

What is it why it matters?

The 1992 UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes

A booklet for all who care about and work for clean water



United Nations Economic Commission for Europe



UNITED NATIONS



Italian Ministry
for the Environment and
Territory



Swiss Agency for the
Environment, Forests and
Landscape SAEFL



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The 1992 UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes

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WATER PROBLEMS IN THE UNECE REGION: COMPELLING COOPERATION

Water is an essential element of our daily lives. In recent years we have had to face an increasing scarcity of water, water pollution and many water-related disasters. Throughout the world, contaminated water is still responsible for some 7% of all deaths and diseases. In the region of the United Nations Economic Commission for Europe (UNECE) alone, i.e. Europe, Central Asia, North America and Israel (see map), an estimated 120 million people do not have access to safe drinking water and adequate sanitation. As a result, they are more vulnerable to serious water-related diseases.



The UNECE region

The United Nations Economic Commission for Europe (UNECE), one of the five United Nations regional commissions, was set up in 1947. It provides a regional forum for governments from Europe, North America, Central Asia and Israel to study the economic, environmental and technological problems of the region and recommend courses of action.

UNECE is also active in the formulation of international legal instruments and the setting of international norms and standards. Its main areas of activity are: economic analysis, environment and human settlements, transport, development of trade, industry and enterprise, forests and timber, sustainable energy, and statistics.

DIFFERENT USES, DIFFERENT PROBLEMS

UNECE has to tackle very specific water quantity and quality problems, most of which are due to the different uses made of the water available in the region (see figure).

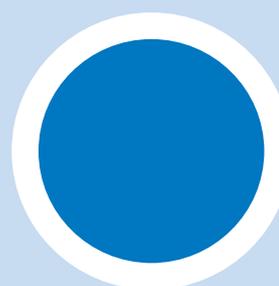
At present 31% of Europe's population lives in countries already suffering from what we call high water stress, particularly during droughts and periods of low river flow. The trouble is that demand for clean water will probably increase throughout Europe and Central Asia. Areas such as the Mediterranean and Central Asian countries, which are already facing over-exploitation of their water resources, may well find this growing demand generating conflicts between the different water users and between countries, too.

At the same time some UNECE countries are suffering from more floods than ever before, and these have a severe economic and social impact. Floods have become the most common and costly "water quantity problem" not only in parts of Western and Central Europe and North America but also in the Mediterranean region.

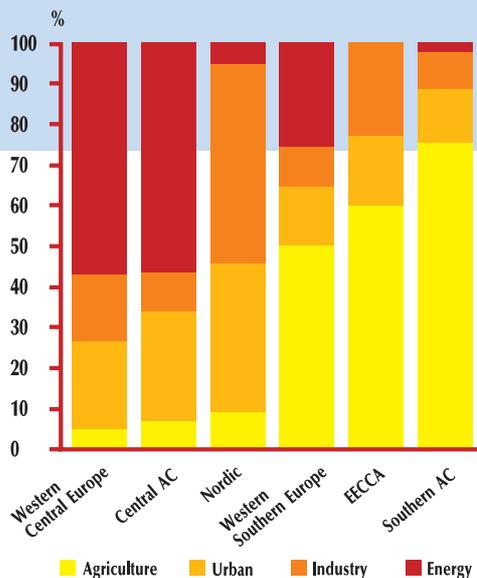
Many countries depend on groundwater to meet the demand for drinking water, and are quickly depleting precious aquifers, especially around cities. Today, the water supply of some 140 million European city dwellers comes from overexploited groundwater resources. The needs of irrigation agriculture, too, make excessive demands on the freshwater available. These processes are inflicting irreversible damage on our environment, as they are lowering groundwater tables and threatening natural wetlands as well as causing salt-water intrusion into coastal aquifers.

Despite this critical situation, water is still being wasted through inappropriate irrigation practices and huge water losses in the distribution systems. Most countries lose an astounding 30% of clean drinking water in their supply networks, a figure that in some cases can soar to 60% or more.

Different uses, different problems



Sectoral abstraction of water per region



Source: Europe's environment: the third assessment, EEA

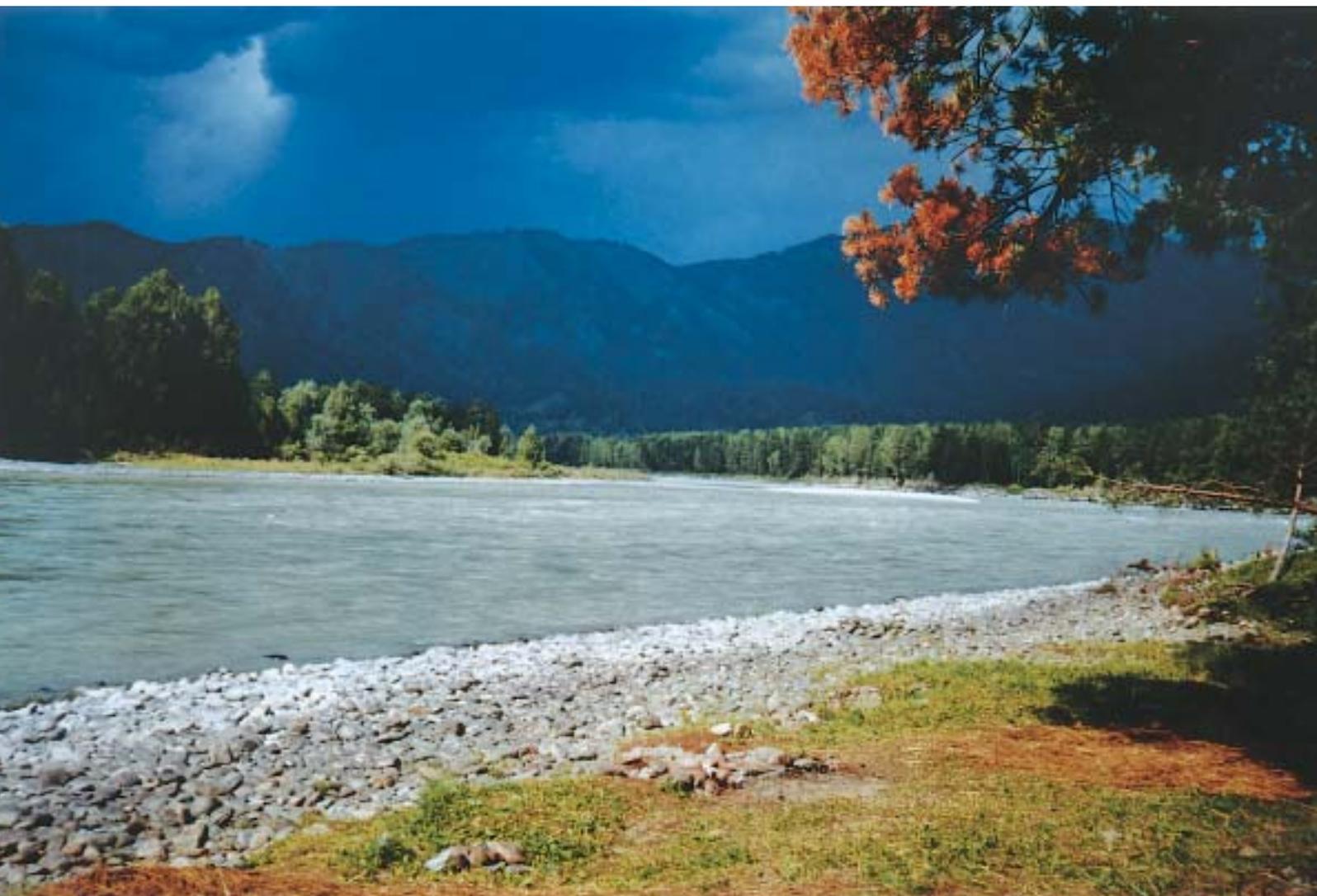
- Western Central Europe:**
Denmark, Germany, Belgium, United Kingdom, Ireland, Austria, Luxembourg, Switzerland, the Netherlands, Liechtenstein;
- Central accession countries:**
Poland, Czech Republic, Estonia, Lithuania, Latvia, Romania, Slovakia, Hungary, Slovenia, Bulgaria;
- Nordic:**
Finland, Sweden, Norway, Iceland;
- Western Southern Europe:**
Spain, France, Greece, Italy, Andorra, Portugal, San Marino, Monaco;
- EECA:**
Kazakhstan, Turkmenistan, Tajikistan, Kyrgyzstan, Ukraine, Russian Federation, Belarus, Uzbekistan, Republic of Moldova, Armenia, Azerbaijan, Georgia;
- Southern accession countries:**
Cyprus, Malta, Turkey.

SHARING WATER

Attempts at solving these complex problems in Europe are further complicated by the essentially transboundary nature of water resources. More than 150 major rivers and 50 large lakes in the UNECE region run along or straddle the border between two or more countries. Over 100 transboundary groundwater aquifers have been identified in Western and Central Europe, and more are expected to be identified in the rest of the region. Twenty European countries depend for more than 10% of their water resources on neighbouring countries and five countries draw 75% of their resources from upstream countries.

Fortunately, UNECE member States are increasingly aware of the need for cooperation if they are to ensure that transboundary waters are used reasonably and equitably. They know that they share the same water resources and rely on each other to apply effective solutions.

This positive approach to the problem has been triggered, in no small measure, by the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes, which 34 UNECE countries and the European Community have already ratified.



THE 1992 CONVENTION ON THE PROTECTION AND USE OF TRANSBOUNDARY WATERCOURSES AND INTERNATIONAL LAKES (UNECE WATER CONVENTION)

The UNECE Water Convention, which was adopted in Helsinki in 1992 shortly before the Rio Conference and which entered into force in 1996, provides a legal framework for regional cooperation on shared water resources (rivers, lakes and groundwaters).

Several bilateral or multilateral agreements between European countries are based on the principles and provisions of this Convention. A first example was the Danube River Protection Convention in 1994, which develops the Convention's provisions in a more specific subregional context. Other examples are the agreements on the rivers Bug, Meuse, Rhine and Scheldt, on Lake Peipsi, as well as on Kazakh-Russian and Russian-Ukrainian transboundary waters. The most recent examples include the 1999 Rhine Convention and the European Union's Water Framework Directive.

UNECE has also contributed to the development and materialization of the Convention's general principles and requirements leading to the adoption of the Protocol on Water and Health, in 1999, and the Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters, in 2003.

The strength of the Convention also lies in the fact that it is part of a larger environmental legal framework set up in the UNECE region to address the most important issues of transboundary cooperation. Four other environmental conventions and their protocols address: air pollution; industrial accidents; environmental impact assessment; and access to information, public participation in decision-making and access to justice.

In 2003, the success of the Convention led its Parties to amend it, opening accession to countries outside the UNECE region, thus enabling the rest of the world to use the Convention's legal framework and benefit from the experience in transboundary water cooperation gained under it. This amendment to the Convention is particularly important for the countries that border the UNECE region.





INTEGRATED WATER RESOURCES MANAGEMENT

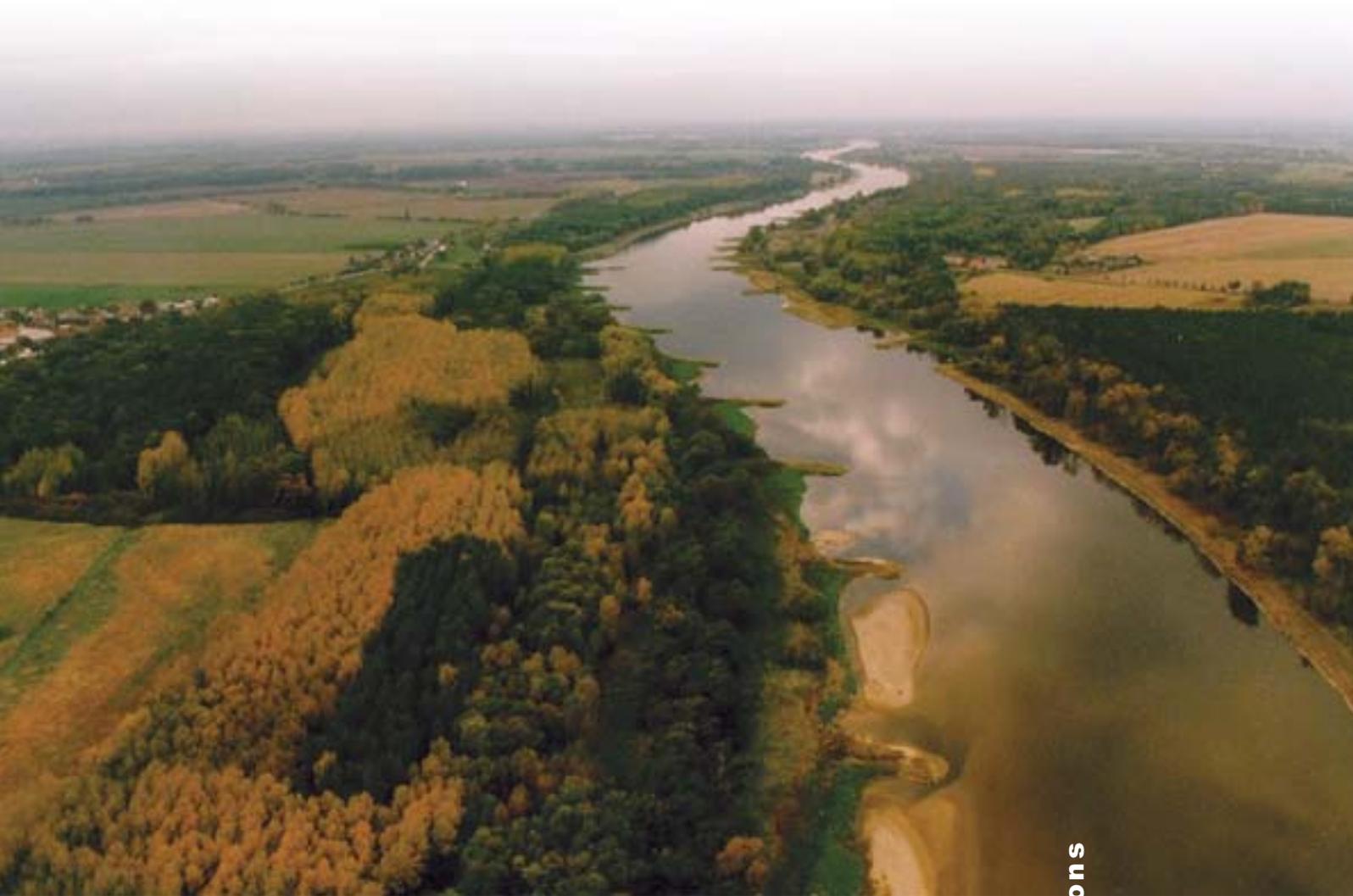
The Convention's primary purpose is to strengthen local, national and regional measures to protect and ensure the ecologically sustainable use of transboundary surface waters and groundwaters.

The management of transboundary waters, however, cannot be divorced from the management of national water resources. Consequently, the Convention requires its Parties to apply its principles when developing and implementing local and national policies, action plans, programmes and practices as well as transboundary ones.

It is widely recognized that the traditional fragmented sectoral approach to water management is inappropriate. So the Convention promotes a holistic approach taking into account the complex interrelationship between the hydrological cycle, land, flora and fauna, based on the understanding that water resources are an integral part of the ecosystem, a natural resource and a social and economic good.

Integrated water resources management is a necessary departure from the earlier focus on localized pollution and the isolated management of separate components of the ecosystem, and from planning provisions which often ignore the profound influences of land use on water quality. This new approach forms a framework for decision-making that compels managers and planners to cooperate in devising integrated strategies for action.

To this end, the Convention envisages two major categories of obligations. The first, more general, obligations apply to all Parties. The second are more specific and must be implemented by Parties sharing transboundary waters.



GENERAL OBLIGATIONS

Parties are obliged to prevent, control and reduce transboundary impacts, i.e. adverse effects on the environment. These can be effects on human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments and other physical structures, and the interaction among these factors. They also include harm to the cultural heritage or socio-economic conditions resulting from alterations to those factors.

The Parties must ensure that transboundary waters are managed in a way that is ecologically sound and rational, that they are preserved and protected, and that their use is reasonable and equitable. They must also preserve and, where necessary, restore ecosystems. The Convention also stresses that measures to prevent, control and reduce water pollution should preferably be taken at source.

The precautionary principle and the polluter-pays principle should guide the application of such measures, and all water management should meet the needs of the present generation without compromising the ability of future generations to meet their own needs.

To prevent, control and reduce transboundary impacts, the Parties must license and monitor waste-water discharges. Emission limits for discharges from point sources should be based on the best available technology, and biological treatment at least must be applied to municipal waste water. The Parties must also develop and apply best environmental practices to reduce inputs of nutrients and hazardous substances from agriculture and other diffuse sources.

The Parties are also required to effect environmental impact assessment and sustainable water resources management, taking into account the ecosystem approach. The Convention expects its Parties to draw up contingency plans, set water-quality objectives and minimize the risk of accidental water pollution.



Obligations

OBLIGATIONS ON PARTIES SHARING TRANSBOUNDARY WATERS

Water management needs to be tailored to the specific conditions of the many transboundary catchment areas in the region. Therefore, the Convention gives a framework for action specific to these individual transboundary basins and requests its Parties to enter into river basin agreements appropriate to its provisions.

The Convention also lays the responsibility for setting up joint bodies on the Parties which are riparian to the same transboundary waters. Such bodies can be bilateral or multilateral river or lake commissions. This is the case, for example, for the rivers Elbe, Danube, Meuse, Moselle, Oder, Saar and Scheldt and for the lakes Geneva, Ohrid, Peipsi and the Great Lakes in North America. There can also be other institutional arrangements for cooperation, such as meetings of plenipotentiaries, as is the case with some transboundary water agreements in Eastern Europe.

It is up to these joint bodies to identify pollution sources, to monitor and assess transboundary waters and to draw up concerted action plans and put them into practice. Joint bodies also help to develop integrated water resources management and water efficiency plans in a transboundary context as stipulated in the Johannesburg Plan of Implementation adopted at the World Summit on Sustainable Development in September 2003.

A particular challenge for joint bodies is to provide a forum for sharing information on best available technology and on existing and planned uses of water and related installations. Joint bodies are responsible, in particular, for establishing warning and alarm systems and for mutual assistance. They also participate in environmental impact assessments following, for example, the provisions of the UNECE Convention on Environmental Impact Assessment in a Transboundary Context.



PROTOCOL ON WATER AND HEALTH

Nowadays, most Europeans take clean drinking water for granted. Yet, in the European part of the UNECE region alone, an estimated 120 million people, i.e. one person in seven, do not have access to safe drinking water and adequate sanitation, making them vulnerable to water-related diseases, such as cholera, bacillary dysentery, coli infections, viral hepatitis A and typhoid. Cleaner water and better sanitation could prevent over 30 million cases of water-related disease each year in the region. The 1999 Protocol on Water and Health was negotiated with this in mind.



Protocol on Water and Health - Main provisions

MAIN PROVISIONS

The main aim of the Protocol is to protect human health and well being by better water management, including the protection of water ecosystems, and by preventing, controlling and reducing water-related diseases. The Protocol is the first international agreement of its kind adopted specifically to attain an adequate supply of safe drinking water and adequate sanitation for everyone, and effectively protect water used as a source of drinking water.

To meet these goals, its Parties are required to establish national and local targets for the quality of drinking water and the quality of discharges, as well as for the performance of water supply and waste-water treatment. They are also required to reduce outbreaks and the incidence of water-related diseases.

This Protocol now introduces a social component into cooperation on water management. Water resources management should link social and economic development to the protection of natural ecosystems. Moreover, improving the water supply and sanitation is fundamental in breaking the vicious cycle of poverty.

It is worth pointing out that the UNECE secretariat and the Regional Office for Europe of the World Health Organization provide the secretariat functions for the Protocol on Water and Health jointly.





PROTOCOL ON CIVIL LIABILITY

The Baia Mare accident, in January 2000, illustrated the catastrophic cross-border pollution potential of industrial accidents. A breach in a tailings dam led a mining company to spill some 100,000 m³ of cyanide-rich tailings waste. This resulted in an estimated release of 50-100 tons of cyanide, as well as heavy metals, particularly copper, into the Lapus, the Somes, the Tisza and, finally, into the Danube before the pollution reached the Black Sea, affecting Romania, Hungary and Serbia and Montenegro.

Such accidents were not adequately dealt with by existing civil liability regimes, which were either not specific enough to apply or simply not in force. The Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters was adopted in 2003 to fill this gap and to solve the problem of uncompensated damage in neighbouring countries.

MAIN PROVISIONS

The Protocol gives individuals affected by the transboundary impact of industrial accidents on international watercourses (e.g. fishermen or downstream waterworks) a legal claim for adequate and prompt compensation.

Companies will be liable for accidents at industrial installations, including tailing dams, as well as during transport via pipelines. Physical damage, damage to property, loss of income, the cost of clean-up and response measures are covered by the Protocol.

The Protocol sets financial limits for liability, depending on the risk of the activity, i.e. the quantities of the hazardous substances that are or may be present and their toxicity or the risk they pose to the environment. To cover this liability, companies have to establish financial securities, such as insurance or other guarantees.

The Protocol ensures the non-discrimination of victims: victims of the transboundary effects cannot be treated less favourably than victims from the country where the accident occurred.

BENEFITS

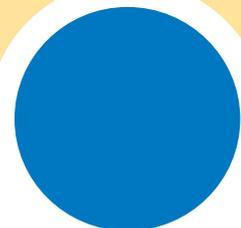
By encouraging companies to take measures to prevent damage for which they will henceforth be liable, the Protocol helps to prevent accidents in the first place and to limit their adverse effects on people and the environment.

The Protocol will be easy to apply, since it does not require any adaptation of domestic law. It will be directly applicable by the courts and the environmental authorities.

The Protocol is the result of synergies between UNECE environmental agreements, since it was developed within the joint framework of the UNECE Water Convention and the UNECE Convention on the Transboundary Effects of Industrial Accidents. It is open for ratification by States Parties to one or both Conventions, but any other Member State of the United Nations may also accede to it upon approval by the Meeting of the Parties.



Benefits



What does the Convention do for you?



LAW FOR GOOD WATER GOVERNANCE

The role of law is fundamental for good water governance and the Convention provides a comprehensive and continuously self-maturing regime for transboundary water management. In the relatively short period since it came into force, great strides have been taken towards the Convention's principal objectives.

Several basin-specific agreements have been concluded under the Convention's auspices. The Convention's influence has been particularly useful since the break-up of the former Soviet Union in helping countries in Eastern Europe, the Caucasus and Central Asia to draw up agreements regulating the waters which the creation of new international boundaries have made transboundary.

Another major contribution to the creation of a water management regime has been the adoption of non-binding instruments, such as guidelines and recommendations. These make it easier to apply the Convention by giving its Parties clear and precise parameters for action. They respond to the varying needs of Parties for guidance on several issues, such as the ecosystem approach in water management, the prevention and control of water pollution from fertilizers and pesticides in agriculture, the prevention of water pollution from hazardous substances, the monitoring and assessment of transboundary rivers, groundwaters and lakes, sustainable flood prevention and public participation.

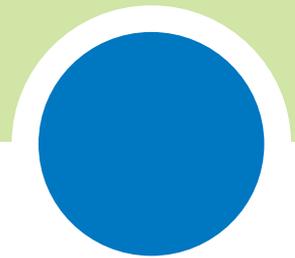
ADVISORY SERVICE

The Convention provides not only the legal framework for the development of bilateral and multilateral agreements, but also the organizational framework for facilitating negotiations. The Convention, through its network of experts, provides an advisory service to Parties and non-Parties in the drawing-up of new or the adaptation of existing agreements on transboundary waters, and in the drawing-up, revision and/or adaptation of national laws/regulations on water management. It also provides guidance to joint bodies in the region in improving their integrated river basin management and water protection.

This advisory service has facilitated, for instance, the agreement between the Russian Federation and Estonia on Lake Peipsi (1997) and the 2002 agreement on the river Sava between Bosnia and Herzegovina, Croatia, Slovenia, and Serbia and Montenegro. Technical and legal assistance has been provided to Belarus, Latvia, Lithuania and the Russian Federation for cooperation on the Daugava and the Nemunas, as well as for the setting-up of the transboundary water commission on the rivers Chu and Talas shared by Kazakhstan and Kyrgyzstan.



Advisory service



Implementation

IMPLEMENTATION

While policy decisions and recommendations have long been the primary focus of the Convention's activities, in recent years the spotlight has shifted towards practical application.

An example is the programme to monitor and assess transboundary water, with a series of pilot projects on (i) transboundary rivers: the Bug (Belarus, Poland, Ukraine), the Ipoly (Hungary, Slovakia), the Kura (Azerbaijan, Georgia), the Latoritca/Uzh (Slovakia, Ukraine), the Maros (Hungary, Romania), the Morava (Czech Republic, Slovakia), the Serverski Donets (Russian Federation, Ukraine) and the Tobol (Kazakhstan, Russian Federation); (ii) lakes: Lake Peipsi (Estonia, Russian Federation) and Lake Pyhäjärvi (Finland, Russian Federation); and (iii) groundwaters: Aggtelek /Slovak Karst (Hungary, Slovakia) and part of the Bug groundwaters (Belarus, Poland). The aim is to implement the guidelines on monitoring and assessment and to test and assess their effectiveness so that they can be revised and updated if need be. It should be underlined that the programme improves not only transboundary monitoring and assessment systems but also cooperation on water management.



TRAINING AND CAPACITY-BUILDING

Another way to strengthen the Convention's application is through training and capacity-building. In the past 10 years, the Convention has organized more than 50 workshops and seminars on various aspects of water management, such as groundwater management, water and industrial accidents, sustainable water management and health, and public participation.

Long-term training activities are also foreseen. For instance, the "Capacity for Water Cooperation" project, to be carried out in 2004-2006, is aimed at strengthening the capacity of transboundary water management in Eastern Europe, the Caucasus and Central Asia, and at improving the coordination, cooperation and sharing of experience among countries, stakeholders and projects in the UNECE region.

ASSESSING THE RESULTS

Activities under the Convention aim at supporting its Parties' compliance with its provisions and with the recommendations and guidelines. So the effectiveness of the policy decisions and recommendations, as well as implementation projects, is followed-up and evaluated, and, if necessary, the programmes are adjusted.

The desire to monitor the effect of the Convention on improving transboundary water resources management in the UNECE region is illustrated by the project to assess European transboundary water bodies (rivers, groundwaters and lakes). It was initiated in 2004 and will contribute to the fourth assessment report of the state of the environment for the Sixth Ministerial Conference "Environment for Europe".

INTERFACE WITH OTHER UNECE ENVIRONMENTAL AGREEMENTS

Since its adoption, the Convention has established close cooperation with the other UNECE environmental conventions. Collaboration with the Industrial Accidents Convention has been particularly successful and has led to the adoption of the Protocol on Civil Liability and to a range of joint activities, including the creation of a joint expert group on water and industrial accidents, and the development of safety guidelines and recommendations to prevent accidental water pollution.

The synergies between the UNECE Water Convention and other UNECE instruments provide an excellent tool to create a cohesive legal framework for environmental protection throughout the UNECE region in general and for transboundary waters protection in particular.



LINKS WITH WORLDWIDE AND REGIONAL WATER-RELATED PROGRAMMES

The Convention also enjoys close interaction with worldwide programmes, such as the follow-up to the World Summit on Sustainable Development, the work of the United Nations Commission on Sustainable Development and the World Water Development Report.

Regionally, the Convention supports the UNECE process "Environment for Europe". In particular, it plays a significant role in the European Union's Water Initiative for Eastern Europe, the Caucasus and Central Asia (EECCA) and in the Environment Strategy for EECCA countries. The Convention helps countries to implement the European Union's Water Framework Directive: it serves as a platform for disseminating the work on the Directive especially in a transboundary context and in countries on the borders of the enlarged EU area.



Bodies under the Convention

MEETING OF THE PARTIES

The main body responsible for the Convention's implementation is the Meeting of the Parties, which takes all decisions on work under the Convention.

It is responsible for defining and reviewing the policies for, and the approaches to, the Parties' transboundary water management. It also shares information on experience gained in concluding and implementing bilateral and multilateral agreements on transboundary waters, and takes any action required to achieve the purposes of the Convention.

The Parties meet every three years to set their programme of work for the next three or more years.

The Meeting of the Parties also decides on the organizational structure and the roles of the bodies it sets up to implement this work programme (see below).

Meeting of the Parties



WORKING GROUP ON INTEGRATED WATER RESOURCES MANAGEMENT

Its main task is to develop and implement new policies, strategies and methodologies to protect trans-boundary waters.

It has already drawn up policy guidelines (e.g. Recommendations on Inter-State Water Distribution, Guidelines on Sustainable Flood Management, Guidance on Public Participation in Water Management, etc.). The Working Group is also responsible for sharing the experience on integrated water resources management under the Convention through workshops and conferences, training and capacity-building.

WORKING GROUP ON MONITORING AND ASSESSMENT

The Working Group is responsible for developing methodologies for monitoring and assessing trans-boundary waters. In particular, it has developed three sets of guidelines for monitoring and assessing trans-boundary rivers, transboundary groundwaters and international lakes. Furthermore, through pilot programmes, the Working Group helps countries to implement the Guidelines on monitoring and assessment of transboundary waters in a number of catchment areas to illustrate their application, and to make the necessary adjustments and improvements to them.

The Working Group is also responsible for preparing strategic guidelines and for the programme of trans-boundary watercourse assessment in the UNECE region.



WORKING GROUP ON WATER AND HEALTH

The Working Group is responsible for the interim implementation of the Protocol on Water and Health pending its entry into force. It therefore provides:

- Common policy guidance to countries on protecting water resources and preventing water-related disease;
- Technical guidance on practical approaches to recognized or emerging problems, such as surveillance of water-related diseases, assessment and management of health risks related to aquifer recharge;
- Practical interventions in countries, such as cooperation in Latvia and Turkmenistan to upgrade drinking water laboratories, in Tajikistan to monitor drinking water quality or in Azerbaijan to help introduce the World Health Organization's Drinking Water Quality Guidelines as a basis for national legislation.

IWAC

The International Water Assessment Centre (IWAC) is the Convention's collaborating centre on integrated water resources management. It was established in September 2000 at the Netherlands Institute for Inland Water Management and Waste Water Treatment (RIZA). IWAC is a joint platform for scientists and policy makers to respond to new challenges in water policy and implementation at national, transboundary and international levels. IWAC provides expertise on water-related monitoring, assessment, information technology and public participation. Its state-of-the-art reports and guidelines, training courses and workshops, and advice to joint bodies have added value to the Convention's work. IWAC builds on a network of leading European water institutions. More information on IWAC is available at <http://www.iwac-unece.org>.



LEGAL BOARD AND ADVISORY SERVICE

The Legal Board is intended to advise bodies under the Convention on controversial legal issues.

The advisory service is a network of national experts that provides legal, institutional, economic, financial and technical support for the practical implementation of the Convention at the request of Parties and non-Parties.



SECRETARIAT

The United Nations Economic Commission for Europe is the secretariat of the Convention and its protocols. Secretariat functions for the Protocol on Water and Health are carried out in collaboration with the Regional Office for Europe of the World Health Organization.

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Water Convention Secretariat

United Nations Economic Commission for Europe
Palais des Nations
CH-1211 Geneva 10, Switzerland
Tel.: +41 (0)22 917 2373, 2463 and 1499
Fax: +41 (0)22 917 0107

E-mail: water.convention@unece.org

Web site: <http://www.unece.org/env/water>

Environment and Human Settlements Division

Fax: +41 (0)22 917 0107

Web site: <http://www.unece.org/env/welcome.html>

UNECE Information Unit

Tel.: +41 (0)22 917 4444

Fax: +41 (0)22 917 0505

Web site: <http://www.unece.org>



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