## COMMISSION OF THE EUROPEAN COMMUNITIES



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97/0067 (SYN)

# Proposal for a COUNCIL DIRECTIVE

establishing a framework for Community action in the field of water policy

(presented by the Commission)



#### **EXPLANATORY MEMORANDUM**

#### 1. INTRODUCTION

This proposal establishes a Community framework for the protection of surface water and groundwater in the Community within a common approach and with common objectives, principles and common basic measures. The principle of the Directive is that environmental water policy shall focus on water as it flows naturally through river basins towards the sea taking into account the natural interaction between surface waters and groundwaters. Both quality and quantity aspects are addressed. The Directive will require that all measures to achieve the environmental objectives for a sustainable protection and use of water are coordinated and their effect overseen and monitored within river basin, thus ensuring that Community policy for water is applied in a coherent and rational way. The Directive is designed to prevent further deterioration and to protect and enhance the quality and quantity of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems. By doing so, it also contributes to the provision of a supply of water in the quantities and qualities needed for sustainable development. With regard to the abatement of pollution, it confirms and formalizes the so-called "combined approach", with control of pollution at the source combined with the setting of objectives for the environment.

This proposal responds to a request from the Council and the Environmental Committee of the European Parliament who in June 1995 called for a fundamental review of Community water policy. As a response, the Commission adopted a Communication on Community water policy in February 1996 based on the principles for environment policy of the Treaty and on the Community's 5th Action Programme, "Towards Sustainability". The Communication recommended the making of a Water Framework Directive. Consultation with Council, the European Parliament, the Economic and Social Committee, the Committee of the Regions, and a broad circle of interested parties, particularly water users, showed general support for the policy presented in the Communication.

This proposal is the outcome of those consultations and it follows closely the outline presented in the Communication.

#### 2. BACKGROUND

#### 2.1 The history of Community water policy

Community water policy dates, like much of the rest of environmental policy, from the 1970s and, broadly speaking, there have been two "waves" of legislation.

The first wave consisted of a batch of quality objective legislation including the Surface Water Directive (75/440/EEC)<sup>1</sup>, the Bathing Water Directive (76/160/EEC)<sup>2</sup> the Fish Water Directive (78/659/EEC)<sup>3</sup>, the Shellfish Water Directive (79/923/EEC)<sup>4</sup> and the Drinking Water Directive (80/778/EEC)<sup>5</sup>. The main emission control elements were the

OJ No L 194, 25.7.1975, p. 26.

<sup>&</sup>lt;sup>2</sup> OJ No L 31, 5.2.1976, p. 1.

<sup>&</sup>lt;sup>3</sup> OJ No L 222, 14.8.1978, p. 1.

<sup>&</sup>lt;sup>4</sup> OJ No L 281, 10.11,1979, p. 47.

<sup>&</sup>lt;sup>5</sup> OJ No L 229, 30.8.1990, p. 11.

Dangerous Substances Directive (76/464/EEC)<sup>6</sup> and the Groundwater Directive (80/68/EEC)<sup>7</sup>. "Daughter" directives to the Dangerous Substances Directive were adopted throughout the early 1980s.

In 1988 the Frankfurt ministerial seminar on water reviewed the existing legislation and identified a number of improvements that could be made and gaps that could be filled. This resulted in the second wave of water legislation, the first results of which were the Urban Waste Water Treatment Directive (91/271/EEC)<sup>8</sup> and the Nitrates Directive (91/676/EEC)<sup>9</sup>. In 1994 the Commission presented a proposal for an Ecological Quality of Water Directive<sup>10</sup> as a further follow up to the Frankfurt seminar.

In 1991 the Hague ministerial seminar, followed by a Council Resolution in 1992<sup>11</sup>, further developed Community water policy by requesting that a detailed Community action programme be drawn up for the comprehensive protection and management of groundwater as part of an overall policy on water protection. The Council also asked for a revision of the Groundwater Directive (80/68/EEC)<sup>12</sup>. The Commission proposal for a Groundwater Action Programme<sup>13</sup> was adopted in 1996.

In addition, the Commission has presented proposals for the revision of the Bathing Water Directive<sup>14</sup> in 1994 and the Drinking Water Directive<sup>15</sup> in 1995 to bring them up to date. The Commission also proposed a new piece of emission control legislation in the form of the proposal for an Integrated Pollution Prevention and Control Directive which was adopted by the Council in 1996 (96/61/EC)<sup>16</sup>.

The arrival of this second wave of legislation has concentrated minds on the question of Community water policy, particularly as the five new proposals have coincided with the implementation period, and its associated costs, of the Urban Waste Water Treatment Directive and the Nitrate Directive.

The Communication on Community water policy, addressed to the Council and the European Parliament, was drafted as a discussion document in order to clarify the needs for and means of a better coordination of Community measures. As stated in the introduction, this Directive is the result of the consultation process following the adoption of that Communication.

<sup>&</sup>lt;sup>6</sup> OJ No L 129, 18.5.1976, p. 23.

<sup>&</sup>lt;sup>7</sup> OJ No L 20, 26.1.1980, p. 43.

<sup>8</sup> OJ No L 135, 21.5.1991, p. 40.

<sup>9</sup> OJ No L 375, 31.12.1991, p. 1.

OJ No C 222, 10.8.1994, p.6.

Council Resolution of 25 February 1992; OJ No C 59, 6.3.1992, p. 2.

OJ No L 20, 26.1.1980, p. 43.

OJ No C 355, 25.11.1996, p. 1.

<sup>&</sup>lt;sup>14</sup> OJ No C 112, 22.4.1994, p. 3.

<sup>&</sup>lt;sup>15</sup> OJ No C 131, 30.5.1995, p. 5.

<sup>16</sup> OJ No L 257, 10.10.1996, p. 26.

#### 2.2 The response to the consultation exercise on the Communication

#### 2.2.1 Council

The Council considered the Communication and adopted conclusions on 25 June 1996 which welcomed the Communication, took note of the guidelines for a Water Framework Directive and urged the Commission to come forward with a proposal by the end of the year, taking due account of the recommendations formulated in previous Council conclusions.

#### 2.2.2 European Parliament

The Opinion of the European Parliament was adopted on 23 October 1996 ( )<sup>17</sup>. It is critical of the Communication and claims that the Commission has failed to provide an overall vision of the future direction of Community water policy. The Opinion asserts that the Commission is trying to "re-nationalize" water policy and to reduce the level of protection. The Opinion focuses on the question of pollution controls and advocates a combined approach to the subject based on "strict and uniform" emission standards and supplementary quality objectives. The Opinion supports the idea of a Water Framework Directive and requests the Commission to come forward with a proposal.

The Commission has studied the Opinion of the Parliament closely and has taken on board many of the comments. With regard to the Parliament's demand for "strict and uniform emission standards", the appropriate instrument for establishing these is the Integrated Pollution Prevention and Control Directive (IPPC) (96/61/EC)<sup>18</sup> which was adopted by Council in September 1996, in cooperation with the European Parliament. It provides for the adoption of uniform emission limit values on a case-by-case basis where necessary, but does not require them in all circumstances. The Commission supports the approach adopted in the IPPC, believing it will be more efficient and, therefore, provide a higher and more effective level of protection. The proposal for a Water Framework Directive establishes the mechanism to ensure that the IPPC, and any standards adopted under it, are fully incorporated into the "combined approach".

#### 2.2.3 Economic and Social Committee

The Economic and Social Committee considered the Communication and supported the idea of a Water framework Directive. It stressed the need to maintain a high level of protection of water resources and the aquatic environment. The Opinion was adopted on 26 September 1996 (ESC 1069/96)<sup>19</sup>.

#### 2.2.4 Committee of the Regions

The Committee of the Regions also considered the Communication and supported the idea of a Water Framework Directive. However, it stressed the need to take into account local administrative structures. The Opinion was adopted on 19 September 1996 (CdR 186/96 fin)<sup>20</sup>.

OJ reference not yet available.

OJ No L 257, 10.10.1996, p. 26.

OJ reference not yet available.

OJ reference not yet available.

## 2.2.5 Other interested parties

Some 30 organizations and individuals responded in writing, all in support of a Framework Directive. Most of the comments welcomed the broad outline given by the Commission, though some of them disagreed with the particular structure in the Communication.

In addition to the written comments, the Commission organized a two-day Conference on 28/29 May 1996. The Conference was attended by some 250 delegates including representatives of Member States, enforcement agencies, local authorities, water providers, industry, agriculture and, not least, consumers and environmentalists.

The Conference produced a wide-ranging and stimulating debate on all aspects of the Commission's proposals. The main sessions dealt with river basin management, the integration of water policy into other policy areas, setting emission limits: the use of quality and emission standards, and water quantity management. No formal conclusions were adopted, though a document listing the main issues discussed is available upon request from the Commission (DG XI, Unit D1).

#### 2.3 The purpose of the proposal for a Water Framework Directive

The four main objectives of a sustainable water policy are:

- the provision of drinking water;
- the provision of water for other economic requirements;
- the protection of the environment; and
- the alleviation of the impact of floods and droughts.

These objectives are not always mutually compatible. In particular it noted that the third element, the protection of the environment, was especially vulnerable and in need of particular attention.

It is also clear that the role of the Community is not the same in each of these four areas. The principle of subsidiarity, when applied to the four objectives, does not produce the same results in each case.

The Commission has reached the conclusion that the principle objective of the Water Framework Directive must be for the protection of the environment, but that such protection also makes a strong contribution to the first two objectives by protecting the raw resources. Prevention and alleviation of floods and droughts depends extensively on regional and local physical planning and action in which the various specific conditions paly a major role. The Commission sees less of a role for the Community in the alleviation of the impact of floods and droughts, though clearly measures taken to secure the sustainable use of water as a resource should also help to achieve the fourth objective. Finally, this is a "Framework" Directive and, as such, it should establish a structure within which the four objectives can be better integrated at the national or regional level even if the Directive itself concentrates on environmental protection. The importance of taking into account also the possible effects of climate change on water policy has been pointed out to the Commission. The Commission agree to this in principle, and indeed has put action behind this, inter alia through the adoption of a number of proposals for action in the field as well as the allocation of funding in the Community research budget. It is believed that the Framework Directive

as such should offer a context where any concrete effect of climate change could be dealt with but it has been difficult to envisage any concrete provision in the Directive foreseeing such action. If necessary, the possibility of developing a Commission strategy included in the Directive may be used to address this issue.

The Water Framework Directive will achieve its objectives in four main ways:

- it will provide an overall framework within which Community, national and regional authorities can develop integrated and coherent water policies;
- it will provide a "safety net" to identify water issues which are not adequately addressed at present and will require action to be taken at the appropriate scale to remedy the situation;
- it will establish a sound basis for the collection and analysis of a large amount of information on the state of the aquatic environment and the pressures being placed upon it. This will provide the essential information base upon which the competent authorities can develop sensible and sustainable policies, and
- it will require transparency based on the publication and dissemination of information and public consultation. It will also establish a network for the exchange of information and experience between water professionals throughout the Community.

## 2.4 The structure of the proposal for a Water Framework Directive

The Water Framework Directive establishes the overall objective of achieving good water status and it requires:

- river basin management;
- an assessment of the characteristics of the river basin;
- monitoring of the status of the surface water and groundwater of the river basin;
- the establishment of programmes of measures to achieve the objective;
- the summarizing of all the above in a "River Basin Management Plan"; and
- public consultation on that Plan.

In addition, it contains requirements for:

- a mechanism to ensure that water use is paid for at full cost recovery prices;
- a feedback mechanism to inform national authorities and the Commission of particular problems;
- action to combat accidental pollution;
- simplified reporting procedures; and

a procedure for the development of coordinated strategies for dealing with pollution by individual pollutants or groups of pollutants.

Further, the Directive establishes a Committee with horizontal responsibilities, taking over responsibility from the Directives repealed by this Directive and will serve any future need for Committees in the area of Community water legislation. Only one of the Directives repealed by this Directive has a Committee but in the long term a Committee Superstructure will unfold.

## 2.5 The relationship of the proposal for a Water Framework Directive to other Community legislation

## 2.5.1 The proposal for an Ecological Quality of Water Directive (COM(93) 680 final)<sup>21</sup>

The proposal for a Water Framework Directive will replace the Ecological Quality of Water proposal. All the main elements of the Ecological Quality proposal can be found in the new proposal, but the scope has been expanded to cover groundwater and to deal with some of the water quantity issues. It has been expanded to create a clearer "framework" and to clarify the relationships with the rest of water policy. Of course, the new proposal has also benefited from the discussions in the Council, the European Parliament and elsewhere on the earlier proposal.

# 2.5.2 The Groundwater Directive (80/68/EEC)<sup>22</sup> and the proposal for a Groundwater Action Programme (COM(96) 315 final)<sup>23</sup>

The Groundwater Action Programme was originally intended, *inter alia*, to lead to a revision of the Groundwater Directive, but the Communication came to the conclusion that the Groundwater Directive should be repealed and that provisions for the protection of groundwater should be included in the Framework Directive. Many of the recommendations in the Groundwater Action Programme are therefore also found in a legally binding form in the Framework Proposal. However, many other aspects of the Groundwater Action Programme cannot be implemented through the Framework Directive, but relate to other policy areas and to measures which have a less formal nature.

## 2.5.3 The Drinking Water Directive (80/778/EEC)<sup>24</sup>

The Commission has recently proposed a revision of the Drinking Water Directive<sup>25</sup>. Both the Directive and its proposed revision set standards for the water actually provided to consumers rather than for the state of the environment. Article 8 of the Framework Directive requires all waters used for the abstraction of drinking water to be identified and for quality standards to be established which enable the standards in the Drinking Water Directive to be met under the expected water treatment regime.

OJ No C 222, 10.8.1994, p. 6.

OJ No L 20, 26.1.1980, p. 43.

OJ reference not yet available.

OJ No L 229, 30.8.1980, p. 11.

<sup>&</sup>lt;sup>25</sup> OJ No C 131, 30.5.1995, p.5.

## 2.5.4 The Bathing Water Directive (76/160/EEC)<sup>26</sup>

The Commission has come to the conclusion that the Bathing Water Directive makes a distinct Community contribution to the integration of environment policy and tourism policy and that it benefits from having a clear, separate identity. However, the Directive will be closely coordinated with the Framework Directive because its "bathing waters" and their associated obligations will have to be incorporated into the River Basin Management Plans. The Commission's proposal for a revision of the Bathing Water Directive<sup>27</sup> therefore remains on the table.

## 2.5.5 The Integrated Pollution Prevention and Control Directive (96/61/EC)<sup>28</sup>

The Integrated Pollution Prevention and Control Directive (IPPC) cannot be said to be a "daughter" to the Framework Directive, because it deals, in an integrated fashion, with emissions to air and soil as well as to water. However, it will have a central role in the control of point source pollution at the source, and thus clearly has a close relationship to the Framework. See also sections 4.1, 4.2 and 4.3 for a description of the measures on pollutants included in the proposed Framework Directive.

## 2.5.6 The Dangerous Substances Directive (76/464/EEC)<sup>29</sup>

The Commission believes that the Dangerous Substances Directive will become redundant once the IPPC Directive, the proposed Water Framework Directive and a future proposal for a Directive dealing with pollution from small industries have been adopted and are fully implemented. See also sections 4.1, 4.2 and 4.3 for a description of the measures on pollutants included in the proposed Framework Directive.

## 2.5.7 The Surface Water Directive (75/440/EEC)<sup>30</sup>

The Framework Directive proposes to repeal the Surface Water Directive once the programmes of measures in the Framework are in place. However, the Framework Directive will replace the Surface Water Directive's requirements with an obligation to identify all water bodies used for the abstraction of drinking water, including groundwaters, and to establish appropriate environmental quality standards to ensure compliance with the Drinking Water Directive following treatment.

## 2.5.8 The Fish Water Directive (78/659/EEC)<sup>31</sup> and the Shellfish Water Directive<sup>32</sup>

The Framework Directive proposes to repeal both these Directives once the programmes of measures in the Framework are in place. At present, both Directives apply only to those waters which Member States identify as fish waters or shellfish waters. They do not, therefore, offer any sort of uniform or universal protection and it is clear that the Member States implement the Directives in very different ways. The Framework Directive, on the other hand, will provide protection to all surface waters up to the level of "good surface water status" and will continue to allow Member States to use specific quality parameters for fish and shellfish waters if they wish.

OJ No L 31, 5.2.1976, p. 1.

OJ No C 112, 22,4,1994, p. 3.

OJ No L 257, 10.10.1996, p. 26.

OJ No L 129, 18.5.1976, p. 23.

OJ No L 194, 25.7.1975, p. 26.

OJ No L 222, 14.8,1978, p. 1.

<sup>&</sup>lt;sup>32</sup> OJ No L 281, 10.11.1979, p. 47.

## 2.5.9 The Information Exchange Decision (77/795/EEC)<sup>33</sup>

The Framework Directive proposes to repeal the Exchange of Information Decision once the Programmes of Measures are in place. The wealth of information to be collected under the Framework Directive, together with the work of the European Environment Agency to collate and analyse that information, will make the Decision irrelevant. However, the Commission, together with the Agency, will consider whether it might be useful to propose a thoroughly revised version of the Decision in order to give legal support to the work of the Agency in this area.

## 2.5.10 The Reporting Directive (91/692/EEC)<sup>34</sup>

The Reporting Directive establishes a three-year reporting cycle for a number of Directives covering water-related, air-related and waste-related legislation. Most of the Directives in the water cycle are due to be repealed in 2007 and will be replaced by the Framework Directive. The Framework Directive will not report via the Reporting Directive, but will establish a six-year reporting schedule in synchrony with what remains of the water cycle of the Reporting Directive.

#### 2.5.11 International Conventions

In a variety of legal formats, the Community and/or its Member States are signatories to a number of international conventions for the protection of seas, lakes, rivers and groundwaters. Membership of these organizations is varied and includes a number of non-Member States.

The Commission has been criticized for allowing inconsistencies to develop between the way in which the various organizations deal with particular issues and it has been suggested that the Framework Directive should be used to ensure greater consistency. However, the European Community clearly cannot legislate to force non-Member States to follow particular policy lines during negotiations under these various Conventions.

Nevertheless, as far as is possible, the Commission is doing what it can to reduce the problems. Increasingly, the Commission is organizing a common Community approach within these organizations (in many of which, Member States form a majority or a significant block). In addition, the Framework Directive attempts to work with these organizations by creating a role for them within the administration of the Directive (see Article 3). Existing international river basin organizations are accommodated as much as possible and those which include non-Member States are encouraged (but obviously not required) to work along the same lines.

The implementation of the United Nations Convention on the Protection and Use of Transboundary Water Courses and International Lakes (which also covers transboundary groundwaters) will be greatly assisted by the measures proposed in this Directive.

Marine waters are not directly addressed in this Directive (although coastal waters and riverine inputs clearly are). The relevant international conventions for the protection of the seas are therefore not as closely associated with this Directive as the river basin organizations are. Nevertheless, the Commission recognizes the importance of the conventions for the protection of regional seas and, along with the relevant Member States, plays a full part in their work.

OJ No L 334, 24.12.1977, p. 29.

OJ No L 377, 31.12.1991, p. 48.

### 2.6 Legal base

The Commission is proposing this Directive under Article 130s(1) of the Treaty. The Directive aims at maintaining and improving the aquatic environment in the Community and establishes the objective of achieving at least a good status of surface waters and groundwater within the Community. The provisions of the Directive have been drafted in order to provide the necessary coordination of administrative structures and procedures which should ensure the protection of the quality and quantity of the waters of the Community.

The Directive provides the overall framework within which Member States and the Community, within their respective responsibilities, can develop the basis for a sustainable protection and use of water, *inter alia*, with a view to questions of a transboundary nature. The procedures for coordination between administrative structures laid down by the Directive will also provide a basis for the coordination of measures ensuring a combined use of emission control at source and quality objectives for the aquatic environment independent of whether such measures are required by this Directive or by other Community or national legislation dealing with water quality.

Other provisions of the Directive offer a common frame of reference for any monitoring of the status of waters required under other legislation or by this Directive with a view to improving water quality and quantity across the Community.

In this respect, control of quantity is one important parameter in the assurance of a good water quality and, as a new element of Community water policy, provisions have been introduced according to which Member States shall be responsible for establishing of procedures, including licensing or prior authorization of water abstraction to ensure that surface waters and groundwater are not overexploited and that fresh water quality is not deteriorating as a consequence of the lowering of water tables or the reduction in the base flow of surface waters.

The bulk of the Directive deals with water quality issues, with quantitative aspects included principally to assist in the achievement of water quality objectives; the choice of legal basis reflects this approach.

#### 2.7 Timing

The text of the Commission's proposal is based on the assumption that the Framework Directive is adopted by the Council at the end of 1997. If the Directive is adopted at a later date, all the various deadlines will need to be modified accordingly. The timetable envisaged in the proposed Directive is coordinated with the reporting cycle for water in the Reporting Directive (91/692/EEC)<sup>35</sup>. The key deadlines are as follows:

Dec 1997 Council adopts Directive.

Dec 1999 Member States transpose Directive.

Commission adapts Appears II III V to scienti

Commission adapts Annexes II, III, V to scientific and technical progress. Competent authorities designated.

Dec 2000 Waters used for the abstraction of drinking water designated (Article 8).

Dec 2001 Analyses of the characteristics of River Basin Districts completed (Article 5).

Reviews of the environmental impact of human activity completed (Article 6).

OJ No L 377, 31.12.1991, p. 48.

	Economic analysis of water use completed (Article 7).
	Registers of Protected Areas completed (Article 9).
	Monitoring programmes operational (Article 10).
Dec 2003	Draft River Basin Management Plans published (Article 17).
Dec 2004	River Basin Management Plans published covering 2005-2010 (Article 16)
Dec 2006	Commission publishes first report on implementation (Article 22).
Dec 2007	Programmes of measures fully operational (Article 13).
	Some existing legislation repealed (Article 24).
Dec 2010	Deadline for objective of meeting "good status" (Article 4).
	Deadline for objective of charging (Article 12)
	2nd River Basin Management Plans published covering 2011-2016.
Dec 2013	Commission reviews Directive (Article 23)

Commission reviews Directive (Article 23).

During the period of coexistence of this proposal with legislation already in force but destined to be repealed, a particular effort will be needed to ensure coherence of activities. The Commission will in particular ensure this coordination through the committee set up by this Directive.

#### 3. SPECIFIC ISSUES RELATING TO THE PROPOSAL

#### 3.1 The combined approach to the control of pollution

The proposed Water Framework Directive will confirm the "Combined Approach" to the protection of water.

The proposal will establish a number of requirements which ensure that environmental quality objectives and standards are established on a common basis throughout the Community. It will also ensure that these efforts are coordinated with the emission limit controls of various kinds established in other pieces of Community environmental legislation such as the Integrated Pollution Prevention and Control Directive (IPPC) (96/61/EC)<sup>36</sup>. Both sorts of controls will reinforce each other and, in any particular situation, it will be the more rigorous approach which applies. If it proves necessary to adopt uniform emission limit values or uniform environmental quality standards for particular substances, these measures will be possible under Article 18 of the IPPC and Article 21 of the proposed Framework Directive, respectively.

It is true that the Commission is not proposing a single "Water Directive" encompassing all the elements of the Combined Approach in a single piece of legislation, but the Framework Directive is designed to provide the coordination and coherence of policy without the need for such an overwhelming and unwieldy measure.

The main tool for ensuring this coordination is the programme of measures, which forms a central element of the River Basin Management Plans required by the Framework proposal. One of the "basic" measures required in the programme under Article 13 is the implementation of all relevant Community legislation, including the IPPC and other pieces of Community legislation from both sides of the Combined Approach such as those listed in Annex VI, Part A.

OJ No L 257, 10.10.1996, p. 26.

<sup>36</sup> 

A further link between the two sides of the Combined Approach is that the IPPC requires emission controls based on Best Available Techniques (BAT), but, in Article 10, it states that further measures must be taken if BAT is insufficient to meet environmental quality standards. The Framework Directive will supply some of those standards.

Finally, the Framework Directive proposal allows the Commission to develop "strategies" to deal with the problems of pollution from particular pollutants. Such strategies will allow all the different elements of Community legislation with an impact on water protection to be coordinated to produce a solution to the problem.

A further point is worth mentioning in this context. One of the more frequent comments on the Communication was that it did not adequately address the question of dangerous substances and, in particular, that it paid insufficient attention to the future fate of the Dangerous Substances Directive (76/464/EEC)<sup>37</sup> and the emission limit values and the environmental quality objectives for individual substances adopted under its various "daughter" Directives. Concern was expressed that the monitoring of water would be based entirely on "ecological" or "biological" parameters without reference to dangerous substances. The Commission has addressed this issue in the following way:

- The requirement of the Dangerous Substances Directive for emission limit values based either on BAT or on environmental quality objectives will be overtaken by the BAT-based emission limit values required under the IPPC. Together with a proposal which the Commission is considering making to cover non-IPPC industries, the IPPC will make the emission limit value part of the Dangerous Substances Directive redundant.
- The Commission has considered what remains of the Dangerous Substances Directive to see whether it is worth retaining. The only significant remaining elements are the programmes of measures for List II substances and the mechanism for adopting environmental quality objectives for individual substances or groups of substances.
- The programmes are overtaken by the programmes of measures required under Article 13 of the proposed Framework Directive.
- The existing quality objectives in the daughter Directives have also been incorporated into the Framework via a cross-reference in Annex X. These environmental quality standards will therefore apply across the whole Community once the Directive is adopted. Further environmental quality standards may be adopted through specific Directives addressing individual substances or groups of substances as appropriate.
- The approach taken towards pollution in the proposed Framework Directive can be summarized as follows:
  - the inclusion of a list of pollutants in Annex VIII;
  - the provision in Article 21(4) for the adoption of environmental quality standards for pollutants and their inclusion in Annex X;
  - the requirement in Article 6 and Annex III to assess point source and diffuse pollution;

<sup>&</sup>lt;sup>37</sup> OJ No L 129, 18.5.1976, p. 23.

- the requirement in Article 10 and Annex V for monitoring of waters for the presence of pollutants;
- the requirement in Article 4, and through the definitions of "good surface water status" and "good groundwater status", that respecting the environmental quality standards forms a part of the overall environmental objectives of the Directive;
- the requirements in Articles 13 and 14 for specific measures to be taken where the environmental quality standards are not being met; and
- the mechanism in Article 21 which allows the Commission to rationalize and coordinate its strategies for dealing with individual pollutants and, where necessary, adopt proposals for new environmental quality standards or take other appropriate action.
- For the present, the Commission has not proposed repealing the Dangerous Substances Directive and its five daughter Directives. However, it will be possible to repeal them once the Framework Directive, the Integrated Pollution Prevention and Control Directive and the non-IPPC industries Directive are fully implemented.
- The only environmental quality standards included in Annex X at present are those currently found in the daughter Directives to the Dangerous Substances Directive. It is not entirely satisfactory to transfer these standards without reconsidering them in the light of new scientific evidence, but the Commission felt that this would have unnecessarily delayed the adoption of the Framework Directive. However, Article 21 of the Directive allows the Commission to develop "strategies" for individual substances and, as a result to consider the need for environmental quality standards. The Commission intends that the substances covered by the daughter Directives will be amongst the first to be addressed by the Commission in this way, inter alia taking into account scientific and technical progress with respect to ecotoxicological methods for risk assessment and the need for adjustment of results of laboratory modelling to "real life" conditions in the aquatic environment.

### 3.2 Diffuse source pollution

The term "diffuse source pollution" covers a wide range of widely differing phenomena and the only thing they really have in common is that they are pollution which is not "point source" pollution. As authorities become more successful at tackling point source pollution, diffuse sources become relatively more and more important and need to be addressed. However, there is not a single, simple solution. The range of solutions is as wide as the range of problems.

The proposed Framework Directive does not try to incorporate all the solutions into a single Directive. The problems of agricultural nitrate pollution will continue to be dealt with under the Nitrates Directive (91/676/EEC)<sup>38</sup>. The Plant Protection Products Directive (91/414/EEC)<sup>39</sup> and the proposed Biocides Directive (COM(93) 352 and COM(95) 387 - COD 465)<sup>40</sup> will continue to be the main tools for combatting pollution from those substances and the Framework Directive does

OJ No L 375, 31.12.1991, p. 1.

OJ No L 230, 19.8.1991, p. 1.

OJ No C 239, 5.9.1993, p. 1 and OJ No C 261, 6.10.1995, p. 5.

not require any changes to those Directives. Where necessary, product controls of various sorts can be established under the Restrictions on Marketing and Use Directive (76/769/EEC)<sup>41</sup>.

However, the Framework Directive does include provisions which will improve the coordination of such efforts. It includes a requirement under Article 6 for competent authorities to make an assessment of the extent and location of diffuse source pollution and it includes a mechanism for identifying and addressing such problems at a local, national and Community level (see section 4.1).

#### 3.3 Common standards

Some requests have been made for common and uniform standards across the Community. The Commission has reached the conclusion that uniform emission limit values and quality standards are appropriate in some circumstances, but are not always the appropriate policy response. In some cases, local circumstances will require differences in the specific standards set. However, it is important to set uniform standards when they are required and to ensure that the overall level of ambition, the overall environmental objectives, are established at a common and ambitious level.

#### 3.3.1 Emission limit values

The Framework Directive itself does not set emission limit values, but it coordinates those required under other pieces of legislation, most notably the Integrated Pollution Prevention and Control Directive (IPPC) (96/61/EC)<sup>42</sup>. The IPPC does not require common emission limit values in all cases, but contains a mechanism in Article 18 for establishing them where necessary. Nothing in the Framework Directive will allow derogations of any sort from the requirements of the IPPC.

### 3.3.2 Environmental quality standards

Annex X of the Framework Directive has taken over the various environmental quality standards from the Daughter Directives to the Dangerous Substances Directive (76/464/EEC)<sup>43</sup> (in which they are, rather confusingly, referred to as "Environmental Quality Objectives"). Whereas these standards were previously only applicable to those Member States choosing to use the "quality standards" approach in the Dangerous Substances Directive, the Framework Directive now applies them across the Community. Article 21(4) of the Framework Directive also contains a mechanism for establishing new common quality standards where appropriate.

#### 3.3.3 Environmental quality objectives

The overall environmental quality objectives of the Directive are established in Article 4. These objectives are to reach and/or maintain "good" status in all surface waters and groundwaters, and to comply with the standards or objectives for "Protected Areas", by the year 2010. These objectives are common throughout the Community.

A few minor exemptions from the need to reach "good" status, or from the timetable to reach it, are permitted under the strict conditions established in Articles 4(3) and 4(4).

<sup>&</sup>lt;sup>41</sup> OJ No L 262, 27.9.1976, p. 20.

<sup>&</sup>lt;sup>42</sup> OJ No L 257, 10.10.1996, p. 26.

<sup>43</sup> OJ No L 129, 18.5.1976, p. 23.

"Good status" is defined in Article 2 and establishes a common level of ambition throughout the Community. Annex V establishes the basic criteria for such monitoring. For surface waters, it includes ecological monitoring of the physico-chemical, biological and physical characteristics of the water body as well as chemical monitoring for the polluting substances listed in Annex VIII. For groundwaters, it includes monitoring of the quantity of groundwater and chemical monitoring for the substances listed in Annex VIII. More details can be found in Annex V of the proposal.

Clearly, the natural conditions of surface waters and groundwaters vary enormously throughout the Community and, therefore, it is not always possible or desirable to establish identical methods or, for example, parameters or parametric values for use in all circumstances. Nevertheless, the Commission believes that the basic criteria have been established for the technical Annexes which, combined with the broad definitions of "good status" in Article 2, will allow fair comparisons to be made and will allow the environmental objectives of Article 4 to be truly "common" to all Member States.

The Commission recently commissioned a study on the ecological quality aspects of surface water monitoring which demonstrated that such an approach is possible and can be developed within the timescale envisaged in the Framework Directive. Copies of the report and of the Commission's summary of it can be obtained from Unit D1 of DG XI.

#### 3.4 Coordination within River Basin Districts

The Commission has noted the almost universal support which the consultation process has demonstrated for the principle of using the River Basin District as the fundamental and natural unit for protection and use of water. The proposal for a Framework Directive therefore establishes river basins as the primary administrative unit for the purposes of water management. However, although the Proposal requires that monitoring and the establishment of programmes of measures, etc. be implemented throughout river basins, it allows this to be achieved through coordination of administrative efforts rather than by the imposition of a single agency or authority. Thus, the role of a Competent Authority can vary from one of having a specific, even limited responsibility within the coordinated administrative structure to a fully fledged, centralized authority depending on the administrative traditions of the relevant Member States.

#### 3.5 Monitoring and the European Environment Agency

A large part of the proposal for a Water Framework Directive concerns the collection of various sets of data on the state of the environment and the pressures on that environment. The data is collected largely for operational reasons to inform decision making within the individual river basins. However, the data is also, potentially, an extremely rich source for surveillance monitoring exercises of the sort carried out by national authorities, the European Environment Agency and within the Commission in particular the Community Authority in charge of statistics (Eurostat) in order to identify trends and to inform decision making at a national and Community level. The Commission has therefore kept in close touch with the European Environment Agency during the preparation of this proposal. The collection and processing of data on the status of and pressures on the environment by the Community Authority in charge of statistics is of equal importance for this task and a close involvement of both institutions will be ensured in the implementation of the Framework Directive.

The Agency is currently working on the design of a surveillance network of monitoring stations which will be based on existing stations supplemented, where necessary, by additional stations to give an overall picture. The monitoring programmes required by this proposal will extend the range of stations which the Agency can draw upon in developing its network:

#### 3.6 Community co-financing

In recent years, and through initiatives such as the reform of the Structural Funds in 1988, increased Community co-financing of environmental infrastructure and other investments has become a major feature of the regional development priorities of the Member States in particular in Objective 1 and 6 areas. For the period 1994-99, approximately ECU 8 billion (1994 prices) is committed to environmental investments within the Member States under the various regional objectives of the Structural Funds. In addition, between 1993 and 1995, over ECU 1.7 billion has been committed to a range of water management infrastructure in the four Cohesion Member States. Funds are also available for projects in the water sector from the European Investment Bank (EIB). This proposal will further strengthen the basis upon which investment needs are made and will enhance the regional planning process both now and in the future.

#### 3.7 Charging for water use

The abstraction and consumption of surface water and groundwater and the emission of pollutants into surface water are distinct ways of using water. These activities, as well as some *in-situ* water uses, have the potential to cause damage to the environment if they are not controlled and regulated and, in fact, such activities are the subject of a great deal of legislation which will be coordinated within the framework of this Directive. Whilst the Commission recognizes the difficulties inherent in attributing diffuse pollution to its exact source, it feels that the cost of this pollution is internalized in existing legislation which follows the polluter-pays principle, e.g. the Nitrates Directive.

However, there is scope for improving the efficiency of water use and the effectiveness of environmental provisions relating to its use by ensuring that, so far as is reasonable, the price of water is a genuine reflection of the economic costs involved, including the environmental and resource costs. This concept was not outlined in the Commission's Communication, but has emerged from the consultation exercise as a means of more fully implementing the polluter-pays principle in this sector.

To this end, Article 7 of the Directive requires an economic analysis of different water uses to be carried out which, *inter alia*, will allow a more realistic view of the economic costs of different water uses in the River Basin Districts to emerge. Article 12 then requires that prices for water use reflect the economic costs more closely.

Charges for water that more closely reflect the economic costs placed on society and the economy are a way of reinforcing effective demand management of an increasingly scarce resource and therefore have an incentive function. In addition, they will help provide the necessary funding for the water sector and, in particular, they help finance environmental protection measures and preventive actions. They therefore also have a financing function.

For the water uses addressed by this Directive, the most important elements of these economic costs are:

- The costs of providing the necessary services for water uses. These services concern mainly the abstraction and distribution of fresh water and the collection and treatment of waste water. More generally, they concern all pollution prevention and control measures required by public authorities, mainly by way of legislation. Prices or charges that reflect all of the costs for these services are called full cost recovery prices.
- Environmental costs and resource depletion costs. These might be relevant depending on the hydrological and socio-economic conditions as well as the legal and administrative provisions in the river basin. These costs represent the costs of environmental damage that certain water users impose on other users, including future users, or on society as a whole and the costs of foregone opportunities which other water users suffer due to depletion of a resource beyond its natural rate of recharge or recovery.

From consultation with Member States, in particular the group of Member States environmental economists (ENVECO), and with other interested parties, an objective of implementing the principle of full cost recovery prices for all water uses has emerged as the principle of sound water management. In fact, a number of Member States (Denmark, Germany, the Netherlands, Sweden, the United Kingdom, and within the European Economic Area, Iceland) have implemented the full cost recovery principle for waste water collection and treatment as well as for fresh water abstraction and distribution throughout their economy, or are on the way to doing so. Other Member States have partial cost recovery or legislation to that effect (Belgium, France, Italy, Austria, Portugal, Finland, and within the European Economic Area, Norway).

Article 12 of this Directive obliges Member States to ensure that all costs (as specified) for all services in relation to water use are fully recovered, overall, i.e. from the entirety of users, and by economic sector, i.e. from within each economic sector when splitting up all water uses of that particular service of that particular sector into at least the following three economic sectors: households, industry, and agriculture by 2010. These provisions aim at reducing direct State aid, usually paid for from tax revenues, cross subsidies between economic sectors, and subsidies between current and future users (provisions for building up reserves).

Available evidence of cross subsidization for service costs between economic sectors suggests that subsidies flow from households to industries in the richer regions of the Community and from industry to households in the poorer regions. In parts of the Community with considerable water stress there is also evidence of subsidies from households and industry to agriculture, e.g. in the form of first come, first served abstractions upstream or through unaccounted for emissions of pollutants. Implementation of full cost recovery prices by economic sector aim at increasing transparency of the financial transactions involved. Transparency is important, not least for assessing matters of distortion of competition, in all non-household water uses. Cost recovery by sector can also prevent certain abuses of monopoly position.

Article 12 further obliges Member States to ensure that, where necessary, the price of water uses also reflects environmental costs and resource depletion costs. Some environmental costs and resource depletion costs are already implemented in several Member States, so far mainly through taxes and charges on water pollution or abstraction (e.g. Belgium, Denmark, Germany, France, the Netherlands, Finland). Setting the level of these charges should be based on estimates of the associated damages from the water pollution and abstraction in question, and on an understanding of

the demand elasticities for these activities. The economic analysis required under Article 7 is intended to provide the necessary information. It is important to note that these economic analyses necessarily have to be carried out on the River Basin District level, since this is the level where effects on the environment and on other members of society can most completely be understood.

Price differentials stemming from differing natural conditions in different River Basin Districts should not be viewed as distortions to competition, as long as they are genuine reflections of the environmental costs and resource depletion costs involved.

Transparency and comparability of economic assessments and price calculations will be ensured through common principles in the Directive and this should make exchange of experience easier and lead to the acquisition of essential skills for informed water management within competent authorities and to more involvement of the public. For this purpose, common principles for the economic analysis of water use are outlined in Article 7 and technical specifications indicated in Annex II.

It will be for the Member States to consider how to implement the full cost recovery obligation, and, in particular, if, how and when to impose the charges representing the environmental and resource costs, taking into account the exemptions in Article 12. In the main, these charges simply reflect the actual costs involved.

#### 3.8 Network and biennial conference

The list of competent authorities and of the names of correspondents will form a natural network of water professionals, including water users which the Commission considers could be an extremely valuable resource. In particular, the Commission is considering holding regular, possibly biennial, conferences of all the correspondents or of specialists in order to discuss areas of common interest and to compare the different approaches which they have adopted. Other activities such as the publication of a network magazine, the development of training and educational material or the exchange of seconded experts might also be possible. The Commission would welcome suggestions in this area.

#### 4. ECONOMIC ANALYSIS

#### 4.1 Introduction

The Commission is fully committed to the principle that all proposals should be accompanied by economic analyses, but recognizes that, in some cases, they will necessarily be short on details. This is the case with the Water Framework Directive.

There is a certain irony in the fact that the Framework Directive is designed to establish many of the information gathering mechanisms that would have enabled the production of a more complete economic analysis of the proposal itself.

The proposal simultaneously requires the monitoring of the state of the environment and that measures be taken to ensure that the status is "good". The available information on the state of the environment is, therefore, insufficient to establish exactly how much further effort needs to be made. Until the monitoring requirements of the proposal are implemented it will not be possible to say with any precision exactly how severe the remedial measures will have to be and, therefore, how much they might cost.

Finally, the economic analysis should only consider the costs and the advantages of this particular proposal. The Commission therefore has to assume that other Directives are fully implemented, notably the Urban Waste Water Treatment Directive (91/271/EEC)<sup>44</sup>, the Bathing Water Directive (76/160/EEC)<sup>45</sup>, the Nitrates Directive (91/676/EEC)<sup>46</sup>, the Integrated Pollution Prevention and Control Directive (96/61/EC)<sup>47</sup> and the others listed in Annex VI, Part A. In many cases these Directives are either inadequately implemented by Member States at present or are still going through their implementation period. Again, until these measures are fully implemented and start to have an effect on the environment it is difficult to assess how much else will be required under the Framework Directive.

Given the above difficulties, the Commission has come to the conclusion that any comprehensive set of figures or estimates of costs and benefits in financial terms would be, at best, unreliable and, at worst, misleading or wrong. The following analysis will therefore concentrate on identifying the nature of the costs and advantages associated with the proposal and will present figures only for estimating the order of magnitude of the monitoring and management costs.

The Commission believes that the probable costs of this proposal will be affordable over the timescale involved and that the measures outlined in the proposal are all necessary for the long-term sustainability of Community water policy. However, the Commission recognizes that Member States, now that they have a proposal on the table, may well be able to produce more substantial economic analyses of the proposal than the Commission has been able to prepare. The Commission would welcome any such work done by the Member States, and indeed, during the consultation process preceding the adoption of this proposal Member States have indicated a willingness to supply such information where possible. In the unlikely event that such studies produce evidence that the costs to government or to private interests are excessive or unnecessary, the Commission commits itself to a constructive dialogue with the Council (and, where appropriate, with the European Parliament) over the extent to which changes in the proposal might be appropriate.

#### 4.2 Costs

The main areas where the Commission expects the proposal to lead to significant costs are as follows.

#### 4.2.1 Administrative costs for Member States

There will be administrative costs associated with the designation of competent authorities. There will be running costs for these organizations, although the improved coordination and a better background information should also lead to an improved cost-effectiveness within administrative operations economies of scale. Operational costs could range from close to zero in small River Basin Districts with "good status of water" and with established coordination procedures and functioning control systems where costs are offset by administrative synergies. In contrast,

OJ No L 135, 21.5.1991, p. 40.

<sup>&</sup>lt;sup>45</sup> OJ No L 31, 5.2.1976, p. 1.

OJ No L 375, 31.12.1991, p. 1.

OJ No L 257, 10.10.1996, p. 26.

for other River Basin Districts administrative costs could amount to ECU 0.5 million per year (monitoring excluded).

Member States will have to establish an authorization or permit system to control water abstractions, where such systems do not already exist. Similarly, they will have to establish a system for charging for water use. The costs of these systems depend crucially on whether one or the other scheme is already implemented and properly enforced. Thus, in Member States with properly enforced permitting systems, additional costs for charging schemes could be very low. However, establishing these systems could lead to elevated unit costs per abstraction permit or pollution unit discharged.

The authorities will have to be involved in a higher degree of public consultation than is generally the case at present and will have to bear the associated costs.

#### 4.2.2 Monitoring costs

Member States will bear the additional costs of monitoring. The main elements of this will be the monitoring of surface water status and groundwater status, together with the monitoring of waters used for the abstraction of drinking water. This will be an increase in the current level of monitoring, particularly with regard to the groundwater monitoring and the monitoring of the ecological status of surface waters.

For the proposed Directive on ecological quality of water, additional monitoring and related costs have been estimated to the order of ECU 350 million per year, representing roughly ECU 1 per citizen annually. However, sampling for "water status", i.e. including chemical and quantity aspects, might double this figure. Some of this monitoring is already done by Member States but for some Member States in particular, the necessary monitoring of groundwater will require increased efforts. From a recent study, the cost of monitoring of groundwater status (quality and quantity) can very roughly be estimated at ECU 30 million for the whole of the Community where monitoring of quantity makes up about 10%. However, the major part of these costs is incurred by requirements already in existing Community and national legislation.

In addition to the physical monitoring of water status, the authorities will have to complete the analysis of the characteristics of the River Basin District, the review of the environmental impact of human activity, the economic analysis of water use within the River Basin District, and the register of protected areas. None of these are likely to be as labour intensive as the monitoring requirements.

#### 4.2.3 Costs to private households

The requirement for water use to be charged at full cost recovery prices might impact upon high use households, but the exemptions to allow a basic level of water use for domestic purposes at a reasonable price should mitigate against large increases for most users.

#### 4.2.4 Costs to industry and agriculture

Where measures under existing Community and national legislation are demonstrated to be insufficient to protect water and the aquatic environment, industry may be required to take further measures. Farmers and fishermen may face similar requirements. The extent of these measures will be difficult to assess until the monitoring programmes have been completed.

The requirement for water abstraction permits and for charging for water use at full cost recovery prices is not expected to have any significant impact on these sectors because often they already cover their costs themselves. However, measures to further account for environmental and resource costs, depending on the modalities of Member States's action, could have significant impacts in certain areas of the Community at certain times of the year. Some of these additional costs would be offset by an improved cost-effectiveness in water use. These costs will reflect regional variations in scarcity throughout the Community and will therefore have a different degree of impact in different areas and possibly also at certain times of the year. In particular, it is possible that charging for environmental cost and resource depletion cost for water abstraction for agriculture could lead to permanent changes in the pattern of agricultural activity in order to ensure long-term sustainability. However, these costs represent an internalization of costs which are currently borne by the whole of society, either financially or through environmental degradation. It is up to Member States, within the single market rules, to chose ways of mitigating those impacts judged unequitable.

#### 4.2.5 Costs of physical improvements to water bodies and to water infrastructure

Member States, local authorities and landowners may be obliged to undertake physical restoration work for surface water bodies and take measures to improve the replenishment of groundwaters. The extent to which such action will be necessary will be revealed by the monitoring programmes.

There may also be cases where urban waste water treatment facilities required under the Urban Waste Water Treatment Directive (91/271/EEC)<sup>48</sup> are deemed to be insufficient and further improvements are required.

It is possible that the improved transparency of water management, together with the introduction of charges at full cost recovery prices, will result in public pressure to improve the water supply infrastructure (particularly with regard to leaking pipes) even though the improvements are not actually required under the proposal.

#### 4.2.6 Job losses

Some of the costs indicated above may translate into job losses in the relevant industries.

#### 4.3 Advantages

The main areas where the Commission expects the proposal to lead to significant advantages are as follows. For many of them, it is difficult to establish their monetary value.

#### 4.3.1 Advantages of improved efficiency and effectiveness of water policy

The information gathered as a result of the various monitoring and assessment requirements of the proposal and the use of river basin management should lead to an improvement in the efficiency of measures and their effectiveness through better targeting of the measures. It might also lead to earlier recognition of potential problems and therefore contribute to early mitigating their impact at less costs. It will lead to a more efficient allocation of scarce water resources. Pressure resulting

<sup>&</sup>lt;sup>48</sup> OJ No L 135, 21.5.1991, p. 40.

from public participation and transparency might translate into higher productivity in the water sector and thus reduce service costs.

## 4.3.2 Advantages of reduced water treatment costs

The proposal should lead to an improvement in the quality of fresh surface water and groundwater (and help prevent further deterioration) which will lead to a reduction in water treatment costs (and future costs).

A simple calculation may demonstrate the extent of these costs: with 0.1 % of the 170 billion cubic metres of surface water annually abstracted in the Community (for all purposes) undergoing advanced treatment to remove pollution (e.g. pesticides) the necessary investments would exceed ECU 600 million. Severe deterioration of groundwater quality would increase this figure substantially.

#### 4.3.3 Advantages of improved sustainability of water supply

Water shortages due to poor water management represent a real cost to farmers and industry, as well as a major inconvenience and potential health hazard to domestic users. The proposal should help to improve the management of surface water and groundwater and, through its pricing mechanism, will encourage greater efficiency of water use. This should contribute to the provision of a sustainable and more reliable supply. The following example illustrates the order of magnitude for domestic users: if, for reasons of reduced trust in the quality of tap water 50 million Europeans would buy 1 litre of bottled water per day at a price of ECU 0.5 per litre, this would represent an annual expense of about ECU 10 billion.

#### 4.3.4 Advantages of increased amenity value of surface waters

The proposal should help improve the quality of bathing waters and recreational waters. It should also lead to improvements in the ecological quality of aquatic habitats and wetlands habitats valued as visitor sites by tourists and by local people. Economic analyses have shown that amenity values can be significant and in fact outweigh the costs of monitoring.

## 4.3.5 Conservation advantages for habitats and species

The proposal should help protect habitats and species, both in water bodies and in wetlands and surrounding areas.

#### 4.3.6 Job creation advantages

Notwithstanding the expected increase in cost-effectiveness, the proposal should create jobs in the administration of policy, in the monitoring of water and in physical projects to improve the environment and the water supply infrastructure. The increased amenity value of waters will ensure presents jobs and may also lead to job creation in the tourism and recreation sectors.

#### 4.4 Conclusion

The uncertainties described in the introduction and the wide range of costs and advantages described above mean that the Commission is unable to put a net value on the proposal for a Water Framework Directive. However, it must be clear that the Commission considers that the overall advantages outweigh the costs, particularly when so many of the costs represent the internalization of costs which are currently being paid through resource depletion and deterioration, through damage to aquatic and wetland habitats, and through transfers and subsidies from other sectors of the economy.

#### 5. BUSINESS IMPACT ASSESSMENT

Many of the arguments set out in the Economic Analysis apply equally to the Business Impact Assessment. Sections 5.2 and 5.3 of that Analysis include references to the impacts upon business.

The Commission has no indication that the impact on Small and Medium-sized Enterprises (SMEs) from the full cost recovery obligation in the year 2010 would lead to any onsiderable price changes over and above an expected baseline scenario.

#### 6. FINANCIAL STATEMENT

A Financial Statement is annexed to this Memorandum.

## Proposal for a COUNCIL DIRECTIVE

## establishing a framework for Community action in the field of water policy

#### THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 130s(1) thereof,

Having regard to the proposal from the Commission<sup>49</sup>,

Having regard to the opinion of the Economic and Social Committee<sup>50</sup>,

Having regard to the opinion of the Committee of the Regions<sup>51</sup>,

Acting in accordance with the procedure laid down in Article 189c of the Treaty, in cooperation with the European Parliament<sup>52</sup>,

- 1. Whereas the supply of water is a service of general interest as defined in the Commission communication on Services of General Interest in Europe (COM(96) 443)<sup>53</sup>;
- Whereas this Directive aims at maintaining and improving the aquatic environment in the Community; whereas this objective is primarily concerned with the quality of the waters concerned; whereas control of quantity is one element in securing good water quality and therefore measures on quantity, serving the objective of ensuring good quality, should be established;
- 3. Whereas waters in the Community are under increasing pressure from the continuous growth in demand for sufficient quantities of good quality water for all purposes; whereas on 10 November 1995, the European Environment Agency<sup>54</sup> presented an updated state of the environment report, confirming the need for action to protect Community waters in qualitative as well as in quantitative terms;

<sup>49</sup> OJ reference

OJ reference

OJ reference

OJ references for European Parliament Opinion, Council Common Position and European Parliament Decision.

<sup>&</sup>lt;sup>53</sup> OJ No C 281, 26.9.1996, p. 3.

Report on "Environment in the European Union - 1995", European Environment Agency, Copenhagen, 1995.

- 4. Whereas the conclusions of the Community Water Policy Ministerial Seminar in Frankfurt in 1988 highlighted the need for Community legislation covering ecological quality; whereas the Council in its resolution of 28 June 1988<sup>55</sup> asked the Commission to submit proposals to improve ecological quality in Community surface waters;
- 5. Whereas the declaration of the Ministerial Seminar on groundwater held at the Hague in 1991 recognized the need for action to avoid long-term deterioration of fresh-water quality and quantity and called for a programme of actions to be implemented by the year 2000 aiming at sustainable management and protection of fresh-water resources; whereas in its resolutions of 25 February 1992<sup>56</sup> and 20 February 1995<sup>57</sup>, the Council requested an action programme for groundwater and a revision of Council Directive 80/68/EEC of 17 December 1979 on the protection of groundwater against pollution caused by certain dangerous substances<sup>58</sup>, as part of an overall policy on fresh-water protection;
- 6. Whereas on 21 February 1996 the Commission adopted a Communication to the European Parliament and the Council on "European Community Water Policy" setting out the principles for a Community water policy<sup>59</sup>;
- Whereas the Commission presented on 9 September 1996 a proposal for a European Parliament and Council Decision on an action Programme for integrated protection and management of groundwater<sup>60</sup>; whereas that programme pointed to the need to establish procedures for the regulation of abstraction of fresh water and for the monitoring of fresh-water quality and quantity;
- 8. Whereas the Council on 25 June 1996, the Committee of the Regions on 19 September 1996, the Economic and Social Committee on 26 September 1996, and the European Parliament on 23 October 1996 all requested the Commission to come forward with a proposal for a Council Directive establishing a framework for European water policy;
- 9. Whereas the Convention on the protection and use of transboundary water courses and international lakes calls for the management of river basins, whereas that Convention was approved by Council Decision 95/308/EC<sup>61</sup>;
- 10. Whereas surface waters and groundwaters are in principle renewable natural sources; whereas, in particular, the task of ensuring a good status of groundwater requires early action and stable long-term planning of protective measures, owing to the natural time-lag in its formation and renewal; whereas such time-lag for improvement must be taken into account in timetables when establishing measures for the achievement of a good status of groundwater;

<sup>&</sup>lt;sup>55</sup> OJ No C 209, 9.8.1988, p. 3.

<sup>&</sup>lt;sup>56</sup> OJ No C 59, 6.3.1992, p. 2.

<sup>&</sup>lt;sup>57</sup> OJ No C 49, 28.2.1995, p. 1.

OJ No L 20, 26.1.1980, p. 43; Directive as amended by Directive 91/692/EEC (OJ No L 377, 31.12.1991, p. 48).

<sup>&</sup>lt;sup>59</sup> COM(96) 59 final of 21 February 1996.

<sup>&</sup>lt;sup>60</sup> OJ No C 355, 25.11.1996, p. 1.

OJ No L 186, 5.8.1995, p. 42.

- 11. Whereas Community water policy requires a transparent, effective and coherent legislative framework; whereas the Community should provide common principles and the overall framework for action; whereas this Directive will provide for such a framework and coordinate and integrate, and, in a longer perspective, further develop the overall principles and structures for sustainable use of water in the Community in accordance with the principles of subsidiarity;
- 12. Whereas the objectives and the principles of the Community's environmental policy, as set out in Article 130r of the Treaty, consist in particular in preventing, reducing and as far as possible eliminating pollution by giving priority to intervention at source and ensuring prudent management of natural resources, in compliance with the "polluter-pays" principle and the principle of pollution prevention;
- Whereas, pursuant to Article 130r of the Treaty, in preparing its policy on the environment the Community is to take account of the economic and social development of the Community as a whole and the balanced development of its regions;
- 14. Whereas Member States sharing the same river-basin or groundwater aquifers should ensure joint long-term planning of water resources based on forecasts of supply and demand, so as to establish long-term strategic objectives for water reserves and priorities for their use;
- 15. Whereas there are diverse conditions and needs in the Community which require different specific solutions; whereas this diversity must be taken into account in the planning and execution of measures to ensure sustainable protection and use of water; whereas decisions should be taken as close as possible to the locations where water is used or affected; whereas priority should be given to action within the responsibility of Member States through the drawing up of specific programmes of measures adjusted to regional and local conditions;
- 16. Whereas the success of this Directive relies upon close cooperation and coherent action at Community, Member States and local level as well as on information, consultation and involvement of management and labour, and individual citizens;
- 17. Whereas, with regard to pollution prevention and control, Community water policy should be based on a combined approach using control of pollution at source through the setting of emission limit values and of environmental quality standards; whereas, for water quantity, overall principles should be laid down for control on abstraction in order to ensure the long-term availability of sufficient amounts of good quality fresh water;
- 18. Whereas common environmental quality-standards for certain groups or families of substances should be laid down in Community legislation; whereas provisions for the adoption of such standards at Community level should be ensured;
- 19. Whereas common principles are needed in order to coordinate Member States' efforts to improve water quantity and quality, to promote sustainable water consumption, to contribute to the control of transboundary pollution problems, to protect ecosystems, in particular aquatic ecosystems, and to safeguard the recreational potential of Community waters;
- 20. Whereas common definitions of the status of water in terms of quality and quantity should be established; whereas environmental objectives should be set to ensure that good status of surface water and groundwater is achieved at Community level;

- 21. Whereas Member States should meet the objective of at least a good water status by defining and implementing the necessary measures within integrated programmes of measures, taking into account existing Community requirements; whereas, where a good water status already exists, it should be maintained;
- Whereas the objective of achieving at least a good status of waters should be pursued within the river basin, thus ensuring an administrative structure which ensures that waters belonging to the same ecological and hydrogeological system are managed as a whole whether such waters are present as groundwater or surface water;
- 23. Whereas there is a need to prevent or reduce the impact of incidents in which water is accidentally polluted; whereas common principles should be established aiming at coordinating Member States' efforts and at increasing transboundary cooperation in this field;
- 24. Whereas there is a need for a greater integration of qualitative and quantitative aspects of protection and management of both surface waters and groundwaters within one administrative structure, taking into account the natural flow of water within the hydrogeological cycle;
- 25. Whereas it is necessary to determine within the river basin existing levels of water pollution and to draw up inventories of water use, including the various sources of pollution, demand for water and other man-made impacts on water status;
- 26. Whereas Member States should designate waters used for the abstraction of drinking water and establish environmental standards to permit compliance with Council Directive 80/778/EEC of 15 July 1980 relating to the quality of water intended for human consumption<sup>62</sup>.
- Whereas, to ensure the participation of the general public and of individual users of water, it is necessary to provide proper information of planned measures and to report on progress with their implementation with a view to their involvement before final decisions on the necessary measures are adopted;
- 28. Whereas, within a river basin where use of water may have transboundary effects, concerted action should be ensured across frontiers; whereas this Directive will contribute to the implementation of Community obligations under international conventions on water protection and management, notably the United Nations Convention on the protection and use of transboundary water courses and international lakes;
- 29. Whereas further integration of sustainable water management into other Community policy areas and, in particular, into agriculture policy, regional policy and fisheries policy is necessary; whereas this Directive will provide a basis for a continued dialogue and for the development of strategies towards a further integration of policy areas; whereas this Directive will therefore bring an important contribution to implementing the main principles and objectives of the European Spatial Development Perspective (ESDP);

OJ No L 229, 30.8.1980, p. 11; Directive as last amended by the Act of Accession of Austria, Finland and Sweden.

- 30. Whereas, in cases where, because of natural conditions, for historical reasons or because of pollution from third countries, it may be difficult or impossible to achieve a good status, appropriate procedures should be established to prevent any deterioration of the status of waters;
- 31. Whereas the development in water status should be monitored on a systematic and comparable basis throughout the Community in order to provide a sound basis for the choice of measures to ensure a sustainable use of water; whereas the European Environment Agency and the Commission, working in close cooperation, will monitor and report on developments in the state of the environment;
- 32. Whereas the use of economic instruments may be appropriate as part of a programme of measures; whereas under the polluter-pays principle any damage or negative impact on the aquatic environment caused by pollutants, abstraction and other use of water should be taken into account; whereas costs of water use should be fully recovered from the water user;
- 33. Whereas full implementation and enforcement of existing environmental legislation for the protection of waters should be ensured; whereas it is necessary to ensure the proper application of the provisions implementing this Directive throughout the Community; whereas appropriate sanctions should be ensured in Member States' legislation;
- 34. Whereas a new committee with horizontal responsibilities in the area of Community water policy should be set up to assist the Commission in matters relating to the implementation of this Directive; whereas this Directive will provide mechanisms to address obstacles to progress in improving water status when these fall outside the scope of Community water legislation, with a view to developing appropriate Community strategies for overcoming them;
- 35. Whereas the Commission should present annually an updated plan for possible future initiatives which it is planning or considering for the water sector;
- 36. Whereas technical specifications should be laid down to ensure a coherent approach in the Community as part of this Directive; whereas adaptation of the Annexes of this Directive to technical development and the standardization of the monitoring, sampling and analysis methods should be adopted by committee procedure;
- 37. Whereas the implementation of programmes of measures for river basins under this Directive will achieve a level of protection of waters at least equivalent to that provided for in:
  - Council Directive 75/440/EEC of 16 June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States<sup>63</sup>,

OJ No L 194, 25.7.1975, p. 26; Directive as last amended by Directive 91/692/EEC.

- Council Decision 77/795/EEC of 12 December 1977 establishing a common procedure for the exchange of information on the quality of surface fresh water in the Community<sup>64</sup>,
- Directive 78/659/EEC of 18 July 1978 on the quality of fresh waters needing protection or improvement in order to support fish life<sup>65</sup>,
- Directive 79/869/EEC of 9 October 1979 concerning the methods of measurement and frequencies of sampling and analysis of surface water intended for the abstraction of drinking waters in the Member States<sup>66</sup>,
- Directive 79/923/EEC of 30 October 1979 on the quality required of shellfish waters<sup>67</sup>,
- Directive 80/68/EEC, as well as
- the proposed Directive on the ecological quality of water<sup>68</sup>,

whereas those Directives should therefore be repealed, and the proposed Directive withdrawn, once the relevant provisions of this Directive have been fully implemented,

#### HAS ADOPTED THIS DIRECTIVE:

### Article 1

#### Purpose -

The overall purpose of this Directive is to establish, for the protection of surface fresh water, estuaries, coastal waters and groundwater in the Community, a framework which:

- (a) prevents further deterioration and protects and enhances the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems; and
- (b) promotes sustainable water consumption based on long-term protection of available water resources;

and thereby contributes to the provision of a supply of water of the qualities and in the quantities needed for sustainable use of these resources.

#### Article 2

OJ No L 334, 24.12.1977, p. 29; Decision as last amended by the Act of Accession of Austria, Finland and Sweden.

OJ No L 222, 14.8.1978, p. 1; Directive as last amended by the Act of Accession of Austria, Finland and Sweden.

OJ No L 271, 29.10.1979, p. 44; Directive as last amended by the Act of Accession of Austria, Finland and Sweden.

<sup>67</sup> OJ No L 281, 10.11.1979, p. 47; Directive as last amended by Directive 91/692/EEC.

<sup>68</sup> OJ No C 222, 10.8.1994, p. 6.

#### **Definitions**

For the purposes of this Directive and, unless otherwise defined in Community legislation, for all Community legislation concerning water, the following definitions shall apply:

- 1. "Surface water" means surface fresh waters, estuaries and coastal waters.
- 2. "Groundwater" means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.
- 3. "Surface fresh water" means all static or flowing water on the surface of the land upstream of the fresh water limit.
- 4. "Coastal water" means water on the landward side of a line every point of which is at a distance of one nautical mile on the seaward side from the nearest point of the baseline from which the breadth of territorial waters is measured, extending where appropriate in the case of watercourses, up to the outer limit of the estuary.
- 5. "Estuary" means the transitional area at the mouth of a river between surface fresh water and coastal waters. The outer (seaward) limits of estuaries shall be defined, as necessary, by Member States. The inner (upstream) limit shall be the fresh water limit.
- 6. "Fresh water limit" means the place in the watercourse where, at low tide and in a period of low fresh water flow, there is an appreciable increase in salinity due to the presence of sea water.
- 7. "Body of water" means a discrete and homogenous element of surface water or groundwater such as an aquifer, a lake, a reservoir, a stretch of stream, river or canal, an estuary or a stretch of coastal water.
- 8. "Significant body of water" for the purpose of Article 8 shall mean all waters intended for the production of drinking water from an individual source serving more than 15 households.
- 9. "River basin" means the area of land from which all surface run-off flows through a sequence of streams, rivers and, possibly, lakes into the sea at a single river mouth, estuary or delta.
- 10. "Sub-basin" means the area of land from which all surface run-off flows through a series of streams, rivers and, possibly, lakes to a particular point in a water course (normally a lake or a river confluence).
- 11. "River Basin District" means the administrative area of land and sea, made up of one or more neighbouring river basins together with their associated groundwaters and coastal waters, which is established under Article 3(1) as the main unit for river basin management.
- 12. "Competent Authority" means a competent authority established under Article 3(2) or 3(3) to be responsible *inter alia* for applying the rules of this Directive within a particular River Basin District.

- 13. "Surface water status" is the general expression of the status of a body of surface water, determined by the poorer of its ecological status and its chemical status.
- 14. "Good surface water status" means the status achieved by a surface water body when both its ecological status and its chemical status are at least "good".
  - Good surface water status is the environmental objective for surface waters established in point (a) of Article 4(1).
- 15. "Groundwater status" is the general expression of the status of a body of groundwater, determined by the poorer of its quantitative status and its chemical status.
- 16. "Good groundwater status" means the status achieved by a groundwater body when both its quantitative status and its chemical status are at least "good".
  - Good groundwater status is the environmental objective for groundwaters established in point (b) of Article 4(1).
- 17. "Ecological status" is an expression of the quality of the structure and functioning of aquatic ecosystems associated with surface waters. It takes into account the physico-chemical nature of the water and sediment, the flow characteristics of the water and the physical structure of the water body, but it concentrates on the condition of the biological elements of the ecosystem.
- 18. "Natural ecological status" means the theoretical ecological status which would be achieved by a body of surface water in the absence of human activity.
- 19. "High ecological status" means the ecological status achieved by a body of surface water which is demonstrated not to be significantly influenced by human activity.
- 20. "Good ecological status" means the ecological status achieved by a body of surface water which is demonstrated to be significantly influenced by human activity, but which nevertheless has a rich, balanced and sustainable ecosystem.
  - Good ecological status is the ecological status required to meet the environmental objectives for surface waters established in point (a) of Article 4(1).
- 21. "Chemical status" is an expression of the degree to which a body of water is polluted.
- 22. "High chemical status" means the chemical status achieved by a body of water in which none of the substances listed in Annex VIII are present in levels in excess of natural background levels.
- 23. "Good chemical status" means the chemical status achieved by a body of water in which concentrations of the substances from Annex VIII do not exceed the environmental quality standards established in Annex X and other relevant Community legislation setting environmental quality standards and in which the trends in the monitoring data do not suggest that such environmental quality standards will be exceeded in the future.

Good chemical status is the chemical status required to meet the environmental objectives for surface waters and groundwaters established in points (a) and (b) of Article 4(1).

- 24. "Quantitative status" is an expression of the degree to which a body of groundwater is permanently depleted by direct and indirect abstractions and alterations to its natural rate of recharge.
- 25. "High quantitative status" means the quantitative status achieved by a body of groundwater in which abstractions and alterations to the natural rate of recharge have a negligible impact on the nature of the aquifer.
- 26. "Good quantitative status" means the quantitative status achieved by a body of groundwater in which abstractions and alterations to the natural rate of recharge are sustainable in the long term without leading to loss of ecological quality in associated surface waters or damage to associated terrestrial ecosystems.

Good quantitative status is the quantitative status required to meet the environmental objectives for groundwaters established in point (b) of Article 4(1).

- 27. "Pollutant" means those substances and groups of substances listed in Annex VIII.
- 28. "Pollution" means the direct or indirect introduction, as a result of human activity, of substances, vibrations, heat or noise into the air, water or land which may be harmful to human health or the quality of the environment, which result in damage to material property, or which impair or interfere with amenities and other legitimate uses of the environment.
- 29. "Environmental objectives" means the objectives set out in Article 4.

Those environmental objectives shall be regarded as "environmental quality standards" for the purposes of point 7 of Article 2 and Article 10 of Council Directive 96/61/EC<sup>69</sup>.

30. "Environmental quality standard" means the concentration of a particular pollutant or group of pollutants in water, sediment or biota which should not be exceeded in order to protect human health and the environment.

For the purposes of this Directive, environmental quality standards are established at a Community level in Annex X. In addition, environmental quality standards shall be established by Member States under Article 8(2) in respect of waters used for the abstraction of drinking water. The environmental quality standards in Annex X and those adopted under Article 8(2) shall also be regarded as environmental quality standards for the purposes of point 7 of Article 2 and Article 10 of Directive 96/61/EC.

31. "Water intended for human consumption" means water covered by the provisions of Directive 80/778/EEC.

<sup>&</sup>lt;sup>69</sup> OJ No L 257, 10.10.1996, p. 26.

- 32. "Use" of water means:
  - (a) abstraction, distribution and consumption of surface water or groundwater,
  - (b) emission of pollutants into surface water and waste water collection and treatment facilities which subsequently discharge into surface water;
  - (c) any other application of surface water or groundwater having the potential of a significant impact on the status of water.
- 33. "Full cost recovery" means that the following cost elements of any service provided in relation to water use are paid by the user through prices or charges:
  - operation and maintenance costs;
  - capital maintenance cost;
  - capital costs (principal and interest payments); and
  - reserves for future improvements and extensions.
- 34. "Domestic use" means individual household water use, excluding use for commercial activity.
- 35. "Basic level of use" means the amount of water used by the individual person for basic needs. This amount shall be calculated taking into consideration the minimum amount required for human health and hygiene. At all stages, water consumption by domestic machinery should be calculated on the basis of best available techniques.

#### Article 3

#### Coordination of measures within River Basin Districts

- 1. Member States shall identify the individual river basins lying within their national territory and, for the purposes of this Directive, shall assign them to individual River Basin Districts. Small river basins may be combined with larger river basins or joined with neighbouring small basins to form individual River Basin Districts where appropriate. Where groundwaters do not fully follow a particular river basin, they shall be assigned to the nearest or most appropriate River Basin District. Coastal waters shall be assigned to the nearest or most appropriate River Basin District.
- 2. Member States shall ensure that appropriate administrative arrangements, including the designation of appropriate competent authorities, are established to ensure that the application of the rules of this Directive is coordinated and overseen within each River Basin District.
- 3. Where a river basin covers the territory of more than one Member State, the Member States concerned shall jointly establish an international River Basin District. At the request of one or more of the Member States involved, the Commission shall act as an independent mediator to facilitate the establishment of such international River Basin Districts.

Member States shall jointly ensure that appropriate administrative arrangements, including the designation of appropriate competent authorities, are established to ensure that the application of the rules of this Directive is coordinated and overseen within such international River Basin Districts.

- 4. Where a river basin extends beyond the territory of the Community, the relevant River Basin District and competent authorities should be jointly established with the relevant non-Member States.
- 5. Member States may designate existing national or international bodies as competent authorities for the purposes of this Directive. In such cases, they shall ensure that the resulting competent authorities have the powers and authority needed to meet the obligations imposed by this Directive.
- 6. Member States shall designate the competent authorities by 31 December 1999.
- 7. Member States shall provide the Commission with a list of their competent authorities and of the competent authorities of all the international bodies in which they participate by 30 June 2000. For each competent authority the information set out in Annex I shall be provided.
- 8. Member States shall inform the Commission of any changes to the information provided according to paragraph 7 within three months of the change coming into effect.

#### Article 4

#### **Environmental objectives**

- 1. Member States shall draw up and make operational within a comprehensive River Basin Management Plan the programmes of measures envisaged as necessary, in order to:
  - (a) prevent deterioration of ecological quality and pollution of surface waters and restore polluted surface waters, in order to achieve good surface water status in all surface waters by 31 December 2010;
  - (b) prevent deterioration of groundwater quality, restore polluted groundwater, and ensure a balance between abstraction and recharge of groundwater, in order to achieve good groundwater status in all groundwaters by 31 December 2010; and
  - (c) comply with all standards and objectives relating to Protected Areas by 31 December 2010, unless otherwise specified in the Community, national or local legislation under which the individual Protected Areas have been established.
- 2. If the objectives established under point (c) of paragraph 1 are incompatible with those established under points (a) or (b) thereof, the objectives established under point (c) shall take priority.

- 3. The deadlines established under points (a) and (b) of paragraph 1 may be extended for specific bodies of water when all the following conditions are met:
  - (a) natural conditions do not allow rapid improvements in the status of the body of water;
  - (b) all the measures required under Article 13 to bring the body of water to the required standard by the extended deadline have been established and made operational by 31 December 2007; and
  - (c) the extension of the deadline, and the reasons for it, are specifically mentioned in the River Basin Management Plan required under Article 16.
- 4. Less stringent environmental objectives than those required under points (a) and (b) of paragraph 1 of a limited area may be established for specific bodies of water when all the following conditions are met:
  - (a) the body of water is severely affected by human activity and improvements in status are proven to be impossible or prohibitively expensive;
  - (b) the environmental objectives are established so as to ensure no further deterioration in status in order not to compromise the achievement of the objectives of this Directive in other bodies of water within the same River Basin District;
  - (c) the establishment of less stringent environmental objectives, and the reasons for it, are specifically mentioned in the River Basin Management Plan required under Article 16;
  - (d) such less stringent objectives are established in a way which does not undermine the implementation of existing Community environmental legislation.

#### Article 5

#### Characteristics of the River Basin District

- 1. Member States shall ensure that an analysis of the characteristics of each River Basin District is undertaken and that it is completed by 31 December 2001. Such analyses shall cover the following elements:
  - (a) the geographical and geological characteristics of the River Basin District;
  - (b) the hydrographical characteristics of the River Basin District;
  - (c) the demographic characteristic of the River Basin District; and
  - (d) land use and economic activity within the River Basin District.

In order to ensure that the maximum use can be made of all available information and to avoid duplication of data collection, cooperation shall be ensured with statistical authorities at national and Community level.

- 2. The technical specifications of Annex II shall, for the purpose of the analysis, be adopted by the Commission by 31 December 1999 at the latest, in accordance with the procedure laid down in Article 25. The technical specifications shall replace the current Annex II.
- 3. The analyses shall be reviewed, and if necessary updated by 31 December 2007 and every six years thereafter.

## Review of the environmental impact of human activity

- 1. Member States shall ensure that, for each River Basin District, a review of the impact of human activity on the status of surface waters and on groundwater is undertaken and that it is completed by 31 December 2001. Such reviews shall cover the following elements:
  - (a) estimations of point source pollution;
  - (b) estimations of diffuse source pollution;
  - (c) estimations of water abstractions; and
  - (d) an analysis of other anthropogenic influences on the status of water.
- 2. The technical specifications of Annex III shall, for the purpose of the review, be adopted by the Commission by 31 December 1999 at the latest, in accordance with the procedure laid down in Article 25. The technical specifications shall replace the current Annex III.
- 3. The review shall be updated by 31 December 2007 and every six years thereafter.

#### Article 7

## Economic analysis of water use within the River Basin District

- 1. Member States shall ensure that, for each River Basin District, an economic analysis of water use is undertaken in order, *inter alia*, to provide the basic information for the purposes of Article 12, and that it is completed by 31 December 2001. Such analyses shall cover the following:
  - (a) the abstraction and distribution of fresh water:
  - (b) the collection and discharge of waste water;
  - (c) the volumes, prices and costs (including environmental and resource costs and benefits) associated with points (a) and (b);
  - (d) the breakdown of the data collected under points (a), (b) and (c) according to different sectors of the economic activity, broken down at least into households, industry and agriculture;
  - (e) long-term forecasts of supply and demand;

- (f) estimates of investments in infrastructure by the public and private sectors; and
- (g) the historical trends in the data collected under points (a) to (f), including seasonal data where relevant, and future projections under a number of price and investment scenarios, covering, at least, the previous six years and projections for the following twelve years;
- 2. The technical specifications of Annex II shall, for the purpose of the analysis, be adopted by the Commission by 31 December 1999 at the latest, in accordance with the procedure laid down in Article 25. The technical specifications shall replace the current Annex II.
- 3 The economic analyses shall be updated by 31 December 2007 and every six years thereafter.

## Waters used for the abstraction of drinking water

- 1. Member States shall carry out, within each River Basin District, the identification of all significant bodies of water which are used for the abstraction of water intended for human consumption or which may in the future be used for the abstraction of such water.
- 2. For each body of water identified under paragraph 1, Member States shall ensure the establishment of environmental quality standards designed to ensure that, under the anticipated water treatment regime, and in accordance with Community legislation, the resulting water will meet the requirements of Directive 80/778/EEC.

#### Article 9

#### **Register of Protected Areas**

- 1. Member States shall ensure the establishment of a register of all areas lying within each River Basin District which have been designated as requiring special protection under specific Community, national or local legislation for the protection of their surface water and groundwater or for the conservation of habitats and species. They shall ensure that the register is completed by 31 December 2001.
- 2. The register shall include all areas designated under Article 8(1) and all Protected Areas listed in Annex IV.
- 3. Within each River Basin District, the register of Protected Areas shall be kept under review and up to date.

#### Article 10

#### Monitoring of surface water status and groundwater status

1. Member States shall ensure the establishment of programmes for the monitoring of water status in order to establish a coherent and comprehensive overview of water status within each River Basin District. For surface waters such programmes shall cover monitoring

of the ecological and chemical status. For groundwaters such programmes shall cover monitoring of the chemical and quantitative status. These programmes shall be operational by 31 December 2001. Such monitoring shall cover the elements listed in Annex V.

2. The technical specifications of Annex V for this purpose shall be adopted by the Commission by 31 December 1999 at the latest, in accordance with the procedure laid down in Article 25. The technical specifications shall replace the current Annex V.

#### Article 11

## **Monitoring of Protected Areas**

- 1. Member States shall ensure the establishment of programmes for monitoring the status of their Protected Areas within each River Basin Districts. These programmes shall be operational according to the timetable contained in Community, national or local legislation under which the individual Protected Areas have been established. Where there is no such timetable in force fixing a commencement date on, or earlier than, 1 January 2002, the monitoring programme shall be operational from that date.
- 2. The technical specifications shall, for the purpose of monitoring, be those contained in Community, national or local legislation under which the individual Protected Areas have been established. Where no such technical specifications for monitoring exist, Member States shall ensure that appropriate technical specifications are established.

#### Article 12

## Charges for the use of water

- 1. By 2010, Member States shall ensure full cost recovery for all costs for services provided for water uses overall and by economic sectors, broken down at least into households, industry and agriculture.
- 2. Following the analysis required under Article 7 and Annex II of methods for calculating the environmental and resource costs and benefits of water use, the Commission shall, where appropriate, come forward with proposals to ensure that environmental and resource costs not covered under paragraph 1 are reflected in the price of water uses.
- 3. Without prejudice to the application of Articles 92, 93 and 94 of the Treaty, Member States may grant exemptions to the provisions of this Article for the following reasons:
  - (a) in order to allow a basic level of water use for domestic purposes at an affordable price;
  - (b) in order to allow capital costs subsidies for infrastructure projects where Community funding is provided under Articles 130a to 130e of the Treaty and which are designed to assist in the achievement of the environmental objectives set out under Article 4 of this Directive;
  - (c) in order to take account of a specific geographical or climatic situation of a region eligible for assistance pursuant to Objectives 1, 5b and 6 of the Structural Funds.

Exemptions shall be explained in detail in the River Basin Management Plans required under Article 16, and a detailed explanation shall be sent to the Commission within six months of the entry into force of those exemptions.

4. Member States shall establish timetables for the full application of the provisions of this Article. Details of such timetables shall be included in the River Basin Management Plans required under Article 16.

#### Article 13

## Programme of measures

- 1. Member States shall ensure the establishment within each River Basin District of a programme of measures designed to achieve the environmental objectives established under Article 4. A programme of measures shall be part of each River Basin Management Plan in accordance with Article 16.
- 2. The programme of measures shall include "basic measures" and, where necessary, in accordance with paragraph 4, "supplementary measures".
- 3. "Basic measures" are compulsory elements of the programme of measures. They shall consist of:
  - (a) those measures required to implement Community, national or local legislation for the protection of water, including measures required under the Community legislation listed in Part A of Annex VI and, in particular, to give full effect to the provisions of Directive 96/61/EC in relation to those industries and activities described in Annex I to that Directive;

For basic measures covering emission of pollutants, a combined approach shall be applied, using control of pollution at source through the setting of emission limit values and the setting of environmental quality standards;

- (b) measures required to implement the charges for water use required under Article 12;
- (c) measures required to meet the environmental quality standards established under Article 8(2) for waters intended for the abstraction of drinking water by the deadlines established under Article 4(1);
- (d) the following measures to apply to all bodies of water having a chemical status below "good":
  - (i) more intensive monitoring of the extent and nature of the pollution within the body of water;
  - (ii) investigation of the source of the pollution; and
  - (iii) immediate review of all relevant authorizations and discharge permits followed by action based upon the level of risk involved;

- (e) controls over the abstraction of fresh surface water and groundwater, including a register of water abstractors and a requirement of prior authorization for abstraction except in areas where the Member State concerned has demonstrated, and reported to the Commission, that abstraction has no significant impact on water status and that the total level of abstraction amounts to a small proportion of the available resources;
- (f) a requirement for prior authorization for all activities having a potentially adverse impact upon the status of water where such prior authorization is not otherwise provided for under other Community legislation; and
- (g) a prohibition on the direct discharge into groundwater of the substances listed in Annex VIII.
- 4. "Supplementary measures" are those measures designed and implemented in addition to the basic measures in order to achieve the objectives set out under Article 4. The programme of measures shall include whatever supplementary measures are considered necessary in order to achieve those objectives, notably in relation to sustainable water consumption. Part B of Annex VI contains a non-exclusive list of supplementary measures.
- 5. The programme of measures shall be established for each River Basin District by 31 December 2004 and all the measures shall be made operational by 31 December 2007.
- 6. The programmes shall be reviewed, and if necessary updated by 31 December 2010 and every six years thereafter. Any new or revised measures established under an updated programme shall be made operational within three years of their establishment.

#### Interim measures to combat pollution

- 1. If the monitoring programme under Article 10 identifies bodies of water where the chemical status has fallen below "good" since the preparation of the most recent review of the programme of measures required under Article 13, Member States shall ensure that, according to the level of risk involved, the following additional interim measures are taken as soon as possible in advance of the next review of the programme of measures:
  - (a) more intensive monitoring of the extent and nature of the pollution within the body of water;
  - (b) investigation of the source of the pollution;
  - (c) immediate review of all relevant authorizations and discharge permits; and
  - (d) the identification of additional measures to be taken.
- 2. Member States shall ensure that appropriate measures are taken to consult interested parties on these additional interim measures, but they should not, as a result, unnecessarily delay their implementation.

## Issues which fall outside the competence of a competent authority

If a competent authority identifies an issue which has an impact on the management of its water but which falls outside its competence, it shall report the issue to the Member State and to the Commission and may make recommendations for the resolution of the issue. Possible reasons for the identification of such issues include the following factors:

- (a) that the source of the problem lies outside the River Basin District;
- (b) that the issue can only be dealt with by measures or legislation at a national or Community level; or
- (c) that the issue relates to other policy areas over which the competent authority has no control.

#### Article 16

## **River Basin Management Plans**

- 1 Member States shall ensure that within each River Basin District a River Basin Management Plan covering the whole of the River Basin District is produced. The River Basin Management Plan shall include the information detailed in Annex VII.
- 2. River Basin Management Plans shall be published by 31 December 2004.
- 3. River Basin Management Plans shall be reviewed and updated by 31 December 2010 and every six years thereafter.

#### Article 17

#### Public information and consultation

- 1. Member States shall ensure that for each River Basin District draft copies of the River Basin Management Plan are published and access granted at least one year before the beginning of the period to which the Plan refers. Upon request access shall be given to background documents and information used for the development of the draft River Basin Management Plan.
- 2. Interested parties shall have at least six months to comment in writing on those documents in order to allow active involvement and consultation.
- 3. Paragraphs 1 and 2 shall apply equally to updated River Basin Management Plans.

### Planning by sub-basin, sector, issue or water type

- 1. River Basin Management Plans may be supplemented by the production of more detailed programmes and management plans to deal with particular aspects of water management, including:
  - (a) programmes and management plans dealing with particular sub-basins within their River Basin District;
  - (b) programmes and management plans dealing with particular sectors of the economy;
  - (c) programmes and management plans dealing with particular water issues; and
  - (d) programmes and management plans dealing with particular classes of water or particular ecosystems.

Reference to such planning activities shall be made in the River Basin Management Plan.

2. Undertaking any of the planning activities shall not exempt Member States from any of their obligations under the rest of this Directive.

#### Article 19

## Accidental pollution

In cooperation with other competent authorities, Member States shall ensure that action is taken to prevent or reduce the impact of accidental pollution incidents, including any required under Council Directive 82/501/EEC<sup>70</sup>. Those measures shall, in particular, cover the risk of accidental pollution due to floods, extinguishing products or by-products from fires occurring in warehouses or plants, and leakage of pollutants during their transport or while in storage. Where appropriate, the measures taken shall include the following:

- (a) hazard analyses and risk assessments of potential sources of accidental pollution;
- (b) preventive measures;
- (c) preparatory measures for responding to emergencies, including procedures for the rapid reporting of pollution incidents to downstream authorities and other interested parties, including water abstractors; and
- (d) measures to restore the body of surface water or groundwater affected by incidents.

<sup>&</sup>lt;sup>70</sup> OJ No L 230, 5.8.1982, p. 1.

## Reporting and the exchange of information

- 1. Member States shall send copies of the following plans to the Commission and to the European Environment Agency within three months of their publication:
  - (a) all River Basin Management Plans covering their national territory and published pursuant to Article 16;
  - (b) all draft River Basin Management Plans covering their national territory and published pursuant to Article 17; and
  - (c) relevant programmes and plans covered by the terms of Article 18;
  - (d) for International River Basin Districts, at least the part of the River Basin Management Plans covering the territory of the Community.

#### Article 21

## Commission strategies against pollution of water

- 1. The Commission may prepare strategies against pollution of water by individual pollutants or groups of pollutants, including any pollution which occurs as a result of accidents.
- 2. Such strategies may be initiated as a result of:
  - (a) recommendations from Member States, or from competent authorities acting under Article 15;
  - (b) recommendations from the European Environment Agency;
  - (c) recommendations from international organizations and conventions to which the Community or its Member States are signatories;
  - (d) risk assessments carried out under Council Regulation (EEC) No 793/93<sup>71</sup>;
  - (e) recommendations from the Community research programmes, or
  - (f) other expressions of concern which come to the attention of the Commission.
- 3. Strategies shall consider the nature of the risk to water and shall take into consideration any possible impact on air and soil quality. They may include recommendations for any of the following classes of action:

OJ No L 84, 5.4.1993, p. 1.

- (a) the consideration of the substance or group of substances in the risk assessment procedure of Regulation (EEC) No 793/93, if it is not already being considered;
- (b) the inclusion of the substance or group of substances in Annex VIII to this Directive and in Annex III to Directive 96/61/EC, if it is not already included in that Directive;
- (c) criteria for selection of priority substances or groups of substances for examination of the risk they pose to the aquatic environment and the desirability of developing a specific Commission strategy for the control of emissions into the aquatic environment. Annex IX contains a list of such criteria;
- (d) the adoption of Community environmental quality standards under paragraph 4;
- (e) the adoption of Community emission limit values under Article 18 of Directive 96/61/EC;
- (f) a review of the relevant authorizations issued under Council Directive 91/414/EEC<sup>72</sup> and Council Directive [Biocides]<sup>73</sup>;
- (g) the adoption of measures under Council Directive 76/769/EEC<sup>74</sup>; or
- (h) the adoption of other appropriate measures at national or Community level.
- 4. Where a Commission strategy recommends the adoption of environmental quality standards applicable to the concentrations of certain pollutants in water, sediments or biota, the Commission shall propose the appropriate measures.

#### **Commission Report**

- 1. The Commission shall publish a Report on the implementation of this Directive by 31 December 2006 and every six years thereafter.
- 2. The Report shall include the following:
  - (a) a review of progress in the implementation of the Directive;
  - (b) a review of the status of surface water and groundwater in the Community;
  - (c) a comparative survey of the River Basin Management Plans submitted in accordance with Article 20, including recommendations for the improvement of future plans;

OJ No L 230, 19.8.1991, p. 1.

OJ reference not yet available

OJ No L 262, 27.9.1976, p. 201.

- (d) a response to each of the recommendations to the Commission made by competent authorities pursuant to Article 15; and
- (e) a summary of any strategies developed under Article 21.

## Plans for future Community measures

- 1. Once a year, the Commission shall present to the Committee referred to in Article 25 an indicative plan of measures having an impact on water legislation which it intends to propose in the near future, including any emerging from the strategies developed under Article 21. The Commission shall make the first such presentation by 31 December 1999.
- 2. The Commission will review this Directive by 31 December 2013 and will propose any necessary amendments to it.

#### Article 24

#### Amendments to the Directive

- 1. Annexes I, II, III, V, VIII and IX may be adapted to scientific and technical progress in accordance with the procedures laid down in Article 25.
- 2. For the purpose of transmission and processing of data, including statistical and cartographic data, technical formats for the purpose of paragraph 1 may be adopted in accordance with the procedures laid down in Article 25.

#### Article 25

#### Committee

The Commission shall be assisted by a Committee composed of the representatives of the Member States and chaired by the representative of the Commission.

The representative of the Commission shall submit to the Committee a draft of the measures to be taken. The Committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority laid down in Article 148(2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission. The votes of the representatives of the Member States within the Committee shall be weighed in the manner set out in that Article. The chairman shall not vote.

The Commission shall adopt \*ne measures envisaged if they are in accordance with the opinion of the Committee.

If the measures envisaged are not in accordance with the opinion of the Committee, or if no opinion is delivered, the Commission shall, without delay, submit to the Council a proposal relating to the measures to be taken. The Council shall act by a qualified majority.

If, on the expiry of three months from the date of referral to the Council, the Council has not acted, the proposed measures shall be adopted by the Commission.

#### Article 26

#### Repeals

- 1. The following are repealed with effect from 31 December 2007:
  - Directive 75/440/EEC;
  - Decision 77/795/EEC;
  - Directive 78/659/EEC:
  - Directive 79/869/EEC:
  - \_ Directive 79/923/EEC; and
  - Directive 80/68/EEC.

#### Article 27

## Implementation

- 1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 31 December 1999 at the latest. They shall immediately inform the Commission thereof.
  - When Member States adopt these provisions, these shall contain a reference to this Directive or shall be accompanied by such reference at the time of their official publication. The procedure for such reference shall be adopted by Member States.
- 2. Member States shall communicate to the Commission the texts of the main provisions of national law which they adopt in the field covered by this Directive.

#### Article 28

## **Penalties**

Member States shall lay down the system of penalties for breaching the national provisions adopted pursuant to this Directive and shall take all the measures necessary to ensure that those penalties are applied. The penalties thus provided for shall be effective, proportionate and dissuasive. Member States shall notify those measures to the Commission no later than the date set out in Article 27(1), and shall notify any subsequent amendment thereto as soon as possible.

## **Entry into force**

This Directive shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Communities.

Article 30

## Addressees

This Directive is addressed to the Member States.

Done at Brussels,

For the Council The President

## Information required for the list of competent authorities

- 1. As required under Article 3(7), the Member States shall provide the following information on all competent authorities within each of its River Basin Districts as well as within each international River Basin District in which they participate.
  - i. Name and address of the competent authority the official name and address of the authority established under Article 3(2).
  - ii. Name and title of correspondent the name and official title of the official to whom all correspondence should be addressed.
  - iii. Geographical coverage of the River Basin District the names of the main rivers within the River Basin District together with a precise description of the position of the terrestrial and maritime frontiers of the River Basin District. This information should as far as possible be available for introduction into the Geographic Information System (GIS) and/or the Geographic Information System of the Commission (GISCO).
  - iv. Legal status of competent authority a description of the legal status of the competent authority and, where relevant, a summary or copy of its statute, founding treaty or equivalent legal document.
  - v. Responsibilities a description of the legal and administrative responsibilities of each competent authority and of its role within each River Basin District.
  - vi. Membership where the competent authority acts as a coordinating body for other competent authorities, a list is required of these bodies together with a summary of the institutional relationships established in order to ensure coordination in a legally binding way of the measures required under this Directive.
  - vii. International relationships where a River Basin District covers the territory of more than one Member State or includes the territory of non-Member States, a summary is required of the institutional relationships established in order to ensure coordination in a legally binding way of the measures required under this Directive.

## Analysis of the characteristics of the River Basin District

- 1. The technical specifications shall establish methods for an analysis of the characteristics of River Basin District listed in Article 5(1) and for economic analyses of water use as required by Article 7(1).
- 2. The technical specifications shall include a common format for the presentation of the analysis of characteristics of the River Basin District and of the economic analysis of water use, and common rules on the amount of information to be included in the summary required as part of the River Basin Management Plan.

The information provided should as far as possible be available for introduction into the Geographic Information System (GIS) and/or the Geographic Information System of the Commission (GISCO).

The collection of information by competent authorities shall be coordinated with the authorities responsible for statistics in Member States in conformity with Community legislation on statistics and in particular with Council Regulation (EC) No 2223/96 of 25 June 1996<sup>75</sup> and Council Regulation (EC) No 58/97 of 18 December 1996<sup>76</sup>.

OJ No L 310, 30.11.1996, p 1.

OJ No L 14, 17.1. 1997, p 1.

## Review of the environmental impact of human activity

1. The technical specifications shall include a common format for the presentation of the review of the environmental impact of human activity and for common rules on the amount of information to be included in the summary required as part of the River Basin Management Plan.

The collection of information by competent authorities shall be coordinated with the authorities responsible for statistics in Member States in conformity with Community legislation on statistics and in particular with Council Regulation (EC) No 2223/96 of 25 June 1996<sup>77</sup> and Council Regulation (EC) No 58/97 of 18 December 1996<sup>78</sup>.

In case the technical specifications indicate more than one method, it must be ensured that such methods lead to comparability of results.

- 2. The technical specifications shall establish methods for estimating the extent and location of point source pollution by the substances listed in Annex VIII and shall be based on information gathered under, *inter alia*, the following Directives, but may include additional requirements:
  - i. Articles 9 and 15 of the Integrated Pollution Prevention and Control Directive (96/61/EC)<sup>79</sup>;
  - ii. Article 11 of the Dangerous Substances Directive (76/464/EEC)<sup>80</sup> and
  - iii. Articles 15 and 17 of the Urban Waste Water Treatment Directive (91/271/EEC)<sup>81</sup>.
- 3. The technical specifications shall establish methods for estimating the extent and the location of diffuse pollution of the substances listed in Annex VIII.
- 4. The technical specifications shall establish methods for identifying those individual bodies of water which are susceptible to the point source and diffuse source pollution identified under sections 2 and 3 above.

OJ No L 310, 30.11.1996, p 1.

OJ No L 14, 17.1.1997, p 1.

OJ No L 257, 10.10.1996, p. 26.

OJ No L 129, 18.5.1976, p. 23.

OJ No L 135, 21.5.1991, p. 40.

5.	The technical specifications shall establish methods for estimating the volume of				
	i.	abstractions for drinking water;			

- ii. abstractions for agricultural uses;
- iii. abstractions for industrial uses; and
- iv. other abstractions.
- 6. The technical specifications shall establish methods for estimating water abstractions:
  - i. total annual demand;
  - ii. seasonal variations in demand; and
  - iii. the efficiency of water use.

#### Protected Areas

- 1. The register of Protected Areas required under Article 9 shall include, where relevant for the purpose of water protection, the following types of Protected Areas:
  - i. areas designated for the abstraction of water intended for human consumption under Article 8;
  - ii. areas designated for the protection of economically significant aquatic species;
  - bodies of water designated as recreational waters, including areas designated as bathing waters under the Bathing Water Directive (76/160/EEC)<sup>82</sup>;
  - iv nutrient sensitive areas, including areas designated as Vulnerable Zones under the Nitrates Directive (91/676/EEC)<sup>83</sup> and areas designated as Sensitive Areas under the Urban Waste Water Treatment Directive (91/271/EEC)<sup>84</sup>; and
  - v. areas designated for the protection of habitats or species where the maintenance or improvement of the status of water is an important factor in their protection, including relevant Natura 2000 sites designated under the Habitats Directive (92/43/EEC)<sup>85</sup> and the Birds Directive (79/409/EEC)<sup>86</sup>.
- 2. The summary of the register required as part of the River Basin Management Plan shall include maps indicating the location of each Protected Area and a description of the Community, national or local legislation under which they have been designated. In the case of bodies of water designated under Article 8, the summary shall include details of the environmental quality standards adopted and the expected treatment regime.

<sup>&</sup>lt;sup>82</sup> OJ No L 31, 5.2.1976, p. 1.

OJ No L 375, 31.12.1991, p. 1.

OJ No L 135, 21.5.1991, p. 40.

OJ No L 206, 22.7.1992, p. 7.

OJ No L 103, 25.4.1979, p. 1.

## Monitoring of surface water status and groundwater status

#### For surface waters:

- 1. The technical specifications for the monitoring of ecological status of surface waters shall establish methods for:
  - i. monitoring of all significant bodies of surface water and representative monitoring of all other bodies of surface water;
  - ii. monitoring of the physico-chemical, biological and physical characteristics of the water body, including quantitative aspects, including dynamic elements such as seasonal variations and long-term natural fluctuations, with most importance being afforded to the biological characteristics;
  - iii. the presentation of monitoring results in a common format or model based on the degree of deviation from natural ecological status or, in the case of artificial water bodies, the degree of deviation from their maximum ecological potential;
  - iv. the use of five classes for the presentation of ecological status, of which the top two classes will be "high ecological status" and "good ecological status".
- 2. The technical specifications for monitoring of the chemical status of surface waters shall establish methods for:
  - i. monitoring of all surface waters identified under section 4 of Annex III as being susceptible to point source or diffuse source pollution by the substances listed in Annex VIII;
  - ii. the use of five classes for the presentation of chemical status of which the top two classes will be "high chemical status" and "good chemical status",

#### For groundwaters:

- 3. The technical specifications for the monitoring of the quantitative status of groundwater shall establish methods for:
  - i. monitoring of all groundwaters used for the abstraction of water and representative monitoring of other groundwaters;
  - ii. monitoring of the quantity of groundwater, including dynamic elements such as seasonal variations, long-term natural fluctuations, the abstraction rate (including indirect abstractions) and the recharge rate;

- monitoring of the impact of changes in groundwater characteristics on the ecological status of associated surface water bodies and on associated terrestrial ecosystems;
- iv. selection of indicators, including natural conditions, for the characterization of the quantitative status of groundwaters with a view to identification of "good quantitative status".
- 4. The technical specifications, monitoring of the chemical status of groundwater shall establish methods for:
  - i. monitoring of all groundwaters identified under section 4 of Annex III as being susceptible to point source or diffuse source pollution by the substances listed in Annex VIII;
  - ii. monitoring at a range of depths;
  - iii. selection of indicators, including natural conditions, for the characterization of the qualitative status of groundwaters with a view to the identification of parameters for "good qualitative status".
- 5. The overall status of any individual groundwater body shall be based on the lower of the two assessments made under sections 3 and 4 above.

## For surface waters and groundwaters:

6. The technical specifications shall be establish recognizing that different methods of monitoring will be appropriate depending on the nature of the body of water, its location and, for surface waters, the aspect of its ecological status which is being examined; and that the technical specifications will have to be flexible to allow the development and refinement of monitoring techniques whilst assuring the comparability of results between different methods and over time.

The technical specifications shall establish monitoring and analysis methods, including criteria for location of sampling stations and frequency as well as quality control systems.

In case the technical specifications indicate more than one method for a specific purpose, it shall be ensured that such methods are leading to comparability of results.

The technical specifications shall include quality assurance provisions and provisions for a common format for the presentation of the results of the monitoring of surface waters and groundwaters and common rules on the amount of information to be included in the summary required as part of the River Basin Management Plan.

## Lists of measures to be included within the Programmes of Measures

#### Part A

- 1. The following is a list of those pieces of Community legislation which, together with national or local legislation, make up the baseline measures to be included in the Programmes of Measures under Article 13(3)(a):
  - i. The Bathing Water Directive (76/160/EEC)<sup>87</sup>
  - ii. The Birds Directive (79/409/EEC)<sup>88</sup>
  - iii. The Drinking Water Directive (80/778/EEC)<sup>85</sup>
  - iv The Major Accidents (Seveso) Directive (82/501/EEC)<sup>90</sup>
  - v. The Environmental Impact Assessment Directive (85/37/EEC)<sup>91</sup>
  - vi. The Sewage Sludge Directive (86/278/EEC)<sup>92</sup>
  - vii. The Urban Waste Water Treatment Directive (91/271/EEC)<sup>93</sup>
  - viii. The Plant Protection Products Directive (91/414/EEC)<sup>94</sup>
  - ix. The Nitrates Directive (91/676/EEC)<sup>95</sup>
  - x. The Habitats Directive (92/43/EEC)<sup>96</sup>
  - xi. The Integrated Pollution Prevention Control Directive (96/61/EC)<sup>97</sup>
  - xii. Other relevant legislation.

#### Part B

- 1. The following is a non-exclusive list of supplementary measures which Member States within each River Basin District may choose to adopt as part of the Programme of Measures required under Article 13(4):
  - i. legislative instruments
  - ii. administrative instruments
  - iii. economic or fiscal instruments
  - iv. negotiated environmental agreements
  - v. emission controls
  - vi. codes of good practice

OJ No L 31, 5.2.1976, p. 1.

OJ No L 103, 25.4.1979, p. 1.

OJ No L 229, 30.8.1980, p. 11.

<sup>90</sup> OJ No L 230, 5.8.1982, p. 1.

OJ No L 175, 5.7.1985, p. 40.

<sup>&</sup>lt;sup>92</sup> OJ No L 181, 8.7.1986, p. 6.

<sup>93</sup> OJ No L 135, 21.5.1991, p. 40.

<sup>&</sup>lt;sup>94</sup> OJ No L 230, 19.8.1991, p. 1.

<sup>95</sup> OJ No L 375, 31.12.1991, p. 1.

<sup>96</sup> OJ No L 206, 22.7.1992, p. 7.

OJ No L 257, 10.10.1996, p. 26.

- vii. abstraction controls
- viii. demand management measures, inter alia promotion of adapted agricultural production such as low water requiring crops in areas affected by drought
- ix. efficiency and re-use measures, inter alia promotion of water efficient technologies in industry and water saving irrigation techniques
- x. construction projects
- xi. desalination plants
- xii. rehabilitation projects
- xiii. artificial recharge of aquifers
- xiv. educational projects
- xv. research, development and demonstration projects
- xvi. other relevant measures

#### River Basin Management Plans

- 1. River Basin Management Plans shall cover the following elements:
  - i. a summary of the information provided to the Commission under Article 3(7);
  - ii. a summary of the environmental objectives adopted under Article 4;
  - iii. a summary of the analysis of the characteristics of their River Basin District required under Article 5;
  - iv. a summary of the review of the environmental impact of human activity required under Article 6:
  - v. a summary of the economic analysis of water use within the River Basin District required under Article 7;
  - vi. a summary of the register of Protected Areas designated under Article 9;
  - vii. a summary of the results of the monitoring programmes carried out under Articles 10 and 11;
  - viii. a summary of the programme of measures adopted under Article 13, including:
    - a. for those measures described under Article 13(3)(a), a description of the European Community, national or local legislation from which the measures derive, together with details of the way in which they have been, or will be, implemented within the River Basin District;
    - b. a summary of the measures taken for the implementation of the charges for water use required under Article 12 and Article Article 13(3)(b);
    - c. a summary of the measures taken under Article 1 Article 13(3)(c) to achieve the environmental quality standards established under Article 8(2);
    - d. a summary of the measures taken under Article Article 13(3)(d) for bodies of water with a chemical status below "good".
    - e. details of the abstraction controls adopted under Article Article 13(3)(e) and, where such controls have not been adopted, reasoned justification for the exemption;
    - f. details of the additional measures adopted under Article Article 13(3)(f), and
    - g. details of the supplementary measures adopted under Article Article 13(4),

including, in each of the above cases, an identification of the individuals or organizations responsible for undertaking the various measures and a timetable for their intended implementation, and

- ix. a summary of the measures taken under Article 19 to reduce the impact of accidental pollution incidents.
- 2. The first update of the River Basin Management Plan and all subsequent updates shall also include:
  - i. a summary of any changes or updates since the publication of the previous version of the River Basin Management Plan;
  - ii. an assessment of progress towards the achievement of the environmental objectives and an explanation for any environmental objectives which have not been reached;

- iii. a summary of, and an explanation for, any measures foreseen in the earlier version of the River Basin Management Plan which have not been undertaken, and
- iv. a summary of any additional interim measures adopted under Article 14 since the publication of the previous version of the River Basin Management Plan.
- 3. The River Basin Management Plan shall contain a summary of the results of the public consultation undertaken on the draft Plan under Article 17 together with a summary of the changes made as a result.
- 4. The River Basin Management Plan shall contain references to any programmes and plans covered by the terms of Article 18.
- 5. The River Basin Management Plans shall also include any recommendations for national or Community action adopted under Article 15.

#### **Pollutants**

- 1. Organohalogen compounds and substances which may form such compounds in the aquatic environment.
- 2. Organophosphorus compounds.
- 3. Organotin compounds.
- 4. Substances and preparations which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction in or via the aquatic environment.
- 5. Persistent hydrocarbons and persistent and bioaccumulable organic toxic substances.
- 6. Cyanides.
- 7. Metals and their compounds.
- 8. Arsenic and its compounds.
- 9. Biocides and plant protection products.
- 10. Material in suspension.
- 11. Substances which contribute to eutrophication (in particular, nitrates and phosphates).
- 12. Substances which have an unfavourable influence on the oxygen balance (and can be measured using parameters such as BOD, COD, etc.).

#### ANNEX IX

Criteria for selection of priority substances or groups of substances for examination of the risk they pose to the aquatic environment and the appropriateness of developing a specific Commission strategy for the control of emission to the aquatic environment.

## The substance or group of substances:

- 1. has been shown to cause unacceptable effects in or there are strong indications of risk to the aquatic environment;
- 2. has been found widespread in one or more compartments of the aquatic environment;
- 3. reaches the aquatic environment from a diversity of sources through a diversity of pathways.

## Environmental quality standards

- 1. The "quality objectives" established under the daughter Directives of the Dangerous Substances Directive (76/464/EEC)<sup>98</sup> shall be considered as environmental quality standards for the purposes of this Directive. They are established in the following Directives:
  - i. The Mercury Discharges Directive (82/176/EEC)<sup>99</sup>;
  - ii. The Cadmium Discharges Directive (83/513/EEC)<sup>100</sup>;
  - iii. The Mercury Directive (84/156/EEC)<sup>101</sup>;
  - iv. The Hexachlorocyclohexane Discharges Directive (84/491/EEC)<sup>102</sup>, and
  - v. The Dangerous Substance Discharges Directive (86/280/EEC)<sup>103</sup>.

<sup>&</sup>lt;sup>98</sup> OJ No L 129, 18.5.1976, p. 23.

<sup>&</sup>lt;sup>99</sup> OJ No L 81, 27.3.1982, p. 29.

OJ No L 291, 24.10.1983, p. 1.

OJ No L 74, 17.3.1984, p. 49.

OJ No L 274, 17.10.1984, p. 11.

OJ No L 181, 4.7.1986, p. 16.

#### FINANCIAL STATEMENT

#### 1. TITLE OF OPERATION

Proposal for a Council Directive establishing a framework for Community action in the field of water policy

#### 2. BUDGET HEADING INVOLVED

B4-304

#### 3. LEGAL BASIS

- Article 130s(1) of the EC Treatry,
- Proposal for a European Parliament and Council Decision on an Action Programme for Integrated Groundwater Protection and Management (OJ No C 355, 25.11.96, p. 1).

#### 4. DESCRIPTION OF OPERATION

#### 4.1 General objective

The Directive has three objectives which should be achieved at the latest by 2010:

- achieve good surface water status in all surface waters
- achieve good groundwater status in all groundwaters, and
- comply with all standards and objectives relating to areas requiring special protection, including waters for the abstraction of drinking water.

#### 4.2 Period covered and arrangements for renewal

The Directive requires

#### for Member States:

- Adoption and execution of River Basin Management Plans by December 2004.
   Plans shall include all measures envisaged necessary to reach good status of surface waters and groundwaters.
- Revision every six years of River Basin Management Plans.

The following main actions to ensure the application of the provisions of the Directive:

- Implement principle of charging users for all water use at full cost recovery prices by 2010 (abstraction, distribution, consumption, collection, treatment and other uses);
- Designate waters for abstraction of drinking water by December 2000;

- Analyse characteristics of River Basin Districts by December 2001:
  - for environmental impact of human activity;
  - for complete registration of Protected Areas;
  - for establishing monitoring programmes for water status;
  - for complete economic analysis of water use.

## for the Commission:

- A review of the Directive by 31 December 2013

The following actions in order to assist and oversee the implementation of the Directive will begin at the earliest by 1998:

- Draw up technical specifications for annexes of Directive:
  - for monitoring of water quality and quantity by 31 December 1999;
  - for qualitative and quantitative assessment of point and diffuse source pollution by 31 December 1999;
  - or analysis of physical, demographic and economic characteristics of River Basin Districts by 31 December 1999,
  - for identification of sectors for use of economic instruments in the water policy, as appropriate;
- Evaluate and publish sixannual report on implementation of Directive by 31 December 2006:
- Present annual indicative Commission plan for planned proposals for measures for water protection and use from 31 December 1999;
- Adopt decisions where Member States do not reach agreement on transboundary water protection and use, as appropriate;
- Negotioation with third countries concerning transboundary water protection and use, as appropriate;
- Evaluate Member States exemptions from the general provisions of the Directive, as appropriate;
- Chair regulatory committee, as appropriate;
- Arrange bi-annual conference for water professionals, water users and regulators from 2000 or later as appropriate.

## 5. CLASSIFICATION OF EXPENDITURE OR REVENUE

- 5.1 DNO
- **5.2** CD

#### 6. TYPE OF EXPENDITURE OR REVENUE

## Expenditure:

Technical and scientific work linked to:

- the development of a uniform system for compliance monitoring programmes;
- specification of details of annexes for the characterization and analysis of environmental and economic parameters;
- the publishing of reports on the imlementations of the Directive;
- possible development of Commission strategies for the control of pollutants.

#### 7. FINANCIAL IMPACT

## 7.1 Method of calculating total cost of operation (relation between individual and total costs)

<u>re: Studies</u> Studies required for technical and scientific assistance for the specification of annexes will largely cover the scope of studies foreseen under the proposed Directive on Ecological Quality of Water (COM(93) 680 final) which will be repealed and substituted by this proposal. The studies are foreseen in the budget for 1997;

<u>re: Reports.</u> This proposal repeals 4 existing Directives and a Decision requiring five reports, Council Directives 75/440/EEC, 78/659/EEC, 79/923/EEC, 80/68/EEC and Council Decision 77/795/EEC. This proposal also substitutes the report required under the proposed Directive on Ecological Quality of Water, COM(93) 680 final, which will be repealed. Furthermore, reporting will be a six-year cycle in stead of three-year cycle, implying a decrease in expenditure.

## 7.2 Itemized breakdown of cost

Commitment appropriations ECU million (at current prices)

Breakdown	year n	n+9	n+15	Total
7	19			
Technical and scientific	97			
asisstance for the				
specification of Annexes				
(studies):				
(a) studies on full cost	0.15			0.15
recovery for water use	0.15			0.15
(b) studies on	0.05			0.05
characterizations of point				
and diffuse sources				
pollution and other				
environmental impact of				
human activity		,		
(c) studies on monitoring	0.1			0.1
methods of chemical and				
ecological status of surface				
water and groundwater				
Commission Poport avery		0.3	0.3	0.6
Commission Report every six years from 2006		0.3	0.3	0.0
Six years from 2000				
Total	0.3	0.3	0.3	0.9

## 7.3 Schedule of commitment and payment appropriations

ECU million

	year n 1997	n+9	n+15	Total
Commitment appropriations	0.3	0.3	0.3	0.9
Payment appropriations				
year n 1997	0.125			
n + 1	0.175			
n + 9		0.3		
n + 15			0.3	
n + 21				
n+27				
n + 33				
and subs. yrs				
Total	0.3	0.3	0.3	0.9

#### 8. FRAUD PREVENTION MEASURES

- it will be explicitly specified in contracts that all work performed is the property of the Commission;
- final payment of contractors will only take place after reception and examination of the reports and services requested.

#### 9. ELEMENTS OF COST-EFFECTIVENESS ANALYSIS

## 9.1 Specific and quantified objectives; target population

Under the general objective of achieving good water status for surface water and groundwater the objectives of the operation may be specified further to: increase protection of human water needs, ecosystems, and water for economic purposes.

## Specific objectives

- prevention of further deterioration of water status, and protection and enhancing of status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems;
- promotion of sustainable water consumption based on long-term planning of available resources;
- securing a sufficient supply of good quality water for human consumption and for economic purposes;
- designation of an administrative structure ensuring coherent and transparent administration of all waters;
- involvement and consultation of water users and the public in preparation of measures;
- establish charging of users for all water use at full cost recovery prices;
- the establishing of a coherent framework for Community action in the field of water policy which integrates Community policies of importance to sustainable water management.

Information on the water status is not fully available and implementation of the Directive will be an ongoing process with information gathering to monitor and assess the impact on water status and water uses. In this sense, the Directive has a procedural nature. Further quantification of specific objectives listed will be ensured as an ongoing process, in close cooperation with Member States, in the implementation of the Directive. Quantification depends on the involvement at local level in Member States because what constitutes "good water status" will vary depending on specific hydrological characteristics, geology, climate, and socioeconomic setting for water use.

The target populations of the Directive are:

- Current and future water users who depend on water of a "good status" will benefit from a sustainable management of water resources, foremost with a sufficient supply of a good quality of drinking water and water for food production, and other industrial processing, for agricultural production, fisheries and fish farming, tourism as well as for leisure and other purposes.
- Downstream users of water who should get a more equitable access to water.
- Water users presently cross-finance other water users who should get a more equitable payment structure e.g. households who presently cross-subsidise industrial users and vice versa, tx payers who subsidise through direct state aid or hidden cross-subsidies.
- Private and public administrations who should get a better cost-effectiveness of administrative routines due to integration and coherence in water management.
- Biodiversity of plant and animal species in aquatic ecosystems.

#### 9.2 Grounds for the operation

A continuous pressure and downwards trend in water status of Community waters call for better integration and coherence in Community water protection and management. This Directive offers a framework to coordinate and partly substitute a patchwork of existing, specific Community and national legislation on water.

#### Subsidiarity:

- Current Community legislation will be integrated within one coherent Framework covering all waters, quality and quantity issues as well as ensuring a combined approach for control of emissions to the aquatic environment through emission limit values and environment quality standards. A coherent set of common definitions and monitoring methodologies will be established. This can only be achieved at the level of the Community. The need for an overall coordination of water status across borders and with third countries under international conventions likewise can only be established at Community level.
- Within this framework, in order to take into account the diverse situations in Member States decisions will be taken as close as possible to where water is being used or affected. Priority is given to action within the responsibility of Member States through the drawing up of specific programmes of measurs within a general Management Plan. Further, the Directive will require the involvement of interested parties, including water users, and the general public in the drawing up of such plans and thus ensure transparency.

## Cost-effectiveness of the operation:

Establishing a coherent framework for water management is expected to lead to improved cost-effectiveness in administrative routines due to coordination of measures, better information background and avoiding duplication of efforts.

Charging for water use at full cost recovery prices and where possible including additional environmental and resources costs will lead to an improved cost-effectiveness of water use as well as an improved protection and more prudent use of water.

Taking into account the diversity of conditions and needs in the Regions of the Community and depending on the level of implementation of existing obligations for water protection, cost-efficiency is likely to vary. Cost-effective solutions for control of pollution and water abstraction may vary accordingly. The procedural nature of the Directive ensure flexibility for implementation of the principle of full cost recovery prices and inclusion of environmental and resource cost by 2016.

The achievement of good water status rely extensively on the full implementation of all existing Community legislation for water protection, and in particular on The Urban Waste Water Treatment Directive (91/271/EEC, the nitrates Directive (91/676/EEC and the Integrated Pollution Prevention and Control Directive (96/61/EEC). Depending on the implementation of these Directives and the local conditions supplementary action may be needed, the nature and extent of which will vary in the specific situations.

#### 9.3 Monitoring and evaluation of the operation

Clear target dates have been set for the achievement of the objectives of the Directive.

The Commission, in close cooperation with Member States and the European Environment Agency, and with involvement of water users and the general public, will monitor development in water status. Reports will be submitted to the Commission every six years. Commission will report annually on any planned proposals to improve water protection in the light of developments.

Member States are obliged to put into operation all programmes of measures envisaged as necessary for the achievement of good status of all waters by 2007 in the form of River Basin Management Plans. Such plans shall be revised every six years.

Member States are obliged to ensure full application of the principle of full cost recovery prices and where possible to impose charges representing environmental and resource costs by 2010.

Member States are obliged to establish monitoring programmes for the status of waters. Member States are further obliged to public consultation on plans and results in the form of six-annual revision of programmes and operational measures for the application of the rules of the Directive. Reports on development shall be publicly available and sent to the Commission every six years.

The Directive establishes common definitions and methodologies for analysis and monitoring allowing comparability of efforts and achievements.

## 10. ADMINISTRATIVE EXPENDITURE (SECTION III, PART A OF THE BUDGET)

Actual mobilization of the necessary administrative resources will depend on the Commission's annual decision on the allocation of resources, taking into account the number of staff and additional amounts authorized by the budgetary authority.

## 10.1 Effect on the number of posts

There is no increase in personnel, 1 fonctionaire and 1 agent temporaire are already in the budget.

Type of post		Staff to be assigned to managing the operation		Source		Duration
		Permanent	Temporary	Existing	Additional	
		<u>posts</u>	posts	resources in	resources	
				the DG or		-
				department		
				concerned		
Officials or	Α	1	1	2	0	Temporary
temporary	В	0	0	0	0	post:
staff	C	1/2	0	1/2	0	1997-1999
Other resource	es	0	0	0	0	
Total		1 1/2	] ]	2 1/2	0	

## 10.2 Overall financial impact of additional human resources

ECU (current prices)

	Amounts	Method of calculation
Officials	0	
Temporary staff	0	
Other resources (indicate budget	0	
heading)		
	0	
Total	0	

## 10.3 Increase in other administrative expenditure as a result of the operation

ECU (current prices)

Budget heading	Amounts	Method of calculation
Meetings of the Article 26 Committee (once or twice/year) from 1998	ECU 20 500	ECU 10 250/meeting x two meetings/year
Bi-annual conference from 2000	ECU 25 000	ECU 50 000/conference every second year. 200 participants, meeting room (Brussels), interpretation, documents
Average/year from year 2000	ECU 45 500	

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