

**THE EUROPEAN UNION'S WATER FRAMEWORK DIRECTIVE**

**TOWARDS AN INTEGRATED MANAGEMENT  
OF WATER RESOURCES AT THE RIVER BASIN SCALE**

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## EXECUTIVE SUMMARY

The European Union water policy has recently entered into a new phase with the adoption of the Directive 2000/60/EC establishing a framework for Community action in the field of water policy (or Water Framework Directive). This new pillar of European water policy builds on key principles such as: emphasising the ecological dimension of environmental objectives, integrated water management at the river basin scale, involvement and participation of stakeholders and the public, and the integration of economic principles, methods and instruments into water policy and management. Overall, it aims at achieving *good water status* for all waters by 2015.

The paper summarises the main elements of the Water Framework Directive. And it identifies a series of challenges countries and actors from the water community are likely to face for its implementation. Although the Water Framework Directive has been adopted recently, many activities targeted to its implementation are already under way. At the European level, a common strategy for sharing information and knowledge, and developing common methodologies and approaches, has been agreed for supporting the Water Framework Directive's implementation.

The dynamics developed in the context of this common strategy and its preliminary deliveries favour an optimistic prospect for future implementation. However, with the implementation phase being initiated only recently, the main challenges remain in front of us. Among those, the forthcoming reforms of key European sector and structural policies will represent as many test-cases for assessing the political willingness of countries to effectively put into practice the principles of the Water Framework Directive.

## **THE EUROPEAN UNION'S WATER FRAMEWORK DIRECTIVE HAS BEEN ADOPTED!**

December 2000: the Directive 2000/60/EC establishing a framework for Community action in the field of water policy (or Water Framework Directive) was published in the Official Journal of the European Communities and thereby entered into force. This adoption of the Water Framework Directive (WFD) and its publication follows more than five years of discussions and negotiations between the European Union (EU) institutions that involved a wide range of actors from the European water community. This process stressed the overall support to the key principles of the WFD. It also showed the diversity of views with regards to the level of application of these principles, be it under different hydrological situations and institutional setup, or for different economic sectors and social groups.

The WFD is evidently not the start of EU efforts to solving water issues. Initiated as early as 1975, EU water legislation has been developed into three phases<sup>ii</sup>:

- The first phase of legislation has mainly imposed a series of quality standards for individual uses (drinking water, bathing, fishing and harvesting of shellfish) and water types (surface water or groundwater) of the water (inland and coastal) system;
- The main objective of the second phase of legislation is to control and reduce the enrichment of water by nutrients, especially compounds of nitrogen and/or phosphorous environmental issues, and eutrophication. It proposed specific levels of wastewater collection and treatment for agglomerations<sup>iii</sup>. And it promoted the use of improved agricultural practices for reducing nitrogen and phosphorous input from agriculture into the water environment<sup>iv</sup>.
- The third phase added complementary building blocks to existing legislation. It imposed new standards for drinking water (tightening the norm for lead for example) and addressed pollution from large industrial installations.

However, the WFD provides the first overall and coherent policy frame that considers the hydrological cycle from the river source to its mouth along with all water uses. As such, it repeals some older pieces of legislation<sup>v</sup> (for example the directive dealing with the quality of surface shellfish water), and integrates the elements and obligations of other legislation pieces such as the directives dealing with urban wastewater treatment and with the control of nitrates from agriculture.

## **THE KEY ELEMENTS OF THE EUROPEAN UNION'S WATER FRAMEWORK DIRECTIVE**

The overall purpose of the European Union's Water Framework Directive is the establishment of a framework for the protection of all waters which:

- Prevents further deterioration of, protects and enhances the status of water resources;
- Promotes a sustainable water use based on long-term protection of water resources;
- Aims at enhancing protection and improvement of the aquatic environment through measures for the reduction or phasing out of discharges, emissions and losses of priority (hazardous) substances;
- Ensures the reduction of pollution of groundwater and prevents its further pollution;
- Contributes to mitigating the effects of floods and droughts.

Overall, the key objective of the Directive is *achieving good water status for all waters by 2015*<sup>vi</sup> through a series of actions Member States need to take. These actions, along with the compliance deadlines specified by the WFD in brackets, include:

- The identification of individual river basins<sup>vii</sup> and of competent authorities for the WFD (2003);

- The characterization of river basins in terms of pressures, impacts and economics of water uses (2004);
- The development of appropriate ecological status systems for different water eco-types and their inter-calibration to ensure similar “levels of efforts” are required for all types (2006);
- The upgrading of existing monitoring systems for complying with the specific requirements of the WFD (2006);
- The development of integrated river basin management plans that propose programmes of measures for achieving the environmental objectives of the WFD cost-effectively in each river basin (2009);
- The implementation of water pricing policies that enhance the sustainability of water resources (2010);
- The identification of a programme of measures that needs to be made operational (2012) and implemented so as to achieve the environmental objectives of the Directive (2015).

Member States may not reach good water status for all waters by 2015, for reasons of technical feasibility, disproportionate costs or natural conditions that need to be made explicit and transparent in the river basin management plans. They then have the possibility to engage into two further six-year cycles of planning and implementation.

Key to the Water Framework Directive is its emphasis on the process on which Member States need to embark for implementation. In coherence with the 1998 UN/ECE Aarhus Convention on Access to Information, Public Participation and Access to Justice in Environmental Matters, and the recent and ongoing debate on governance, transparency and participation in decision making in Europe (see for example: European Commission 2001a), the Directive specifies that Member States shall encourage the active involvement of all interested parties (stakeholders) in the development and implementation of the river basin management plans. They shall also inform and consult the public, including users, in

particular on the timetable and work programme for the production of the river basin management plan (2005), the overview of significant water management issues in the river basin (2006), and the draft river basin management plan (2008).

For concluding this summary of the WFD text, let's emphasise the spirit of this directive: achieving *good water status* for all waters will require an effective implementation of the different *integration* facets touched upon by the Directive as illustrated in Box 1. Indeed a difficult and complex tasks but a challenging one.

### **Box 1. Integration: a key concept underlying the Water Framework Directive**

(Adapted from: European Commission 2002a)

*Integration* is a key concept to the management of water resources at the river basin scale. As such, it is central to the Water Water Framework Directive's text and its implementation. Its many facets include:

- **Integration of environmental objectives**, combining quality, ecological and quantity objectives for protecting valuable aquatic ecosystems and ensuring an overall *good status* for all waters;
- **Integration of all water resources**, combining fresh surface water and groundwater, wetlands, transitional and coastal water resources **at the river basin scale**;
- **Integration of all water uses, functions, values and impacts** into a common framework, i.e. investigating water for the environment, water for health and human consumption, water for economic sectors, transport, leisure, water as a social good, etc ;
- **Integration of analyses and expertise**, combining hydrology, hydraulics, ecology, chemistry, soil sciences, technology engineering and economics, to develop a shared representation of the river basin, assess current pressures and impacts on water resources and identify measures for achieving the environmental objectives of the Directive in the most cost-effective manner;
- **Integration of water legislation into a common and coherent framework**. The requirements of some old water legislation have been reformulated in the Water Framework Directive to meet modern ecological thinking. After a transitional period, these old Directives will be repealed. Other pieces of legislation must be co-ordinated in the river basin management plan where they form the basis of the programme of measures;
- **Integration of a wide range of measures, including pricing and other economic instruments, into a common management approach**. Programmes of measures, including basic measures specified in existing directives and supplementary measures for achieving the environmental objectives of the WFD, are presented in the **management plan** developed for each river basin;
- **Integration of stakeholders and the civil society in decision-making**, by promoting transparency and information to the public, and by offering a unique opportunity for involving stakeholders in the development of river basin management plans;
- **Integration of different decision-making levels that influence water resources and water status**, be it local, regional, national and European, water-related or relevant to other sector and structural policies, for an effective management of all waters; and,
- **Integration of water management from different Member States**, for river basins shared by several countries, existing and/or future Member States of the European Union.

## **SOME CHALLENGES FOR IMPLEMENTATION**

Because of its encompassing and integrated nature, the WFD results in a series of challenges for implementation. Some of those are touched upon in the following paragraphs that are by no means exhaustive.

### **Addressing the demand for new expertise and knowledge**

Implementing the WFD requires the development and adaptation of a wide range of expertise and knowledge.

- In some cases, expertise and knowledge already exist, but not necessarily applied and developed at the “right” spatial scale. This is the case, for example: (i) for many aspects linked to stakeholders’ participation into water management that is often experienced at local scale – how to transpose and adapt these experiences to the socio-economic and institutional contexts of large river basins such as the Rhine or the Danube?; (ii) knowledge on climate change has often been developed in a global policy making context – how to account for climate change in developing management plans for river basins of limited sizes?
- In other cases, expertise, approaches and tools belong to the research arena. And efforts are required for making those operational at the river basin scale. This is often the case for existing economic expertise applied to water resources in Europe that too often disregards the reality of the hydrological cycle and existing heterogeneity in constraints and behaviour. It is also the situation faced by part of the expertise on aquatic ecology that will need to be mobilised for defining objectives, reference conditions and establishing inter-calibration.



- Finally, the WFD will require research and development for: understanding the functioning of transitional waters; developing robust methods and approaches for scenario and prospective analysis; integrating wetlands within the wider water management sphere; deepening the understanding of surface water and groundwater interactions; investigating adaptation policies and mechanisms to climate change; or undertaking sound cost-effectiveness analysis where open questions remain for both the cost and the effectiveness elements of this analysis.

In addition to these issues that are expertise specific, and in line with the message put forward in Box 1, there is an overall gap in expertise and knowledge on integrated approaches, methods and tools. While often referred to, experience of analytical frame at the river basin scale that integrates biophysical and decision-making processes, that investigate different spatial and temporal scales, and that can be used as plate-form for interactions between actors... remains rare!

### **Giving due attention to economics**

For the first time in the EU, the Water Framework Directive clearly integrates economics into an environmental policy. It calls for the application of economic principles (e.g. the *polluter pays principle*), economic approaches and tools (e.g. cost-effectiveness analysis or the assessment of costs and benefits) and the implementation of economic instruments (e.g. pricing).

The economic analysis, to be performed in the context of the development of river basin management plans, will have several roles:

- First, the assessment of the economic significance of key water uses in the river basin, today but also tomorrow. This forward-looking component of the economic analysis will require assessing trends and likely changes in key economic drivers influencing pressures and water uses;

- Second, the economic assessment of potential measures for reaching *good water status*. This assessment will mainly build on cost-effectiveness analysis requiring an operational integration between economics (the *cost* element) and biophysical expertise (the *effectiveness* element). In some cases, when the costs of achieving *good water status* will be considered *disproportionate*, an assessment of costs and benefits will be undertaken.
- Third, and in accordance with the WFD text<sup>viii</sup>, it will form the basis for developing pricing policies that promote a more sustainable use of water resources and that ensure an adequate recovery of all the costs of water services by key economic sectors.

Because of very limited past experience of integrating economics into water management in Europe, economists are facing a clear challenge: to be accepted by water experts and integrated into the analysis at its early stages to ensure economics effectively play a role in supporting decision making and the selection of measures for achieving the environmental objectives of the WFD. From the part of economists, information and communication, along with clear efforts for being practical, providing operational approaches and adequately accounting for the functioning of the hydrological cycle, will be required.

### **Developing the right organisational framework**

Because of subsidiarity concerns, the WFD says little on organisational requirements for its implementation. It only asks Member States to designate an authority that will have overall competence for the WFD implementation.

Today, few countries have embarked on a review of their institutional set-up in line with the new challenges of the WFD such as implementation at the river basin scale, implementation of pricing policies, participation of concerned parties, or information and consultation of the public. This *institutional conservatism* as seen by some environmental NGOs may be justified on the willingness to minimise related transaction costs and to ensure existing organisations join the ongoing implementation

momentum<sup>ix</sup>. Whether current institutional setups will adequately deal with the challenges of the new WFD remains to be seen.

In the context of the international river basins, where effective co-ordination is required between riparian countries (be EU Member States, candidate countries or third-countries), organisational issues have taken a significant share of preliminary discussions targeted to the implementation of the WFD. A key issue to be addressed is the role in the implementation of the WFD of existing international conventions and commissions established for the main international river basins (Rhine, Danube, Scheldt, Maas, Elbe, Oder). Interestingly, the WFD has already provided a new impetus to some of these conventions and commissions that were rather dormant since their adoption and creation.

#### **Allocating resources to implementation**

To ensure new expertise, approaches and knowledge is made available for implementing the WFD will require human and financial resources, on the part of governmental organisations traditionally involved in the implementation of water legislation but also for local authorities, non-governmental organisations, economic sector organisations, environmental NGOs, private sector representatives that will jointly embark on the implementation process. In many cases, information and training will need to be provided to ensure existing expertise is re-engineered to answer the WFD challenges. In an overall policy environment where budgetary control is more the rule than the exception, resource allocation will represent a possible bottleneck to effective implementation of the Directive. It will then be important to ensure limited available resources are shared between the breadth of expertise required for implementing the WFD, and not solely allocated to traditional water engineering and technical expertise.

Allocating enough resources to the WFD process may be more problematic for candidate countries to the EU as compared to Member States. Faced with similar obligations with regards to the implementation of the WFD, these countries encounter severe resource constraints further stressed by

the priority given to the current transposition (and follow-up implementation) into national legislation of older EU water directives that are part of the environmental *acquis*. While the WFD can be seen as an added burden to these countries, it may represent to the contrary an opportunity for ensuring a more cost-effective and coherent implementation of the water-related elements of the environmental *acquis*.

### **Developing coherent and standardized reporting**

Vast amount of monitoring and reporting data will be collected within the frame of the WFD. Standardisation of information systems, analyses and reporting methods will be key to coherent reporting, monitoring and evaluation. It matters for reporting obligations from countries to the European Commission. It also matters for carrying out effective public information and consultation, especially in international river basins where information from different sources and countries will be jointly reported and discussed.

### **From reporting compliance to effective management and policy change**

Reporting obligations for Member States are clearly specified in the WFD, and will be reviewed as part of any assessment of countries compliance with the obligations of the WFD. However, these reporting obligations represent the upper part of the iceberg, as they are to inform of the progress of the overall process that leads to the development of the river basin management plans and their effective implementation.

Developing an analysis of the critical path required for implementing the WFD stresses that some activities need to be undertaken ahead of deadlines referred to in the WFD text. It is the case, for example, for efforts aimed at involving interested parties that will need to start at the earliest for ensuring appropriation of the process and of its deliveries. It is also the case for the designation of water bodies modified heavily by human activities for which softer environmental objectives will be set-up. In other cases, the critical path analysis identifies activities to be postponed: although requested

for 2004 by the WFD, the cost-effectiveness analysis of measures cannot be performed by that date because environmental objectives and significant water management issues will not have yet been defined and identified.

Pressures in terms of financial and human resources may give priority to reporting for compliance. It will be important to remain alert to ensure the WFD implementation is effectively about integrated river basin management and not merely about integrated water reporting. Developing a process with effective involvement of stakeholders and actors is likely to provide a certain safeguard in this regard.

### **Ensuring coherence between the WFD and other policies**

While many efforts are currently focused on the implementation of the WFD *per se*, it is recognised that many difficulties in implementing the directive will originate from other EU policies: for example, sector policies that target the development of specific economic sectors such as agriculture, transport or energy - or structural and cohesion policies that often support the construction of infrastructures.

Although progress can be seen over the past decade in the legislation governing these policies, the integration of environmental concerns into these policies in practice remains limited. Examples of contradictions between policies include: the promotion of hydropower as “clean energy” in the context of the Kyoto protocol versus the aim of the WFD for restoring ecosystems including sites currently and potentially used for hydropower production; or discussions on enhancing the fluvial transport capacity of large European rivers versus restoring the ecological continuum of these rivers as promoted by the WFD.

As the implementation of the WFD will gain momentum, and as information on pressures, impacts and the economic of water uses will start being collected for all river basins in Europe, it will be time for the water community to get further involved in reforms of key structural and sector policies. In the long term, higher coherence between the WFD and other policies will ensure most cost-effective implementation of the WFD itself and better use of overall financial resources.

Although politically less sensitive, coherence with other EU water initiatives will be required: more specifically, the strategy on integrated coastal zone management, the marine strategy currently under preparation, or the new bathing water directive, all promoting an integrated analysis and management of specific components of the overall water system. The WFD also offers a unique opportunity for integrating water protection and nature protection.

## **ACCOMPANYING THE IMPLEMENTATION OF THE WATER FRAMEWORK DIRECTIVE**

While the WFD has been adopted less than two years ago, many activities pertaining to its implementation have been launched already, by Member States and candidate countries to the EU that will need to implement this Directive alike, by government departments and Non-Governmental Organisations (NGOs)<sup>x</sup> involved at local, national and EU levels in water management and policy. This situation contrasts with past EU water policies where implementation often took some years before being duly considered and that are often “lagging behind” in terms of implementation deadlines and requirements (see for example on the Nitrates directive: European Commission 2002b).

At the EU level, a specific initiative has been launched: a common strategy for supporting the implementation of the WFD (European Commission 2001b). Agreed by the water directors of the EU Member States, Norway and the European Commission in May 2001, thus less than a year after the adoption of the Directive, the key elements of this common strategy include sharing information and knowledge, and developing common methodologies and approaches. And it strongly builds on involving experts from candidate countries to the EU and stakeholders from the water community. This initiative represents a clear innovation in EU environmental policy implementation. It logically follows from a series of informal discussions between EU water directors that started during the

preparation phase of the WFD, because of the recognized strategic nature and complexity of this Directive. It builds on the early recognition by many countries of potential difficulties in implementation, because of the limited expertise in specific components of the Directive, and limited (financial and human) resources available for developing this expertise within a rather short time. Although the common implementation strategy focuses mainly on the implementation of the WFD *per se*, it also deals with the need for further policy development including daughter directives<sup>xi</sup>, a coherent research programme tailored to the needs of the WFD and the development of strategies for integrating the WFD principles and requirements into key community policies.

To implement this common strategy, a specific organizational structure has been setup. It includes:

- The group of the EU water directors, that plays the role of the overall decision body for this strategy.
- A series of working groups dealing with specific thematic and technical issues<sup>xii</sup>. The main objective of these working groups is the development of non-legally binding guidance. An additional working group has been created for organizing and undertaking the integrated testing of all guidance documents in a number of pilot river basins representing a wide range of hydrological, institutional and socio-economic conditions throughout Europe.<sup>xiii</sup>
- A strategic co-ordination group that oversees the activities of the working groups and report directly to the EU water directors.

Flexibility represents an important dimension of this strategy. Indeed, it must respond to (emerging) needs of countries and stakeholders as the implementation of the WFD proceeds. The working groups that have been established at the outset will soon complete their mandate. Some may continue to exist and operate, others may cease to exist, and new working groups may be created for tackling new thematic issues. The working group dealing with economic issues, for example, has already produced a non-legally binding document on the economic analysis required for the WFD (European Commission

2002a). The mandate of this working group has been reviewed, and new issues have then been identified for further work (for example: making operational methods for assessing environmental and resource costs). Another example of this flexibility can be found with regards to the members of the water directors group: since June 2002, it includes also all water directors of the candidate countries. Looking at the past 18 months shows that the common strategy has been successful so far in providing a frame and impetus for developing coherent and shared approaches for implementing specific elements of the WFD. Experts from governmental and non-governmental organizations have put efforts and energy for ensuring it is a success and an effective process, as illustrated by the first deliveries of this strategy. Clearly much remains to be done for integrating the output of individual working groups, something that will be achieved through bilateral discussions between working groups but more importantly through the integrated testing of all guidance documents in pilot river basins as mentioned above. Also, how the common strategy integrates the views of all actors involved in the process, without changing the content and balance of the WFD, remains an every day challenge. For many involved, the common strategy represents indeed an institutional change that requires reflection and adaptation...

## **THE WATER FRAMEWORK DIRECTIVE: WHAT ARE THE INNOVATIONS?**

A detailed review of the WFD's text emphasizes that it is not the individual technical components of the WFD that are innovation in water management and policy. For example:

- Integrated water management at the river basin scale was promoted as early as 1971 by the RAMSAR convention on wetlands. And the river basin scale is present in EU directives from the second phase through the identification of sensitive or vulnerable zones requiring specific interventions. Today, it is one of the most common buzzword of the water community, be it in



Europe or elsewhere both in developed and developing countries. But examples of *good practices* still remain rare.

- Participation of stakeholders and the public in water management has an old tradition in some societies. More recently, participation principles are often followed for water management at the local scale. The literature on participation and water is indeed very large, maybe more focused on developing countries where stakeholders participation has been a basic component of many funding agencies programmes and projects for the last two decades. How to apply participation principles for water management at the scale of large river basins, such as the Danube or the Rhine, remains to be tested.
- The integration of economics into water policy is not a recent phenomenon: the *polluter pays principle* is a basic principle to EU policy since the mid seventies; cost and benefit analyses are systematically performed in the UK for any proposed (water) policy; and the need to better account for the economic dimensions and value of water was recognized in 1992 in the Dublin Conference and by the declaration of the Rio Summit. Similar to the integrated management of water resources, *good practices* of pricing that enhance the sustainability of water resources remain rare, the emphasis being too often on the financial rather than on the economic and sustainability dimensions of pricing.

However, the WFD cannot be limited to its individual components and key principles. As it stands today, there are four areas where the WFD and the process that is accompanying its development and implementation can be considered as innovative:

- The WFD integrates all these individual pieces into a common framework. While this can be seen as an accomplishment, it clearly increases the complexity of the WFD, its understanding and its implementation.

- It is an adopted legislation, thus likely to have more leeway and effects than research documents, conventions or softer legislation. This is likely to “force” applying and testing the key principles of the WFD under a wide range of socio-economic, hydrological and institutional situations. Thus, a situation that will lead to common learning that will benefit the entire water community worldwide.
- The WFD has been developed in a rather open and transparent manner<sup>xiv</sup> that as such represented an innovation in EU environmental policy-making. With current changes in policy-making, many policies have since been developed along similar participatory lines. And openness and transparency are also key principles for developing the first two daughter directives of the WFD pertaining to hazardous priority substances and to groundwater.
- The way the policy is being currently implemented – the common implementation strategy led by the EU water directors may represent today the most innovative part of the WFD. Clearly, it does not change the overall implementation responsibility that remains on the shoulders of Member States. However, it significantly enhances the involvement and appropriation of the implementation process by many at the European level.

## **LOOKING FORWARD TO THE FUTURE**

We are just at the beginning... indeed, and although the ongoing implementation process can lead to optimism, most of the challenges lie in front of us!

- We will face the first milestone of the Directive in 2004 – Member States reporting will allow us to assess the seriousness and importance given to implementation – from building a catalogue of data and information (the basic requirement for compliance...) to developing an

process and first characterization of river basins that can effectively lead to the identification of key water management issues and actions.

- The year 2004 will also provide the means for assessing the first deliveries of the common implementation strategy - has guidance delivered by the common implementation strategy proved useful, adequate, of relevance to the diversity of situations faced by experts in Member States and candidate countries? Also, has enough information and training been provided on these guidance documents to ensure they can be used effectively?
- While the positive start of the common implementation strategy is fully recognised, with the first delivery (economics guidance) in June 2002 and most of the guidance documents from other working groups expected by the end of the year, it is now entering into a critical integration phase via the integrated testing of individual guidance documents in pilot river basins.
- Enlargement will take place soon – for today’s candidate countries that will become tomorrow’s Member States, the WFD represents a challenge in terms of human and financial resources. Adequately implemented, the WFD represents a real opportunity for building a coherent and cost-effective implementation of the entire *water acquis*.
- Reforms of key EU policies, be structural or sector policies, will take place within the next couple of years. These reforms will be important tests for assessing the willingness of governments and actors to integrate the WFD’s principles and objectives into these policies. Of particular importance is the forthcoming reform of the Common Agricultural Policy foreseen for 2006 but that has already been initiated through its recent mid-term review (European Commission, 2002c). Other key policy areas where the environmental objectives of the WFD will be balanced against other objectives include transport, energy, and structural and cohesion policies.

Overall, the Water Framework Directive represents a clear step forward in terms of water legislation and policy making in Europe. It should be shared with others outside Europe and its key principles promoted such as currently done in the context of the new water initiative launched by the EU at the World Summit on Sustainable Development in Johannesburg<sup>xv</sup>. However, as mentioned above, we are just at the beginning in implementing some of the elements of the WFD. Thus, this promotion can only be modest, based on discussions on these principles, their operationality under concrete situations, and more importantly the sharing of experiences in river basins in Europe and elsewhere that will deliver a common learning.

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<sup>i</sup> The views expressed in this paper are solely those of the author.

<sup>ii</sup> The exact references of legislative texts and water-related directives referred to in the present paper have not been included in the paper itself. For more information on existing European water directives, to consult the WEB site of DG Environment <http://www.europa.eu.int/comm/environment/water>.

<sup>iii</sup> Urban Waste-water Treatment Directive (91/271/EEC)

<sup>iv</sup> Nitrates Directive (91/676/EEC)

<sup>v</sup> The list of legislation to be repealed is specified in Article 22 of the Water Framework Directive.

<sup>vi</sup> The WFD refers to the *water body* as the basic management and compliance checking unit.

<sup>vii</sup> The WFD refers to river basin districts, being a grouping of river basins having similar features. This grouping is of direct relevance for small river basins for example, for which preparing separate river basin management plans is likely to be too cumbersome. It is also used for grouping river basins belonging to common administrative units that will continue to play a role in the implementation of the WFD.

<sup>viii</sup> A specific article of the WFD (Article 9) is devoted to cost recovery and water pricing. This article specifies :

*Member States shall ensure by 2010*

- *that water-pricing policies provide adequate incentives for users to use water resources efficiently, and thereby contribute to the environmental objectives of this Directive,*
- *an adequate contribution of the different water uses, disaggregated into at least industry, households and agriculture, to the recovery of the costs of water services...*

<sup>ix</sup> It is worth mentioning that institutional questions linked to the implementation of the WFD do not raise the same concerns in candidate countries to the EU. This may be explained by the recent drastic changes in many organisations and institutional setups in these countries, and by the accession mood making experts and government departments more ready to experiment the implementation of the basic elements of the WFD.

<sup>x</sup> See for example the seminar series on the implementation of the Water Framework Directive developed by the environmental NGO WWF with support from the European Commission – WEB site <http://www.panda.org/europe/freshwater/seminars/seminars.html>

<sup>xi</sup> Two daughter directives are currently under preparation: (i) a daughter directive on priority substances that fixes emission limits and quality standards for these substances ; (ii) a daughter directive on groundwater that fixes quality standards for key man-made substances in groundwater, along with thresholds for reversing negative trends in groundwater quality. A Commission proposal is expected for both daughter directives.

<sup>xii</sup> The working groups are organised around thematic issues that include : (i) assessment of pressures and impacts ; (ii) identification and designation of heavily modified water bodies ; (iii) reference conditions for inland surface waters ; (iv) typology and classification of transitional and coastal waters ; (v) intercalibration ; (vi) economic analysis ; (vii) monitoring ; (viii) Tools for the assessment and classification of groundwater ; (ix) best practices in river basin planning ; (x) Geographic Information Systems.

<sup>xiii</sup> So far, river basins that have been proposed include : the national river basins Marne (France), Shannon (Ireland), Odensee (Denmark), Oulujoki (Finland), Guadiana (Portugal), Jucar (Spain), Piniós (Greece), and the international river basins of the Scheldt, Moselle-Sarre, Tisza, Neisse. Proposals may still be made mainly by candidate countries keenly interested in applying and testing the guidance documents.

<sup>xiv</sup> Clearly, because of their political nature and the role and responsibility of each EU institutions in policy making, parts of the negotiation and adoption process are less open to stakeholders. This is the case for the conciliation procedure that involves solely the European Parliament and the Council, the European Commission playing the role of facilitator.

<sup>xv</sup> See WEB site <http://europa.eu.int/comm/environment/wssd>

