protocols;
- Convention on the Protection and Use of Transboundary Watercourses and International Lakes (signed in 1992, in force since 6 October 1996)³;
- Convention on Environmental Impact Assessment in a Transboundary Context (signed 1991, in force since September 1997);
- Convention on the Transboundary Effects of Industrial Accidents (signed 1992); and
- Convention on Access to Environmental Information and Public Participation in Environmental Decision-making (in preparation).

³ The ECE recommendations and guidelines which further substantiate the Convention on the Protection and Use of Transboundary Watercourses and International Lakes are listed in the Annex to this Chapter.

THE HENSINKI CONVENTION ON THE PROTECTION AND USE OF TRANSBOUNDARY WATERCOURSES AND INTERNATIONAL LAKES

The UN/ECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes was signed in 1992 at Helsinki by 25 countries. It entered into force on October 6, 1996.

General Provisions

The aims of the Convention (see Article 2) may be summarised as follows:

- protection of transboundary waters (including surface and groundwaters) by preventing, controlling and reducing pollution;
- ecologically sound and rational management of transboundary waters;
- reasonable and equitable use of transboundary waters; and
- conservation/restoration of ecosystems.

To that end, Parties have the obligation to take measures for the prevention, control and reduction of pollution, where possible at source. This applies both to point and diffuse sources.

The Convention explicitly recognizes the need to apply a number of basic principles. The *precautionary principle* implies that action to avoid the potential transboundary impact of the release of hazardous substances shall not be postponed on the ground that scientific research has not fully proved a causal link between those substances and the potential transboundary impact. Costs of pollution prevention, control and reduction measures shall be borne by the polluter (“the *polluter-pays-principle*”). Water resources shall be managed so that the needs of the present generation are met *without compromising the ability of future generations to meet their own needs*.

Provisions Relating to All Parties

The essential obligation of the Parties (Article 3 and the following ones) is to develop, adopt, implement and render compatible relevant legal, administrative, economic, financial and technical measures with respect to a number of issues including:

- application of low- and non-waste technologies;
- introducing emission limits for and licensing of waste-water discharges;

- applying at least biological treatment to municipal waste-water;
- applying best available technology (BAT) and best available practices to reduce nutrient inputs from industrial and diffuse sources;
- application of environmental impact assessment;
- promoting sustainable water-resources management including the application of the ecosystem approach;
- contingency planning and minimisation of the risk of accidental pollution;
- monitoring the conditions of transboundary waters; and
- research and development on effective techniques for the prevention, control and reduction of transboundary impact.

Provisions Relating to Riparian Parties

The main and core obligation (Article 9) to the Riparian Parties, i.e. the parties bordering the same transboundary waters, is to enter on the basis of equality and reciprocity into bilateral or multilateral agreements or other arrangements, in order to define their mutual relations and conduct regarding the prevention, control and reduction of transboundary impact. Such agreements shall provide for the establishment of joint bodies, covering well-defined catchment areas, with their tasks including to:

- collecting, compiling and evaluating data on and inventories of pollution sources;
- elaborating joint monitoring programmes;
- elaborating emission limits for waste water, and evaluating effectiveness of control programmes;
- elaborating joint water-quality objectives;
- developing concerted action programmes for the reduction of pollution loads; establishing warning and alarm procedures; and
- exchanging information on existing and planned uses of water and on BAT.

The work of the joint bodies specifically includes the cooperation with coastal States, as well as with the joint bodies established by coastal States for the protection of the marine environment directly affected by transboundary impact.

Whether or not in the framework of joint bodies, the Riparian States have very detailed obligations on consultations, joint monitoring and assessment, common research and development, exchange of information, warning and alarm systems, mutual assistance and public information (Articles 11-16). The Riparian Parties should ensure that the following information is made available to the public:

- water-quality objectives;
- permits used and the conditions required to be met; and
- results of water and effluent sampling carried out for the purposes of *monitoring*, assessment as well as checking compliance with the water-quality objectives or the permit conditions.

The Convention contains also certain *institutional provisions on the settlement of disputes* which are discussed in Chapter 4.

The Helsinki Declaration 1997

The First Meeting of the Parties to the Convention,⁴ which was held at Helsinki from 2 to 4 July 1997, adopted the Helsinki Declaration. The main statements of this declaration are as follows:

- The problems faced are not unique to transboundary waters; they should be seen in the context of integrated water management.
- The cooperation will be focused on five programme areas of the Work Plan 1997-2000 (see below).
- There will be close cooperation at all levels - regional, sub-regional, national, provincial and local - and the relevant activities will be delegated to the lowest appropriate level.
- All ECE member countries are encouraged to ratify the Convention and to ratify under its umbrella relevant conventions and agreements, such as the Convention on Cooperation for the Protection and Sustainable Use of the Danube River.

⁴ ECONOMIC COMMISSION FOR EUROPE, MEETING THE PARTIES TO THE CONVENTION ON THE PROTECTION AND USE OF TRANSBOUNDARY WATERCOURSES AND INTERNATIONAL LAKES, REPORT OF THE FIRST MEETING (1997).

- Executive bodies of related conventions, organizations, institutions are invited to cooperate so that both sides can benefit from one another's experience.
- Broad public participation is essential for implementing and developing further the Convention.
- An aim is to prepare jointly with WHO-EURO an international instrument to address the problem of water-related diseases.
- The Parties encourage countries in transition to prepare and implement joint projects on human resources development and institutional capacity building to resolve existing water-management problems and prevent future disputes over water resources. They support the ECE Regional Advisory Service Programme (see below) in facilitating the preparation and implementation of such joint activities. They call on financial institutions and funding mechanisms to give high priority to such joint country initiatives.

Work Plan 1997 - 2000

The First Meeting of the Parties to the Convention also adopted a Work Plan 1997 - 2000 with the following main programme areas.

Programme Area 1: Joint Bodies

- A series of workshops to assist countries in setting up joint river and lake commissions.
- Inventory of agreements on transboundary waters.

Programme Area 2: Assistance to Countries with Economies in Transition

- Pilot programme on monitoring.
- Advisory service on legal instruments.
- Strengthening the capability of Parties to comply with the obligations under the Convention.
- Sharing experience on the implementation of the Convention.

Programme Area 3: Integrated Management of Water and Related Ecosystems

- Review of national policies and strategies for the protection and use of transboundary waters.
- Orientation beyond 2000.
- Implementation, compliance monitoring and enforcement.
- Conference on Management of Transboundary Waters in Europe (Mrzezyno, Poland, September 1997).
- Groundwater management: assist countries to develop a comprehensive groundwater protection policy.
- Monitoring and assessing transboundary groundwaters and rivers.
- Pilot programme on monitoring.
- Laboratory quality management and accreditation.

Programme Area 4: Land-based Pollution Control

- Land-based pollution control in catchment areas of transboundary lakes.
- Best agricultural practices.

Programme Area 5: Water Supply and Human Health

- Prevention, control and reduction of water-related diseases.

A number of parties have offered to take the lead in the implementation of the various programme areas and sub-programmes of the Work Plan 1997-2000.

ECE Regional Advisory Services to Facilitate the Implementation of the Convention

The UN/ECE Regional Advisory Services Programme (RASP) was established in mid-1994. It offers a new dimension of services and diversification of assistance to countries in transition (CIT). The Programme acts as a fieldwork oriented catalyst for the transition to a market economy. Its activities are demand-driven and are executed in direct consultations to national policy makers. One aim is to assist the integration of the CIT through the application of ECE norms and standards. Another major aim is to assist in capacity building, project preparation and in developing links with the private

sector and financing and donor organizations. The RASP gives logistic support and input to the Southeast Europe Cooperative Initiative (SECI) and the Joint ESCAP/ECE Special Programme for the Economies of Central Asia (SPECA). The RASP environmental activities⁵ have focused on:

- Water management and protection.
- Prevention of, and response to industrial accidents.
- Cleaner industrial and agricultural production.
- Environmental impact assessment.
- Environmental performance reviews.

RASP will continue facilitating future implementation of the Convention by providing assistance to countries in transition in developing human resources and building institutional capacities in all programme areas.

THE ESPOO CONVENTION ON ENVIRONMENTAL IMPACT ASSESSMENT IN A TRANSBOUNDARY CONTEXT: RELEVANCE TO THE PROTECTION OF INTERNATIONAL WATERCOURSES

Environmental impact assessment (EIA) has already proven to be a very important instrument for implementing and strengthening sustainable development. It combines the precautionary principle with the principle of preventing environmental damage and arranges for public participation. EIA has become the major tool for an integrated approach to the protection of the environment since it requires a comprehensive assessment of the impacts of an activity on the environment, contrary to the traditional sectoral approach. Moreover, it looks into alternatives to the proposed activity and brings facts and information on environmental impacts to the attention of

⁵ Examples of advisory activities in capacity building include:

ECE Training Workshop on "Significance and implementation of the ECE Environmental Conventions in Central Asian republics", Almaty (Kazakhstan), December 1996; ECE Training Workshop on "Significance and implementation of the ECE Environmental Conventions in Transcaucasian Republics", Tbilisi (Georgia), November 1997; ECE Workshop on "Prevention and limitation of industrial accidents with effects on transboundary waters", Berlin (Germany), 1998; and Conference on "Protection and management of international lakes", Estonia, 1998.

Examples of advisory assistance in project preparation include:

Protection and management of transboundary waters between Belarus, Estonia, Latvia, Lithuania and the Russian Federation (submitted by the five countries for support by the PHARE and TACIS programmes); Protection and management of the transboundary Kura River Basin (project proposal for the Sixth UNDP Programming Cycle); Pilot Inventory Programme for Stockpiled Obsolete Pesticides in Ukraine; and Spent Oil Collection and Recycling and Treatment of Oil-Containing Wastes in NIS.

the decision makers and the public. The EIA Convention was adopted at Espoo (Finland) on 25 February 1991 and entered into force on 10 September 1997.

This Convention is the first multilateral treaty to specify the procedural rights and duties of Parties with regard to transboundary impacts of proposed activities and to provide procedures, in a transboundary context, for the consideration of environmental impacts in decision-making procedures. The EIA Convention stipulates the obligations of Parties to assess the environmental impacts at an early stage of planning. The Convention prescribes measures and procedures to prevent, control or reduce any significant adverse effect on the environment, particularly any transboundary effect, likely caused by a proposed activity or any major change to an existing activity. Appendix I to this Convention covers seventeen groups of activities to which the Convention applies, including, inter alia, activities such as nuclear and thermal power stations, road and railway construction, chemical installations, waste disposal facilities and water management activities such as the construction of dams and reservoirs, groundwater abstraction and the construction of ports and water ways.

Definitions

Article 1 contains the definitions. The definition of "proposed activity" comprises not only new or planned activities but also "any major change to an activity". The definition of "transboundary impact" explicitly excludes impacts of a global nature and therefore concentrates on impacts of a local or subregional character in the ECE region.

Field of Application

Normally, Parties must apply the provisions of the EIA Convention when two requirements are met. According to Article 2, a Party has to take the necessary legal, administrative or other measures to implement the provisions of this Convention, such as the establishment of an EIA procedure that permits public participation and the preparation of the EIA documentation according to Appendix II, for proposed activities (i) listed in Appendix I to the EIA Convention and (ii) likely to cause a significant adverse transboundary impact.

Proposed Activities Listed in Appendix I

Many activities listed in Appendix I to the EIA Convention are fairly well defined. However, the words "major", "integrated" and "large" are also used to set a threshold for several activities in Appendix I to this Convention. Difficulties in determining thresholds may arise due to the differences in environmental, social and economic conditions in a geographical area under consideration for the purposes of the EIA Convention. Despite many difficulties, specific thresholds would serve as useful initial guidance in the application of the EIA Convention. It must be decided whether an activity is referred to in the list of proposed activities in Appendix I to the EIA

Convention, before the significance of the likely transboundary impact can be considered.

Significant Impact

The consideration of the "significance" of an adverse transboundary impact will always be part of the decision to apply the EIA Convention. At the national level, various approaches to determining the significance of an impact has been developed in ECE countries. They are described in the ECE publication "Policies and Systems of Environmental Impact Assessment."⁶ In some countries, particular criteria have been used to draw up lists of activities subject to an EIA at the national level. These so-called positive lists are usually more extensive than the one included in Appendix I to the Convention. The advantage of establishing and applying lists of activities, considered a priori to have a significant adverse impact, is that both authorities and proponents know when an EIA has to be carried out.

According to Article 3 of the EIA Convention, the identification of likely transboundary impacts and the determination of significance for transmitting the notification to the affected country could be set in a general framework, which would give a structured starting point for further discussions between the competent authorities in the country of origin, the proponent and the affected country. The information to be submitted to the affected country in the notification in accordance with Article 3 of the Convention could include a description of the impacts and indicate which impacts are considered possibly significant. In all cases of likely transboundary impacts, a central consideration will be the likely area of impact relative to the border. The competent authority in the country of origin must decide on the likely area of impact and on the criteria by which it is delimited. Reference should be made to relevant environmental standards and threshold values.

EIA Procedure

If a planned activity is listed in Appendix I to the Convention and this activity is likely to cause a significant adverse transboundary impact, the Convention procedure as indicated in this Convention must be implemented. This procedure starts with a notification by the Party of origin to any Party that it considers an affected Party as early as possible and no later than when informing its own public about the proposed activity.

The wording of Article 3, paragraph 1, of the Convention should, in principle, pose no problem for countries that have introduced a national scoping procedure as part of the EIA procedure, which includes the mandatory participation of the public. These

⁶ ECONOMIC COMMISSION FOR EUROPE, ENVIRONMENTAL SERIES NO. 4: POLICIES AND SYSTEMS OF ENVIRONMENTAL IMPACT ASSESSMENT (1991).

countries must notify affected countries no later than when informing their own public in the scoping procedure.

Article 3 furthermore requires the affected Party to respond to the Party of origin and to indicate whether it intends to participate in the EIA procedure. The purpose of this provision is to help the Party of origin to prepare the EIA documentation. The information shall be furnished "promptly". The Convention sets a standard for the minimum requirements for the content of the documentation to be submitted to the competent authority. When the EIA documentation has been prepared it is transmitted to the competent authority of the Party of origin, which has to transmit the documentation to the affected Party. The documentation is to be used for further consultations between the concerned Parties.

The Convention includes provisions that aim at establishing mechanisms to prevent a dispute about the application or interpretation of the agreement.

Public Participation

The EIA Convention contains three references to public participation. Article 2, paragraph 6, includes a general reference to this issue and Articles 3 and 4 mention more specific parts in the EIA procedure where the public has the right to participate. Article 3, paragraph 8, of the Convention requires the concerned Parties to ensure that the public of the affected Party in the areas likely to be affected is informed of, and provided with possibilities for making comments on, or objections to the proposed activity and for the transmittal of these comments or objections to the competent authority of the Party of origin. Similarly, under Article 4, paragraph 2, the concerned Parties shall arrange for distribution of the EIA documentation to the authorities and the public of the affected Party in the areas likely to be affected and for the submission of comments to the competent authority of the Party of origin.

Effects on International Law

The elaboration and signing of the Convention on Environmental Impact Assessment in a Transboundary Context has influenced and will continue to influence other international instruments such as Conventions and Ministerial Declarations. The already mentioned 1992 Convention on the Transboundary Effects of Industrial Accidents includes procedures compatible with those set out in the Convention. Article 7 of the Convention on the Marine Environment of the Baltic Sea Area (Helsinki, 1992) also makes reference to EIA in a transboundary context. The EIA Convention is also recognized in, for example, the Final Declaration of the Ministerial Meeting of the Oslo and Paris Commissions (September 1992), the Ministerial Declaration on Cooperation in the Barents Euro-Arctic Region (January 1993) and the Nuuk Declaration on Environment and Development in the Arctic (September 1993).

Interim Implementation

Meetings of the Signatories to the EIA Convention, open to all ECE member countries, were held annually. These meetings reviewed the actions taken by Signatories to implement the Convention pending its entry into force and considered legal, administrative and methodological aspects of its practical application. The meeting also discussed ways and means of strengthening the capability of future Parties, particularly countries with economies in transition, to comply with the obligations under this Convention, and established a work programme. ECE member countries are making the necessary arrangements to implement the provisions of the EIA Convention at the subregional level, in particular through bilateral and multilateral agreements or other arrangements of relevance to this Convention. A number of existing bilateral and multilateral agreements are being used to implement the Convention.

For example, in Hungary, bilateral agreements on transboundary waters with neighbouring countries relate to activities that might have an adverse impact on the quality and quantity of these waters, and include provisions for the submission of information on such impact. The bilateral agreement between Hungary and Ukraine on environmental cooperation provides for cooperation in the field of EIA in relation to proposed activities that may have an adverse environmental transboundary impact. In Finland, in many cases the relevant cooperation regarding EIA in a transboundary context is done through joint bodies. The mandate of these joint bodies and the means of cooperation are defined in agreements. Finland is a party to such joint bodies or otherwise regularly cooperates with other countries according to several agreements. In some agreements there are provisions on the right of parties to obtain information on a planned project and participate in the relevant planning and permit procedures.

Also new agreements are being elaborated for this purpose and other cooperative arrangements are being made. For instance, in the Netherlands, initiatives were taken to start bilateral discussions, with Belgium and Germany. Examples of specific experiences with transboundary EIA include the application of the Convention between Croatia and Hungary, Hungary and Slovakia and The Netherlands and Germany. In Finland, the first notification according to the Convention was sent to Sweden in late autumn 1994. The notification included information on plans to build the Vuotos artificial lake (i.e. large dam and reservoir) in Lapland. It is likely that the building of the reservoir will have an adverse impact on the water quality in the Bothnian Bay, which is also on Swedish territory. According to some other agreements and arrangements Finland and neighbouring countries have cooperated concerning permission procedures for the planned projects.

The Convention is understood to be an innovative international legal instrument for achieving sustainable development and for preventing, reducing and controlling transboundary environmental impacts. The importance of this legal instrument as an

efficient tool to promote active, direct and action-oriented international cooperation at the regional level is growing in view of the increasing membership of the ECE.

THE UN/ECE CONVENTIONS AS A TOOL TO PROMOTE CONFLICT PREVENTION AND SETTLEMENT OF DISPUTES IN TRANSBOUNDARY ENVIRONMENTAL ISSUES

Although not designed solely for that specific purpose, the UN/ECE conventions provide a mechanism to promote conflict prevention and settlement of disputes in transboundary environmental issues.

Conflict Prevention

UN/ECE Conventions are preventive by design as is stipulated in the formulation of certain general provisions. For example, Article 2, paragraph 1, of the Convention on the Environmental Impact Assessment in the Transboundary Context states that “[t]he Parties shall, either individually or jointly take all the appropriate measures to prevent, reduce and control significant adverse transboundary environmental impact from proposed activities.”

Article 2, paragraph 1, of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes states that “The Parties shall take all appropriate measures to prevent, control and reduce any transboundary impact.”

A number of corresponding instruments of conflict prevention have been elaborated and included in the Conventions, such as

- obligation of Parties to cooperate.
- consultation mechanisms.
- transboundary notification.
- exchange of information and technology.
- information and participation of the public.
- bilateral and multilateral cooperation.
- mutual assistance.
- joint assessment and monitoring.
- bilateral and multilateral agreements.

Settlement of Disputes in the Framework of UN/ECE Conventions

The UN/ECE Conventions contain identical provisions for the settlement of disputes. For example, Article 22 of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes stipulates that “if a dispute arises between two or more Parties about the interpretation or application of this Convention, they shall seek a solution by negotiation or by any other means of dispute settlement acceptable to the parties to the dispute.” Paragraph 2 continues that “a Party may declare ... that, for a dispute not resolved ... it accepts one or both of the following means of dispute settlement as compulsory in relation to any Party accepting the same obligation: (a) Submission of the dispute to the International Court of Justice; and (b) Arbitration in accordance with the procedure set out in annex IV.”

The main elements of that arbitration procedure are as follows:

- In the event of a dispute, a party or parties shall notify the secretariat.
- The arbitral tribunal shall consist of three members; both the claimant party and the other party to the dispute shall appoint an arbitrator, and the two arbitrators shall designate by common agreement the third arbitrator, who shall be the president of the arbitral tribunal.
- The arbitral tribunal shall render its decisions in accordance with international law and the provisions of the Convention.
- The decisions, both on procedure and on substance, shall be taken by majority vote.
- Unless determined otherwise, the expenses of the tribunal will be borne by the parties to the dispute in equal shares.
- The arbitral tribunal shall render its award within 5 months of the date on which it is established.
- The award of the tribunal shall be accompanied by a statement of reasons; it shall be final and binding on all parties.

CONCLUSION: MANAGING TRANSBOUNDARY WATERS IN EUROPE - LESSONS LEARNT AND FUTURE PROSPECTS

Some 150 international - bilateral or multilateral - agreements exist in Europe and North America on the protection and use of transboundary waters.⁷ However not all of Europe's transboundary waters are covered, and some of the agreements are outdated. Lessons can be learnt from the drawing-up and implementation of these agreements and arrangements.⁸

- There should be a common will to resolve existing problems:

If there is no sufficient political will on both sides of the border to resolve existing problems, or if water problems are overshadowed by other political problems, it is cumbersome to draw up and implement water-related agreements.

- There should be confidence that all the Parties are willing and able to undertake action as stipulated:

The principles of good-neighbourliness, reciprocity, non-discrimination and good faith form the basis for cooperation. However good-will is not enough: countries need to develop the necessary skills in financing, management and negotiation, and this needs time.

- Acting in partnership:

Wherever applicable, command-and-control approaches need to be replaced by acting in partnership by all stakeholders. This requires a new culture in environmental transboundary relationship calling for opening up of cooperative processes to all main stakeholders as partners: governments, local authorities, business and industry, banking institutions, non-governmental organisations and the public at large.

- Challenging medium- and long-term objectives:

Remarkably, ECE was the first forum where Governments agreed on the ecosystem approach in water management to be applied to the whole catchment area.

⁷ SENIOR ADVISERS TO ECE GOVERNMENTS ON ENVIRONMENTAL AND WATER PROBLEMS, ECONOMIC COMMISSION FOR EUROPE, BILATERAL AND MULTILATERAL AGREEMENTS AND OTHER ARRANGEMENTS IN EUROPE AND NORTH AMERICA ON THE PROTECTION AND USE OF TRANSBOUNDARY WATERS (1993).

⁸ Rainer E. Enderlein, *Managing Transboundary Waters in Europe: Lessons Learned and Future Prospects*, in PROCEEDINGS OF THE INTERNATIONAL CONFERENCE "MANAGEMENT OF TRANSBOUNDARY WATERS IN EUROPE" (forthcoming). See also Branko Bosnjakovic, *Environmental Security: A Regional Perspective for Countries in Transition*, in PROCEEDINGS OF THE INTERNATIONAL WORKSHOP "ENVIRONMENTAL SECURITY AND SUSTAINABLE DEVELOPMENT" (Marcel T.J. Kok ed., 1996).

To implement that principle with success, medium-term and long-term objectives need to be jointly agreed upon.

- Flexibility in dealing with newly emerging problems:

Countries are now confronted with certain problems which were neglected or underestimated in the recent decades, such as the environmental effects of floods, outbreaks of water-borne diseases and industrial accidents.

- Parties should delegate authority to joint bodies:

As has been observed in a review⁹ of major regional policy implications of the outcome of the 1992 UN Conference on Environment and Development, there are complex and still unresolved issues associated with the protection and management of transboundary waters. These issues relate to the development and application of policies and practices ensuring the equitable and rational use of water and sustainable water management, the development of environmentally sound water-construction works and water-regulation techniques, and the physical and financial assessment of damage resulting from transboundary impact. Further progress is also required in developing a concept of responsibility and liability for transboundary water pollution which is acceptable region-wide.

⁹ ECONOMIC COMMISSION FOR EUROPE, THE RIO FOLLOW-UP AT REGIONAL LEVEL, A REVIEW OF MAJOR REGIONAL POLICY IMPLICATIONS OF THE OUTCOME OF THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (1993).

ANNEX

ECE Recommendations and Guidelines which further Substantiate the Convention

1993 Guidelines on the ecosystem approach in water management.

1993 Recommendations to ECE Governments on water-quality criteria and objectives.

1994 Recommendations to ECE Governments on the prevention of water pollution from hazardous substances.

1995 Guidelines for ECE Governments on the prevention and control of water pollution from fertilizers and pesticides in agriculture.

1996 Guidelines on licensing waste-water discharges from point sources into transboundary waters.

1996 Recommendations to ECE Governments on specific measures to prevent, control and reduce Groundwater pollution from chemical storage facilities and waste-disposal sites.

1996 Guidelines on water-quality monitoring and assessment of transboundary rivers.