



UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL

Distr. LIMITED E/ESCWA/ENR/1996/WG.1/WP.7 23 November 1996 ORIGINAL: ENGLISH

Economic and Social Commission for Western Asia

Expert Group Meeting on Water Legislation in the ESCWA Region Amman, 24-26 November 1996

GERMAN, EUROPEAN UNION AND WATER INTERNATIONAL LAW

by

Peter Kessler

Deputy Secretary Directorate of Water Management Ministry of Environment Protection Energy, Youth, Family and Health

State of Hesse/Germany

UN FRANCISCO AND SOCIAL CONTRIBUTION 3 - DEC 1003 LIBRARY & ESCUMENT SECTION

The views expressed in this paper are those of the author and do not necessarily reflect those of the Economic and Social ESCWA Documents converted to CDs.

CD #4

Directory Name:

CD4\ENR\96_1_WP7

Done by: ProgressSoft Corp., P.O.Box: 802 Amman 11941, Tordan

96-0453

• Introduction

Water is the basis for all human life as well as for fauna and flora. Its availability and quality are fundamental to the environment and to the economy.

We use water in very varied ways. We drink it, cook and wash with it. We use it to grow food. Worldwide, most freshwater is used for agricultural purposes. We enjoy water for recreation and for the beauty of lakes, streams and waterfalls. We produce electrical energy from it and sail ships on it.

In a report about the National Water Master Plan of Jordan which was drafted during 1976-1977 I found the following sentences:

"The elaboration and publication of the National Water Master Plan resulted in a continuous discussion of the high value and the scarcity of the water resources of the country. This discussion has led to increased public awarenesss of this sensitive problem....."

Worldwide, one can notice an increasing awareness of water problems. While the Brundlandt-Report "Our Common Future" 1987 deals with freshwater resources only marginally, the Rio AGENDA 21 addresses water - related issues in several chapters. The AGENDA summarizes the water problems as follows:

"There are few regions of the world that are still exempt from problems of loss of potential sources of freshwater supply, degraded water quality and pollution of surface and groundwater sources."

It is not only the arid and semi-arid countries which suffer from water scarcity nowadays. Even countries like England, Norway and Germany which

traditionally have abundant water resources experience temporal and regional water stresses.

We have to take good care of our water, indeed. Meetings like this can provide us with information and experiences from other countries which might be useful for our own water protection and management. In most cases, it is not recommendable to transfer one solution of a problem into another country with a completely different tradition and political framework. So, I would never recommend to a country to introduce a German type wastewater charge. But a country can very well adopt the underlying idea, which is the **polluter-pays-principle**, and then develop its own scheme of a wastewater charge.

In my presentation, I will be talking about four levels of water law. Starting at the bottom, this will be

- the German States
- the German Federation
- the European Union and
- international water law.

As I cannot go into the details of German States' legislation let me just stress that it is important to manage water at a **regional and local level**. Both the Dublin Conference of 1992 and the Rio AGENDA 21 emphasize that sustainability in water management can only be obtained in a decentralized and participatory approach. So, talking about water management in Germany I should mention a fifth level which is the **municipalities**. They provide water and wastewater services, either themselves or through associations.

2 German Water Law

Germany is a federal state. Responsibilities are divided up between the Federation and the 16 States. This is true for water legislation, too.

The Federation has only a framework competence while the detailed water legislation and water management is with the States. Water agencies are state or municipal agencies.

Under German law, water is a **common good**. It is not part of the private property of the land-owner. This is true both for surface water and groundwater. As a consequence, all water uses are subject to a permit, be it water abstractions or discharges into rivers, or indirect discharges into sewer systems. Only trifle cases are exempt.

Different from Germany, groundwater traditionally is considered part of the landowners rights in many European countries. But there is a definite trend in these countries to treat groundwater as common property (public domain) of those who use it.

Paragraph 1a of the Federal German Water Act rules:

"As an integral part of the ecosystem, waters shall be managed in such a manner that they serve the public interest and, in harmony with this, they also serve the interests of individuals, and that any avoidable impairment of their ecological functions is to be refrained from".

In terms of groundwater use the water law of the Federal State of Hesse forbids an overuse. Only the renewable part of the groundwater resources can be abstracted. As far as surface water is concerned, more and more Federal German

States are introducing regulations about minimum flows in the river beds in order to maintain the ecological balance. These regulations indicate that German water management - at least in terms of quantity - is close to sustainability, without using this word in the formulation of the law.

As groundwater provides about 2/3 of the German water supply, it is protected in all areas. Around wells, special protection areas are established. A lot of money is spent on groundwater rehabilitation.

The prevailing **command and control** strategy in German water law is increasingly supplemented by an economic approach. This is a consequence of the **resource-user-principle** which means that the user has to pay the full economic, ecological and social price of the utilization. Free or subsidized access to resources leads to wasting resources. So, a complex system of user fees, charges and levies has been developed to reach sustainable water use and water protection. The most prominent economic instruments in German water management are a cost-recovering water price, water abstraction charges in most German states and the wastewater charge which was mentioned earlier. All these economic instruments make use of the **commercial interest** of the user: **If you use less or pollute less, you pay less**. Due to this combined approach of command and control and the use of marked-based instruments, the biological quality of surface waters has improved considerably and the per capita water consumption has declined in recent years.

A big issue both in German and European water policy is the **privatization** of water supply. While the water supply in England and Wales has been privatized under the Thatcher administration and French municipalities tend to turn over the water supply to big water companies for a limited time, the Germans still prefer public water supply, which in our system is mostly run by the municipalities or

1

associations which were founded for that purpose. In Germany, private water supply is well possible but only a few cities have privatized their water companies. We think, that the municipal water companies can work as efficiently as private ones as long as they are given business-like conditions.

Within the German and EU environmental legislation, one principle is becoming more and more important: the **cross-media approach**. So far, in our countries both the environmental legislation and the environmental management have been media-oriented which means water-, soil- or air-oriented. Complex installations though require an integrated licencing and monitoring procedure. Otherwise, environmental problems will not be solved but only moved from one environmental medium to the other. Both the German and the European environmental legislation and management are moving in this direction. In this context, I will just mention the **EU-Directive for an Integrated Prevention and Pollution Control**, that has just taken effect.

8 European Union Water Law

Environmental legislation

The European Community started of as an **economic** community. But already in 1967 the first environmental directive was adopted which addressed classification, packaging and labelling of dangerous substances. In 1987 the Single European Act formally incorporates environmental policy into the Treaty of Rome. In 1991 the **Maastricht Treaty** on the **European Union** broadens the realm of environmental policy so that it "must be integrated into the definition and implementation of other Community policies". A number of key elements of EU-legislation need to be emphasized. Only the most relevant points will be reviewed, under each of the following basic issues:

- the continuing debate on pollution control resulting from Best Available Techniques (BAT) versus a system based on quality standards, and the consequences of its possible outcome;
- the new emphasis given to pollution from diffuse sources;
- the developing Commission approach towards prioritization of substances with the purpose of regulating them.

Best Available Technology (BAT) versus Environmental Quality Standards (EQS)

To protect surface waters, you can take the BAT approach or the EQS approach. In case of the BAT approach, sector-oriented limit values are set for the different discharge parameters. Choosing the EQS approach, ambient standards or at least quality objectives are set for the receiving river or river-basin. In both cases, the discharge permit has to be rejected or withdrawn if the standards are not met.

Supporters of BAT set emissions continue to maintain that cost elements can be built into the choice of an industry specific BAT, and that only this approach can ensure compliance with the **precautionary principle**. Others support that the precautionary principle can only be respected by a **quality standard approach**.

The Directive for the Integrated Prevention and Pollution Control which I mentioned earlier seems to offer a good compromise. Although the BAT system prevails, when environmental quality standards (EQS) data are available, the BAT based limits must be checked against and adapted to local conditions which is the quality standards of the receiving water. This is called the **combined** approach.

Pollution from Diffuse Sources

No formal definition of "diffuse sources" exits, but reference to them is made mainly in connection with three classes of activities which have the potential to pollute water streams and groundwater. The first, and possibly most important, is agriculture. Fertilizer usage contributes to eutrophication and oxygen depletion of the waters, while pesticides and herbicides add to the indirect emission of toxic substances. The second is municipally treated and untreated waste water. The third can be categorized as human activities, including traffic, boating, tourism, and sport.

There is an increasing realization that emissions from diffuse sources play an important, if not more important a role than do emissions from **point sources**. A combination of pure legislative instruments and appropriate codes of practice form the basis of a new approach. New legislation on chemicals is another instrument now being used more frequently to regulate and minimize pollution from chemicals with a diffuse origin. Together with legislative instruments, best

environmental practices, mostly implying **voluntary codes**, may become an important tool in regulating all three areas.

Prioritization of Substances

The Commission has taken a new general approach in prioritizing chemical substances based on **risk factors**. This is executed within the framework of existing and developing chemical legislation. For water pollution, the basic reference system has been a list of dangerous substances from a 1976 Directive. This list of potential candidates for "special" treatment (elimination of pollution) was derived by selecting chemicals from a list drawn up from production and usage data of EU substances. A prioritization process was to take place based on the assessment of key data on toxicity, persistence, and bioaccumulation, resulting in a number of daughter Directives. The Commission is also looking at another list of around 180 substances, which have been prioritized and confirmed by the members of the 1992 North Sea Conference.

From an overall standpoint, EU-water legislation is far from being consistent and coherent. This has to do with the different philosophies of the Member States. The Commission has been asked to draw up a **Water Framework Directive** which would be something like the Basic Water Law in the EU. The draft is to be submitted at the end of January 1997.

International Water Law

Traditionally, a state has the right to use the fluvial waters which lie within its territory without any limitation, regardless of the effects of this utilization on other states. This theory is known as the **Harmon Doctrine**, after the Attorney General of the United States who expounded this opinion in 1895, during the dispute with Mexico over the utilization of the waters of the Rio Grande. But, the Harmon Doctrine was soon being revised by international treaties. The first reported treaty which concerns the management of the Rhine river is the final Act of the Congress of Vienna, in 1815. It is important with regard to provisions concerning navigation. Many more treaties followed, concerning hydraulic works, the free flow of water and fishing rights.

Nowadays, the International Commission for the Protection of the Rhine against Pollution is a model for international river management. This commission was set up by an agreement signed in 1963 under the framework of the Hague Convention. After 30 years of improving the water quality of the Rhine river, the commission has become a model for other international river basins like the Elbe, the Oder and the Danube. At the same time, the responsibility of the International Commission for the Protection of the Rhine is being extended to include the protection of floodplains and flood management.

Other transboundary issues in Europe like the Portuguese-Spanish Rivers still remain to be settled.

Since the early 1970s, the EC and later the EU has participated in the activities of the Council of Europe aiming to establish the "European Convention on the Protection of International Water Recources against Pollution" - the Strasbourg

Convention whose objectives are both setting up minimum criteria for preserving water quality and the creation of an international committee with specific responsibility on the protection of international water courses and their estuaries. There is a more recent convention, the "Convention on the Protection and Use of Transboundary Watercourses and International Lakes".

In what concerns environment protection problems in transboundary zones, the EU recommends that Member States devise consulting procedures aiming at establishing agreements for environment protection in those zones. It is recognized that a water course must be able to meet multiple and often very different demands simultaneously, which makes it desirable to adopt a rigorous planning method to ensure an efficient and rational management of this resource.

Today, it can be said that the principle which presumes to grant to a state the absolute freedom to use waters flowing through its territory is contrary to general international law. On the opposite, there is the theory according to which a state may not use an international river in a way which alters its course, its flow-rate, the volume of its waters or their quality in the territory of another state. That is to say that a state could not alter the natural regime of the river that also runs through the territory of another state. This theory has been occasionally applied to settle disputes between the member states of a federal state like the US or Germany. This is usually called "equitable utilization" or "equitable apportionment". This general norm is applied to each particular case, as appropriate. This means, riparian states should negotiate a treaty about sharing water resources between themselves, according to these legal principles.

There is a quite rich and diversified tradition in Europa with respect to bilateral and multi-lateral agreements and conventions on international rivers. But many existing agreements are quite limited in scope dealing usually with sectoral

problems of water management. As far as I know, in the ESCWA-Region there is no basin-wide agreement, and all **bilateral agreements** fail to mention the water rights of other riparians.

What is needed, is an **integrated management** across water uses and jurisdictional boundaries, comprehending a programmatic planning and systems management. For this, the states concerned might need a **mediation** like the one carried out successfully with the Agreement of the **Mekong-River Basin** in April 1995 between Cambodia, Laos, Thailand and Vietnam. The agreement implies provisions for

- a minimum natural flow
- a Basin Development Plan
- the environmental conditions of water and land resources, air, flora and fauna
- reasonable and equitable utilization
- prevention and cessation of harmful effects
- freedom of navigation
- emergency situations.

Differences and disputes among the parties are explicitly adressed. The Mekong River Commission and its steady secretariat provide the institutional framework.

6 Recommendations

Let me conclude with some recommendations which I gathered from the Dublin Conference on Water and the Environment, the Rio AGENDA 21 and the Berlin Workshop on Strategies for Inter-sectoral Water Management in Developing Countries.

Water as an economic good

Water will be wasted as long as there is free or subsidized access to it. So water like other resources should have its price which should cover the costs. As a prerequisite, water rights for all uses have to be identified and established, following cultural, environmental and social considerations.

I am well aware that it is socially and economically unacceptable to confront users with a cost-recovering water price at once. But governments should start pricing water and take a step by step approach.

River-basin water management

Since all water-related activities are closely interlinked through upstreamdownstream relations in river-basins, the river-basin must be looked on as a whole in all water development policies, monitoring and policy implementation.

As I said earlier, the river-basin approach should be taken for transboundary basins, too.

Water resources management at the lowest appropriate level

This is the subsidiarity principle or simply the call for decentralization. There are tasks for which a river-basin is too large. Those tasks should be dealt with at a regional or local level. Take as an example water supply and wastewater treatment plants which in Germany are run by the municipalities or regional associations.

Users involvement

Governments should strengthen user participation in allocation and management of water resources. This involvement should reconcile multiple or contradictory objectives and reduce conflicts over ownership, control of water and - its price. There is much to be said for user participation being the prerequisite for local water sustainability. In this context, the pivotal role of women as providers and users of water should be recognized.

Capacity-building

Institutional capacity for implementing integrated water management should be reviewed and developed. Existing administrative structures will often be quite capable of achieving local resources management, but the need may arise for new institutions based upon the perspective, for example, of river-basin areas, district development councils and local community committees. Capacity-building in these cases will have to include staff training in water resources planning and management and procedures in users participation.

Without water there is no life.

So, let us take good care of it!