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IMPLEMENTING EC WATER LAW: THE CASE OF THE STATE UNION OF SERBIA AND MONTENEGRO

The State Union of Serbia and Montenegro intends to adapt its water law, in particular that applicable to the Danube river, to existing European Community water legislation. This would be an important step in preparation for the State Union's eventual accession to the European Union, an event which I sincerely hope will happen in the reasonably near future. In order to help identify the legislative efforts necessary, this paper will first explain the existing EC water law with particular emphasis on the Water Framework Directive (WFD). Second, it will discuss the meaning and scope of the duty to implement directives and assess which provisions of the WFD have to be transposed into national law. By way of conclusion, it will make recommendations on steps considered necessary for the intended adaptation of domestic to EC water law.

I. European Water Protection Directives in Force

1. Directives Enacted before the Entry into Force of the Single European Act

European water legislation dates back to a period when the EC Treaty provisions about environmental policy did not yet exist. For enacting what fre-

quently is called the “first wave” of European water legislation, the Community institutions had to take recourse to Articles 94, 95 and 308 (formerly 100, 100a and 235) E.C.¹ This first group of directives² primarily focused on quality standards for specific types of water bodies – bathing waters,³ fish⁴ and shellfish waters⁵ and waters used for drinking water abstraction.⁶ A total of eight water directives was adopted between 1975 and 1980.⁷ Generally speaking, most of these directives set compulsory environmental quality standards for water bodies intended for particular types of use, and require Member States to designate such water bodies, to establish plans of action and implementation as well as pollution reduction programmes, and to analyse, monitor and inspect the quality of such water bodies. By contrast, directives 76/464 and 80/68 on the protection of, respectively, surface water and groundwater against pollution caused by dangerous substances, follow an emission-based approach in seeking to limit discharges of substances designated as dangerous by inclusion in the directives’ Annexes. In addition, directive 80/778 fixes maximum permissible concentrations and non-mandatory guide values for certain undesirable substances in drinking water and required Member States to take the necessary measures to ensure compliance.⁸

¹ *Kraemer, L.*, *E.C Environmental Law*, Fourth Edition, 2000, p. 184.

² For an outline of the “first wave” water legislation, see *Bloech, H.*, *European Water Policy and the Water Framework Directive: an Overview*, [2004] *JEEPL*, pp. 170/171; *Grimeaud, D.*, *Reforming EU Water Law: Towards Sustainability?* [2001] *EEnvLR*, p. 41.

³ Council Directive 75/160/EEC, [1976] *O.J. L* 31, p. 1.

⁴ Council Directive 78/659/EEC, *O.J. L* 1978 L 222, p. 1.

⁵ Council Directive 79/923/EEC, [1979] *O.J. L* 281, p. 47.

⁶ Council Directive 75/440/EC, [1975] *O.J. L* 194, p. 26; see also Council Directive 79/869/EEC of 9 October 1979, [1979] *O.J. L* 271, p. 44.

⁷ In addition to the measures listed in footnotes 3 to 6, the following directives constitute the first wave of water legislation: Council Directive 76/464/EEC on control of surface water pollution by dangerous substances, [1976] *O.J. L* 129, p. 23, as amended by Directive 91/692/EEC, [1991] *O.J. L* 377, p. 48; Council Directive 80/778/EEC relating to the quality of water intended for human consumption, [1980] *O.J. L* 229, p. 11, as last amended by Directive 98/83/EC, [1998] *O.J. L* 330, p. 32; Council Directive 80/68/EEC on the protection of groundwater against pollution caused by certain dangerous substances, [1980] *O.J. L* 20, p. 43.

⁸ For details, see *Jans, J. H.*, *European Environmental Law*, Second Edition, 2000, pp. 341 – 358; *Kraemer* (footnote 1), pp. 183 – 198.

2. Directives Addressing Principal Causes of Water Pollution

In the 1990s, a further group of Directives was enacted to address principal causes of water pollution, that is urban waste water, agriculture and industry. The 1991 Urban Waste Water Treatment Directive⁹ was based on Article 175 (formerly 130s) E.C. The Directive aims at reducing the pollution of surface waters with nutrients, in particular nitrates and phosphates from urban waste water, including domestic waste water and the mixture of domestic waste water and industrial waste water and/or run-off rainwater. Member States are required to provide, by the end of 2005, a sewerage system for all agglomerations of more than 2,000 people. The deadline for equipping agglomerations of more than 15,000 people with such a system expired at the end of 2000. The Directive also provides that Member States arrange for secondary treatment of waste water before it enters the sewerage systems. This requirement is subject to the same deadlines as apply to establishing the sewerage system. The discharge of sludge from treatment installations into waters had to be phased out by the end of 1998. Furthermore, Member States have to designate sensitive areas according to certain criteria. Discharges of urban waste water into these areas are required to undergo more stringent treatment than discharges into areas not so designated. Areas amenable to such designations include, in particular, waters which are found to be eutrophic, and waters which are intended for the production of drinking water. The Directive also authorizes Member States to define less sensitive areas which may be made subject to more lenient provisions for waste water treatment.

The Nitrates Directive aims to reduce water pollution caused or induced by nitrates from agricultural sources.¹⁰ It requires Member States to identify, according to criteria specified in Annex I, the waters which are affected or can be affected by nitrate pollution. All known areas of land in Member States' territories which drain into the waters so identified must then be designated as vulnerable areas. This requirement applies to areas where waters contain a concentration of nitrates in excess of 50 mg/l and the Member State concerned considers that the discharge of nitrogen compounds from agricultural sources makes a "significant contribution" to the overall concentration of nitrates.¹¹ On-

⁹ Directive 91/271/EEC, [1991] O.J. L 135, p. 40, amended by Commission Directive 98/15/EC, [1998] O.J. L 67, p. 29; for a summary, see *Kraemer* (footnote 1), pp. 197/198, and *Jans* (footnote 8), pp. 354/355..

¹⁰ Directive 91/676/EEC, [1991] O.J. L 375, p. 1; for a summary see *Jans* (footnote 8), pp. 355/356.

¹¹ Case C-293/97 *Standley* [1999] E.C.R. I-2603.

ce these zones have been designated, Member States must set up action programmes consisting of certain mandatory measures. For instance, the limit for the application of livestock manure is set at the amount of manure containing 170 kg of nitrates per hectare and year. Outside the vulnerable zones, farmers are to be encouraged voluntarily to implement a “code of good agricultural practice.”

The Directive on Integrated Pollution Prevention and Control (“IPPCD”)¹² takes an integrated approach to controlling pollution of important environmental media by industrial installations listed in its Annex I. As stated in the Directive’s preamble, attempts to control emissions into air, water and soil separately may encourage the shifting of pollution among the various environmental media rather than protect the environment as a whole. The general obligations specified in Article 3 IPPCD clearly reflect the integrated approach. More particularly, Article 3 requires Member States to ensure that installations are operated in such a way that all appropriate preventive measures are taken against pollution, in particular through application of the best available techniques; no significant pollution is caused; the Community legislation on waste avoidance, recovery and disposal is complied with; energy is used efficiently; the necessary measures are taken to prevent accidents and limit their consequences; and the necessary measures are taken upon definitive cessation of activities to avoid all pollution risk and return the site of operation to a satisfactory state. The Directive includes detailed provisions on the granting of permits with a view to implementing the integrated approach. First, Article 7 requires Member States to take the measures necessary to ensure that the conditions of, and procedure for the grant of the permits are fully coordinated where more than one competent authority is involved. The competent authority shall grant a permit containing conditions guaranteeing that the installation complies with the requirements of the directive or, if it does not, shall refuse to grant the permit. All permits granted must include details of the arrangements made for air, water and land protection (Article 8 IPPCD). As specified in Article 9(3) IPPCD, permits have to include emission limit values for pollutants which are likely to be emitted from the installation concerned into water, air or land. Article 9(4) IPPCD stipulates that the emission limit values “shall be based on the best available techniques” (“BAT”). The phrase “best available techniques” is further broken down in Article 2(11) IPPCD.¹³ “Best” is defined as “most effective in achieving a high general level of protection of the envi-

¹² Directive 96/61/EC, [1996] O.J. L 257, p. 26, last amended by Regulation (EC) No. 1882/2003, [2003] O.J. L 284, p. 1; for an outline, see *Kraemer* (footnote 1), pp. 115 – 118, and *Jans* footnote 8), pp. 330 – 332.

¹³ For an explanation of the BAT standard, see *Bell, St. & McGillivray, D.*, *Environmental Law*, fifth edition, 2000, pp. 396/397.

ronment as a whole.” This is not an absolute term and there may be a number of different techniques which would fall within this definition. “Techniques” include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned. “Available” techniques are those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator. This should exclude experimental techniques or techniques which are disproportionately costly. The language of the definition is vague which grants some degree of discretion to regulatory agencies in determining applications for permits on a case-by-case basis. There is, however, some supplementary guidance to be found in the BAT reference documents. As required by Article 16(2) IPPCD, the Commission established an exchange of information between Member States and the industries which fall under the Directive in order to establish BAT, associated monitoring and development in these areas. There is now an IPPC Information Exchange Forum (“IPPCIEF”) on which all Member States are represented. Trade associations and NGOs also attend the meetings. The Commission must publish the results of the information exchange every three years. The main purpose of the IPPCIEF is to prepare BAT reference documents (“BREF”) which describe the best available techniques for each specific industrial process. These documents will have to be taken into account when determining BAT either for a sector or for an installation.

3. The Water Framework Directive (“WFD”)

a) The Integrated Approach and its Limitations

The water framework directive 2000/60/EC¹⁴ creates an innovative water management regime that seeks better to address, in an integrated fashion, deficiencies of water quality as well as water supply shortages. Abandoning previous legislative approaches which only protected a limited number of water bodies intended for specific uses, the WFD makes protection of all of Europe’s waters – rivers and lakes, groundwater, transitional and coastal waters – subject to one single, though highly complex, legal regime. Consequently, the WFD repeals most “first wave” Community water legislation.¹⁵ In particular, the 1975 direc-

¹⁴ [2000] O.J. L 327, p. 1, amended by Decision No. 2455/2001/EC, [2001] O.J. L 331, p. 1.

¹⁵ For the wide-ranging change of legislative approach embodied in the WFD, see *Bloech* [2004] JEEPL, p. 172; *Grimeaud* [2001] EELRev, pp. 41-43.

tive on the quality of surface water intended for the abstraction of drinking water, the 1978 directive on the quality of freshwater to support fish life, and the 1979 directive on the quality required of shellfish water will be repealed at the latest in 2013. The WFD also provides for abrogation of several directives aimed at protecting surface water and groundwater against pollution caused by dangerous substances. The 1980 groundwater directive in its entirety will expire in 2013. Article 22(2) WFD provides that the 1976 directive on dangerous substances will be repealed in 2013, with the exception of its Article 6. As further stipulated by the WFD, Article 6 which authorized the EC Council to set environmental quality standards and emission limit values ceased to have effect upon the entry into force of the WFD. The “first wave” legislation will be replaced by a single regulatory instrument, the WFD, which seeks to achieve “good status” for all waters by 2015 and introduces the “river basin district” as the key unit for integrated water management. This new approach aims at simplifying implementation of EC water policy, at addressing hydrological incoherence and overlaps in standards, and at ensuring that relevant issues of public health and environmental protection are dealt with in an integrated manner. However, Annex IX WFD results in the continuation in force of existing standards for hazardous substances until their eventual replacement by new standards set under the WFD.¹⁶ Furthermore, the 1976 bathing water and the 1980 drinking water directive as well as all “second wave” legislation aiming at water protection will remain in force even after 2013. This includes the 1991 Nitrates Directive, the 1991 Urban Waste Water Directive, and the 1996 IPPC Directive. Thus, integration as envisaged by the WFD will not be complete.¹⁷ Consequently, several provisions of the WFD call for Member States to coordinate implementation of the new water regime with measures required by the “second wave” directives.¹⁸

¹⁶ There appears to be some misunderstanding in *Grimeaud* [2001] EELRev, p. 42, in whose opinion the “daughter directives” on limit values for dangerous substances will also be repealed, whereas Article 6 of the 1976 directive will continue to be in force even after 2013. However, Annex IX WFD provides that the ‘limit values’ and ‘quality objectives’ set under the daughter directives shall be considered ‘emission limit values’ and ‘environmental quality standards’ for WFD purposes. And the third indent of Article 22(2) reads as follows: “The following shall be repealed with effect from 13 years after the date of entry into force of this Directive [...] Directive 76/464/EC, with the exception of Article 6, *which shall be repealed from the entry into force of this Directive*” (emphasis added). Still, *Grimeaud, loc. cit.*, correctly, though with disputable reasoning, points out that existing standards for hazardous substances will remain in force until replaced by new standards set under the WFD.

¹⁷ To this effect, see also *Grimeaud* [2001] EELRev, pp. 42 - 43.

¹⁸ See, e. g., Annex VI Part A, Articles 22(4), 22(5), 7(2), 10(2) WFD.

Member States are required to implement the new regime in a step-by-step process which will run until 2019, as illustrated by the following table:¹⁹

Transposition into national legislation (Article 24)	
Assignment of river basins to river basin districts (Article 3)	
Designation of competent authorities (Article 3)	December 2003
First analysis of pressures and impacts; economic analysis of water use (Article 5, Annexes II and III);	December 2004
Register of sites for the intercalibration exercise (Annex V)	
Monitoring programmes operational (Article 8, Annex V)	
Latest date for starting public participation (Article 14)	December 2006
Draft river basin management plans (Article 13)	December 2008
Binding river basin management plans (Article 13)	
Programmes of measures (Article 11)	December 2009
Water pricing reflecting cost-recovery (Article 9)	by 2010
Review and update of river basin management plans and programmes of measures (Articles 11, 13)	December 2015
Review of the Directive by the Commission	December 2019

Most of the river basins in Europe cover the territory of more than one state. Thus, a joint understanding of the Directive and a joint approach to implementation are of utmost importance. Therefore Member States and the Commission agreed on a Common Implementation Strategy for the WFD which has resulted in publication of a wide range of nonbinding guidance documents covering major WFD implementation issues.²⁰

b) Environmental Objectives

Article 4(1) WFD sets different environmental quality objectives for Member States' management of surface water, groundwater and protected areas. As specified in the introductory clause of Article 4(1), these objectives are to govern Member States' conduct "in making operational the programmes of measures specified in the river basin management plans."

aa) Surface water

With regard to surface water management, the WFD requires Member States to "protect, enhance and restore all bodies of surface water with the aim

¹⁹ See *Bloech* [2004] JEEPL, p. 175.

²⁰ *Bloech* [2004] JEEPL, p. 176; the guidance documents are available on the Commission's information exchange platform: <http://europa.eu.int/comm/environment/water/water-framework/implementation.html>.

of achieving good surface water status” by December 21, 2015.²¹ The expression “with the aim of” presumably indicates that Member States are subject only to an obligation to use all reasonable means to achieve the specified objectives, rather than a clear-cut obligation to realise them. Thus, Member States have to take all reasonable or possible measures to achieve good surface water status, but they cannot be taken to court for failure to bring about “good status.”²²

Article 2(18) WFD explains that a body of surface water enjoys “good status” when both its ecological and its chemical status are at least “good”. Criteria to determine the ecological status of a surface water body are established by Article 2(22) in conjunction with Annex V WFD. Generally, the WFD stipulates that a surface water body has good ecological status where levels of distortion resulting from human interference are such as to deviate only “slightly” from those which would prevail under undisturbed conditions. Nature and degree of ecological distortions are to be determined on the basis of the examination of several ecological quality elements, including biological elements and hydro-morphological as well as physico-chemical constituents supporting the biological components. For different types of surface water bodies – rivers, lakes, transitional and coastal waters – to enjoy good ecological status, all quality elements have to achieve at least “good status” as opposed to “moderate status.” Perhaps inevitably, the criteria spelled out in the WFD to distinguish “moderate” from “good” or “high” ecological status are rather vague. In this context, Article 5 and Annex II WFD require Member States to analyse the characteristics of each River Basin District to identify the ecological, hydro-morphological and chemical features of water bodies, and Article 8 WFD stipulates that water status has to be monitored continuously. Using the information gathered by means of initial analysis and continuous monitoring, Member States first have to establish for each category of water bodies type-specific hydro-morphological, physicochemical and biological reference conditions for “high” ecological status. Next, they are called upon to attach numerical “ecological quality ratio” values to the biological elements that characterize their remaining surface water bodies and to determine whether each water body enjoys “high”, “good” or “moderate” ecological status. As provided by Section 1.4.1. of Annex V WFD, the numerical values designating the class boundaries will be set by means of what is called an “intercalibration exercise” administered jointly by Member States and the Commission. As part of this exercise, reference surface water sites corresponding to the class bou-

²¹ Article 4(1)(a)(ii) WFD.

²² To this effect, see also *Grimeaud* [2001] EELRev, p. 50.

ndaries will be selected for each Community eco-region²³ by means of expert judgment; each Member State monitoring system will be applied to those reference sites which are both in the eco-region and of a water body type to which the system will be applied pursuant to Article 8 WFD. The results of this application shall be used to set the numerical values for the relevant class boundaries in each Member State monitoring system. Theoretically, uniform numerical values developed under the intercalibration exercise will limit Member States' discretion in determining the status of water bodies. However, the process of setting numerical values starts with selection of the reference water bodies based on expert judgment concerning correspondence to the vaguely-worded normative definitions of water body classes. Thus, the determination whether a water body enjoys good ecological status will to a large extent still depend on how Member States and the Commission interpret these normative definitions of the permissible degree of ecological distortion.²⁴

In addition to "good ecological status", a surface water body also has to achieve "good chemical status." Article 2 § 24 defines "good chemical status" as one in which pollutant concentration do not exceed existing Environmental Quality Standards for hazardous substances,²⁵ Environmental Quality Standards to be established for "priority substances" under Article 16(7) WFD, and any other Environmental Quality Standards laid down in current EC legislation, such as the 1991 Urban Waste Water and Nitrates Directives. In comparison with the definition of good ecological status, the characterization of good chemical status appears to be based on more precise criteria.²⁶

bb) Artificial and Heavily Modified Water Bodies

"Artificial and heavily modified water bodies" are subject to different environmental objectives from those applicable to other surface water bodies.²⁷ Member States are required to "protect and enhance" such water areas "with the aim of achieving good ecological *potential*" and good chemical surface water status at the latest in 2015. Thus, artificial or heavily modified water bodies are to achieve good chemical status under the same terms as apply to other surface water bodies. By contrast, a different ecological objective applies to artificial or

²³ Annex XI Part A WFD indicates that the Danube river basin passes through three eco-regions: central highlands (9); dinaric western Balkan (5), eastern Balkan (7).

²⁴ To this effect, see *Grimeaud* [2001] EELRev, p. 46, and *Hasche, F.*, *Das neue Bewirtschaftungsermessens im Wasserrecht*, 2005, pp. 139 – 141.

²⁵ See Section 1.4.3 of Annex V in conjunction with Annex IX WFD.

²⁶ *Grimeaud* [2001] EELRev, p. 47; *Hasche* (footnote 24), pp. 131/132.

²⁷ Article 4(1)(a)(ii), (iii) WFD.

heavily modified water bodies. In essence, good ecological potential varies from good ecological status in that it takes account of deteriorated ecological conditions resulting from the artificial or heavily modified characteristics of the water body concerned.²⁸ Aside from this considerable difference in stringency of objectives, the process of determining the ecological characteristics of artificial or heavily modified water bodies runs along similar lines as that applicable to natural and unmodified water bodies.

The WFD defines an “artificial water body” as a body of surface water which has been created by human activity. A “heavily modified” water body for purposes of the WFD is a surface water body which as a result of physical alterations by human activity is substantially changed in character, and which has been designated as such by Member States in accordance with Annexes II and V WFD.²⁹ For designation purposes, Annex V specifies that the ecological quality elements which will apply to heavily modified water bodies will be those applicable to the type of surface water area that most resembles the prospective heavily modified water body concerned. For example,³⁰ where a water body amenable to designation as being heavily modified resembles a river type, the biological, hydro-morphological or physicochemical quality criteria which relate to the closest comparable river type will apply as baseline criteria for determining whether there has been a “substantial” change in character due to physical alterations. Presumably, all reaches of the Danube river dammed for power generation, or dredged or fitted with groynes for navigation purposes qualify for designation as heavily modified. Article 4(3) WFD authorizes Member States to designate water bodies as heavily modified based on a cost proportionality test of environmental goals and economic development objectives. More particularly, such designation is permitted if changes to be made to the hydro-morphological features of the water body concerned – in the case of a river, factors such as flow characteristics, river continuity, channel patterns, width and depth variations – to achieve “good ecological status” (as opposed to “good ecological potential”) would have significant adverse effects on beneficial objectives served by the existing modified characteristics of the water body concerned. These beneficial objectives include protection of the general environment, navigation, drinking water supply, power generation, irrigation, flood protection, land drainage and “other equally important sustainable human development activities.” Designation of existing water bodies as heavily modified for purposes of lowering applicable ecological objectives furthermore requires a finding that the beneficial objectives served by the modified characteristics of the water bodies cannot, for reasons of technical feasibility or

²⁸ See Annex V part 1.2.5 WFD.

²⁹ Article 2(8), (9) WFD.

³⁰ For this example, see *Grimeaud* [2001] EELRev, p. 48.

disproportionate costs, be reasonably achieved by other means which are a significantly better environmental option. The directive does not set limits on the detrimental economic effects of restoring a heavily modified water body to be considered in the proportionality test. Member States thus are not required to exclude indirect economic effects from the cost-benefit analysis. Therefore Member States have considerable latitude in opting for a designation under Article 4(3) WFD rather than for ecological restoration of the water body concerned.³¹ Of course, Member States' discretion is subject to some degree of qualification in that only activities aiming at "sustainable human development" are capable of justifying such a designation. However, because of the sustainability principle's inherent vagueness, this is not an effective check on Member States' discretionary powers. The definition of "sustainable development" used most often refers to "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."³² The Court of Justice has not yet addressed the meaning of sustainable development in the EC law context. However, several opinions of Advocates General have in passing referred to this concept. As explained by Advocate General *Léger*, the sustainable development principle does not imply that the interests of the environment must necessarily and systematically prevail over economic and social interests. Rather, it emphasises the necessary balance between various interests which sometimes clash, but which must be reconciled.³³ Therefore the term "*sustainable* human development activities" in Article 4(3)(a)(v) WFD presumably does not accord overriding importance to environmental aspects. On the contrary, it once again somewhat redundantly stresses the need to support designations under Article 4(3) by a proper balance of environmental considerations against societal and economic development interests. For the sake of transparency, the second clause of Article 4(3)(b) WFD provides that such designations and the reasons for them have to be specifically mentioned in the river basin management plan required under Article 13 WFD.

The baseline duty under Article 4(8) WFD also limits Member States' discretion in that designations under Article 4(3) WFD must not permanently exclude or compromise the achievement of the directive's more ambitious ecological objectives for other water bodies in the same river basin district. Thus, Member States are not permitted to restrict themselves to achieving, for instance, good ecological potential for a river used for navigation, where this

³¹ See to this effect *Grimeaud* [2001] EELRev, p. 49, and *Hasche* (footnote 24), pp. 157 - 162.

³² This is the definition contained in the 1987 *Brundtland* Report "Our Common Future", as quoted in *Bell & McGillivray* (footnote 13), p. 39.

³³ Opinion of Advocate General *Léger*, case C-371/98 R. v. Secretary of State for the Environment, Transport and the Regions ex parte First Corporate Shipping Ltd., <http://curia.eu.int>.

would result in permanently missing the objective of good ecological status for associated surface water bodies. Furthermore, designations under Article 4(3) must be consistent with the implementation of other EC environmental legislation, including, e. g., the 1992 Habitats Directive.³⁴ Generally, Member States are required by Article 4(9) WFD to ensure that the application of the WFD, including that of Article 4(3), provides at least the same level of protection as existing Community legislation. To give an example, where a river to which the 1979 fish water directive applies is designated a heavily modified water body, the level of protection has to be at least as good as that required under the fish water directive. Designation as a heavily modified water body must on no account result in failure to achieve quality requirements set by current EC legislation.³⁵

cc) Groundwater

Article 4(1)(b)(ii) WFD, setting environmental objectives for groundwater management, requires Member States to “protect, enhance and restore all bodies of groundwater” and to “ensure a balance between abstraction and recharge of groundwater, with the aim of achieving good groundwater status” at the latest in 2015. As in the case of the environmental objectives for surface water, the expression “with the aim of achieving” only requires Member States to take reasonably feasible measures to meet the objective.³⁶ Criteria for determining whether a groundwater³⁷ body enjoys good status are both its quantitative and its chemical status.³⁸

aaa) Good Chemical and Quantitative Status

“Good groundwater chemical status” means a status which meets the conditions on pollutant concentration and conductivity which are set out in Annex V, table 2.3.2 WFD. With regard to conductivity, table 2.3.2 makes a finding of good status dependent on the absence of changes in conductivity indicative of saline or other intrusions into the groundwater body. The test as to whether pollutant concentrations amount to good status is threefold. First, such

³⁴ Article 4(8) WFD.

³⁵ See to this effect *Grimeaud* [2001] EELRev p. 50; for a more extensive discussion of the baseline obligations created by Article 4(9) WFD, see *infra* at footnote 46.

³⁶ See to this effect *Grimeaud* [2001] EELRev p. 90.

³⁷ Article 2(2) WFD defines “groundwater” as all water which is below the surface of the ground in the saturation zone, and in direct contact with the ground and the subsoil.

³⁸ Article 2(19), (20), (25) – (28) WFD.

concentrations must not exhibit the effects of saline or other intrusions; second, they must not exceed the quality standards to be set pursuant to Article 17 WFD; third, they must not be such as would result in failure to achieve environmental objectives for associated surface water bodies or in any significant diminution of the ecological or chemical quality of such bodies or in any significant damage to terrestrial ecosystems which depend directly on the groundwater body. Thus, a finding of good groundwater chemical status depends not only on compliance with environmental quality standards but also on the interpretation of vague terms such as “significant damage” and “significant diminution” of quality.³⁹

Annex V table 2.1.2 WFD specifies criteria for determining whether a groundwater body has achieved “good quantitative status”. First, the level of groundwater must be such that the available groundwater resource is not exceeded by the annual average rate of abstraction; second, the level of groundwater must not be subject to such anthropogenic alterations as would result in failure to achieve environmental objectives for associated surface water bodies, in any significant diminution in the status of such waters, or in any significant damage to terrestrial ecosystems which depend directly on the groundwater body. Like the test for good chemical status, these criteria present considerable problems of interpretation, given their rather vague terminology.

bbb) Quality Standards for Assessing Good Chemical Status

As just noted, Article 4(1)(b) WFD in setting conditions for good chemical status uses rather vague language which might cause a good deal of legal uncertainty as to whether good groundwater chemical status has been achieved. Article 17 WFD provides for adopting groundwater pollution control measures which shall include additional criteria for assessing groundwater chemical status. These new measures will replace the existing 1980 Directive on the protection of groundwater against pollution by certain dangerous substances which in turn will expire in 2013. There is some doubt as to the existence of a legal requirement that the new groundwater pollution control strategy has to result in better protection than the current regime.⁴⁰ More specifically, Article 17(1) WFD stipulates that the European Parliament and the Council shall enact measures to prevent and control groundwater pollution with a view to achieving good groundwater chemical status. The Commission was supposed to present proposals for such measures by December 2002. Missing this deadline by 9 months, the Commission finally submitted a proposal for a new directive on the

³⁹ Grimeaud [2001] EELRev p. 89.

⁴⁰ Grimeaud [2001] EELRev pp. 132/1333.

protection of groundwater against pollution in September 2003.⁴¹ As expressly required in Article 17(2) WFD, this proposal includes more specific criteria for assessing good groundwater chemical status and criteria for identifying sustained and significant upward trends in pollutant concentrations and starting points for reversal of such trends. It also provides for continuation of the groundwater protection regime established in the 1980 groundwater directive. In case of the Community institutions failing to adopt groundwater pollution control measures in time, Article 17(4) WFD authorizes as well as requires Member States to adopt appropriate chemical status and trend reversal criteria as stopgap measures at the latest in 2005. Obviously, this authority would become relevant if the Council and the European Parliament fail to reach agreement on the current Commission proposal. In addition, the WFD sets a baseline criterion for identifying reversals of upward trends in pollutant concentration which will apply in the absence of criteria adopted at national level: Pursuant to Article 17(5), in this case trend reversal shall take as its starting point a maximum of 75% of the level of the quality standards set out in existing Community legislation applicable to groundwater.

cc) Protected Areas

Apart from surface water bodies and groundwater, the WFD for purposes of environmental objectives specifically addresses protected areas. Article 6 in conjunction with Annex IV WFD provides that Member States have to establish registers of all areas designated as requiring special protection under specific EC legislation aimed at protecting surface water or ground water or at conserving habitats and species directly depending on water. These areas include water bodies designated for the abstraction of drinking water, areas designated for the protection of economically significant aquatic species, designated bathing and recreational waters, nutrient-sensitive areas such as areas designated under the 1991 Nitrates and Urban Waste Water Directives,⁴² and 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. The latter category includes relevant sites designated under the 1979 Wild Birds Directive or the 1992 Habitats Directive.⁴³

⁴¹ COM(2003)550 final.

⁴² For an outline of these Directives, see *supra* at footnotes 9 *et seq.*

⁴³ Directive 79/409/EEC, [1979] O.J. L 103 p. 1, as last amended by Directive 97/49/EC, [1997] O.J. L 223 p. 9; Directive 92/43/EEC, [1992] O.J. L 206 p. 7, as last amended by Directive 97/62/EC, [1997] O.J. L 305 p. 42.

With regard to environmental objectives, Article 4(c) WFD expressly requires that in protected areas any WFD-related standards and objectives “shall” be achieved at the latest in 2015. This language contrasts with the expression “with the aim of achieving” used in relation to good groundwater and surface water status. Thus, for protected areas, Member States have a clear-cut obligation to achieve good status and to comply with relevant quality standards.⁴⁴ For instance, where a protected area qualifies as a river, “good surface water status” will have to be achieved by 2015. More importantly, Article 4(c) makes this obligation dependent on the absence of specific provisions in the EC legislation under which protected areas have been designated. Thus, more stringent quality standards and time frames set under the specific EC legislation will prevail over the duty to achieve good status by 2015.

There are special environmental objectives for waters designated for drinking water abstraction. Article 7 WFD requires Member States to identify all water bodies used for the abstraction of drinking water which provide or will provide a minimum of 10 cubic meters per day or which serve at least 50 persons. In respect of such water areas, two sets of environmental objectives must be achieved. Like all other protected areas, water bodies intended for drinking water abstraction firstly have to comply with the good status objective. Second, Member States will have to ensure that under the water treatment regime applied the resulting water meets the requirements of the drinking water directive. More specifically, Member States are required to aim at avoiding deterioration in water quality so as to reduce the level of purification treatment necessary to produce drinking water. For this purpose, Article 7(3) invites Member States to establish water safeguard zones. The purpose of this clause is to ensure adequate protection within the period between expiry of the 1975 surface water directive and realisation of good water status.⁴⁵

dd) The Continuing Relevance of the First Wave Legislation

The vague language of the “good status” objectives supports the conclusion that Member States will not be found liable for Treaty infringement if they miss these objectives. The only thing they have to do is to take all reasonable measures to achieve them. Still, Member States will have to comply, as a minimum, with Article 4(9) WFD which provides that the application of the WFD, including the application of paragraphs 3 through 7 of Article 4 guarantees at least the same level of protection as the existing Community legi-

⁴⁴ For a discussion of environmental objectives for protected areas, see *Grimeaud* [2001] EELRev p. 91.

⁴⁵ *Grimeaud* [2001] EELRev p. 92.

slation. Further, subparagraphs (a) and (b) of Article 4(1) WFD establish a principle of non-deterioration for management of surface water bodies and groundwater. In addition, Art. 11(3)(a) defines measures necessary for implementing specified existing Community legislation⁴⁶ as “basic measures” which have to be included in programmes of measures for river basin district management. This provision strongly indicates that the change to the WFD regime will on no account justify non-compliance with such Community legislation.⁴⁷ The WFD, however, is ambiguous as to whether directives slated for expiry qualify as “existing” Community legislation within the meaning of Article 4(9) WFD. This primarily concerns the shellfish water and fish water directives which will be repealed in 2013. Having regard to the environmental objectives of the WFD, it may be argued that these measures would remain “baseline” quality criteria even after their repeal. This would allow minimum water quality standards to be maintained, which would complement the non-deterioration requirement established in Article 4(1), and the importance of existing legislation emphasized by Article 11(3)(a), Article 10 and Annex IX WFD. Thus, with a view to the context of Article 4(9) WFD, it is submitted that the term “existing” should be read as including those EC measures that were on the books at the time of the adoption of the WFD rather than those which will be in force at the time the WFD has been implemented and applied. Such an interpretation is supported by the fact that otherwise there would be a two-year gap between the time the fish water and shellfish water directives are repealed (2013) and the time when good water status has to be achieved (2015).⁴⁸ Therefore, countries wishing to adapt their water law to existing Community legislation appear to be well advised to transpose the fish water and shellfish water directives as well.

c) Exemptions from the Requirement to Achieve the Environmental Objectives

Article 4(4) through (7) WFD authorize Member States to postpone realisation of the environmental objectives, to allow temporary deterioration in particular cases, to set less stringent objectives for specific water bodies, or permanently to derogate from both the good status and the non-deteriorations objectives. For each of these derogations, the WFD sets specific conditions with what one commentator has claimed is a built-in hierarchy.⁴⁹

⁴⁶ Namely, the directives listed in Article 10 and Annex VI Part A WFD.

⁴⁷ *Grimeaud* [2001] EELRev p. 50.

⁴⁸ For a similar line of reasoning, see *Grimeaud* [2001] EELRev, p. 50.

⁴⁹ *Bloch* [2004] JEEPL, p. 172.

aa) Extension of Deadlines

Pursuant to Article 4(4), the deadlines for achieving “good water status” may be extended. Any such extension shall be limited to a maximum of six years,⁵⁰ except in cases where natural conditions prevent the environmental objectives concerned from being realised even during this extended period. When taking recourse to a deadline extension, Member States are still under the “bottom line” obligation of preventing any further deterioration of the water body concerned. Furthermore, they have to demonstrate that their inability to execute the necessary improvements in water status within the deadline results from lack of technical feasibility, from disproportionately high costs or from natural conditions. Unfortunately, the WFD does not provide any meaningful criteria for determining whether a water status improvement is technically feasible or whether its costs meet the proportionality test. Thus, it will be up to each Member State to decide on a case-by-case basis whether a delay is justified.⁵¹ The reasons for any deadline extensions must be set out in the river basin management plan which has to be prepared pursuant to Article 13 WFD.

bb) Less Stringent Objectives

As provided by Article 4(5) WFD, Member States may, for specific bodies of water, aim to achieve less stringent environmental objectives than those required under Article 4(1) WFD. This authority to derogate from any environmental objective listed on Article 4(1) WFD is subject to the non-deterioration principle and conditional on a finding in the initial analysis under Article 5(1) WFD that the water body concerned is so affected by human activity or natural conditions that the achievement of good status would be infeasible or disproportionately expensive. Member States wishing to rely on Article 4(5) WFD furthermore are required to demonstrate that the environmental or socioeconomic needs served by the human activity impacting on the water body concerned cannot be achieved by other means which are a significantly better environmental option not entailing disproportionate costs. Any permissible derogation from the good status objective is limited by the further requirement to achieve

⁵⁰ Article 4(4)(c) WFD provides that extensions shall be limited to a maximum of two further updates of the river basin management plan. Pursuant to Article 13 WFD, paragraphs (6) and (7), the first river basin management plan has to be published nine years after the entry into force of the WFD, and has to be updated at the latest 15 years after the entry into force of the WFD and every six years thereafter. Thus, a Member may justify under Article 4(5) that good water status will not be realised until 21 years after the entry into force of the WFD.

⁵¹ Grimeaud [2001] EELRev, pp. 92/93; Hasche (footnote 24), p. 165.

the highest possible status, taking into account the impacts on water quality which could not reasonably have been avoided due to the nature of the human activity or pollution. Unlike Article 4(3) which for purposes of lowering applicable environmental objectives authorises designation of heavily modified water bodies serving “important sustainable human development activities”, Article 4(5) appears to encompass any kind of human activity serving social and economic needs. Thus, setting less stringent environmental objectives seems to be easier to justify under Article 4(5) than under Article 4(3) WFD. Vague terms such as “infeasible”, “disproportionately expensive” or “significantly better environmental option not entailing disproportionate costs” likely result in wide discretionary powers for Member States deciding whether less stringent environmental objectives are appropriate.⁵² Article 4(5) requires the reasons for setting less stringent environmental objectives to be included in relevant river basin management plans.

cc) Temporary Deterioration in Water Status

In circumstances of force majeure or of natural causes which are exceptional or which could not reasonably have been foreseen, temporary deterioration in water status may be permissible pursuant to Article 4(6) WFD. Cases justifying such deterioration include extreme floods, prolonged droughts and accidents which could not reasonably have been foreseen. Article 4(6) requires Member States to identify in the river basin management plan conditions under which exceptional circumstances may be declared. Furthermore, the measures to be taken in such circumstances have to be included in the programme of measures required under Article 11 WFD; those measures must not jeopardize the recovery of the water body concerned once the exceptional circumstances are over. Once an exceptional deterioration in water quality has occurred, Member states are under a duty to prevent further deterioration in status and to ensure the achievement of the Directive’s objectives in other water bodies not affected by the exceptional circumstances. In addition, all practicable measures have to be taken with the aim of restoring the body of water to its status prior to the effect of those circumstances as soon as reasonably practicable. Obviously, Member States have plenty of discretion in deciding which restoration measures are “practicable” within the meaning of Article 4(6) WFD.⁵³ For reasons of transparency, a summary of the effects of the circumstances and of measures taken or to be taken to mitigate those effects, must be included in the next up-

⁵² See to this effect *Grimeaud* [2001] EELRev, p. 95, and *Hasche* (footnote 24), p. 170.

⁵³ *Hasche* (footnote 24), p. 174.

date of the river basin management plan. In conjunction with the duty to identify in advance conditions under which exceptional circumstances may be declared, this is a procedural device aimed at preventing potential abuse of Article 4(6).

dd) Permanent Derogation from the Environmental Objectives

Article 4(7) WFD provides that Member States will under certain conditions not be in breach of the Directive when they permanently fail to reach applicable environmental objectives or to prevent deterioration in the status of a water body. More particularly, such failure may be permissible when it is the result of new modifications to the physical characteristics of a surface water body or alterations to the level of bodies of groundwater.⁵⁴ For instance, activities such as construction of new dams for power generation purposes or of groynes for maintaining a navigation channel within a river may be legal even though these activities result in failure to achieve applicable environmental objectives or to prevent deterioration in water status. In addition, failure to prevent deterioration from high status to good status of a body of surface water which is the result of new sustainable human development activities also may be permissible.⁵⁵ Thus, the requirement to achieve good status does not impose a standstill obligation on Member States with regard to economic or societal development involving modification of water bodies. Rather, Article 4(7) WFD expressly authorizes Member States to carry out such new development provided that provisions on balancing costs and benefits and on documentation in the river basin management plan are complied with. Specifically, the reasons for new modifications of water bodies or new sustainable human development activities have to be set out in the river basin management plan and reviewed every six years, that is on occasion of the management plan being updated. As a matter of substantive law, a Member State wishing to rely on Article 4(7) WFD has to balance the conflicting environmental aspects and societal or economic development interests in order to justify the modifications and alterations concerned. Presumably, only very important societal or economic development interests are capable of justifying alterations and modifications resulting in permanent failure to achieve the environmental objectives. The Directive uses somewhat redundant language to emphasize this balancing requirement, without, however, providing any significant checks on Member States' discretion.⁵⁶ More specifically, it requires a showing that the reasons for such modifications

⁵⁴ See the first indent of Article 4(7) WFD.

⁵⁵ See the second indent of Article 4(7) WFD.

⁵⁶ *Hasche* (footnote 24), pp. 176/177.

or alterations “are of overriding public interest and/or the benefits to the environment and to society of achieving the [applicable environmental] objectives are outweighed by the benefits of the new modifications or alterations to human health, to the maintenance of human safety or to sustainable development.” It is quite unclear to what extent the “overriding public interest” criterion varies from the one which considers “benefits to human health, the maintenance of human safety, or to sustainable development.” Because of the term “and/or”, it is also quite unclear whether for an alteration or modification to be permissible both criteria need to be complied with jointly. The reference, on the one hand, to human health and safety and, on the other hand, to sustainable development supports the conclusion that only those societal and economic development interests whose importance resembles that of human health and safety are capable of justifying alterations or modifications under Article 4(7) WFD. However, determining the importance of such development interests as well as the process of balancing them against environmental considerations are rather difficult tasks, given the lack of any operational criteria.⁵⁷ The Directive also requires a showing that the beneficial objectives served by the modifications or alterations cannot for reasons of technical feasibility or disproportionate costs be achieved by other means which are a significantly better environmental alternative. To summarize, new alterations, modifications or sustainable human development activities within the meaning of Article 4(7) WFD are permissible if the Member State concerned demonstrates that they serve either reasons of human health and safety protection or equally important societal and economic development interests, and that there are no reasonably feasible better environmental alternatives.

c) Measures to Achieve the Environmental Objectives

As briefly mentioned above,⁵⁸ the WFD calls for a step-by-step process of implementation whose starting points are the identification of River Basin Districts (RBDs) as principal water management units and the designation of competent authorities (Article 3 WFD). Next, the characteristics of each river basin district will have to be analysed and monitoring schemes will have to be set up, with a view to determining which measures are to apply and the extent to which use is to be made of exemptions from the environmental objectives (Articles 5 and 8 WFD). The measures aimed at achieving the environmental objectives will be included in a programme of measures, as required by Article 11

⁵⁷ See to this effect *Grimeaud* [2001] EELRev, pp. 96-97.

⁵⁸ See *supra* at footnote 19.

WFD. Article 13 in conjunction with Annex VII WFD provides that Member States will also establish a river basin management plan (RBMP) which will be a comprehensive body of information on water management pursuant to the Directive. Further specific measures required include a combined approach to pollution control with particular emphasis on progressively reducing discharges of so-called “priority substances” (Articles 10 and 16 WFD), control of groundwater pollution (Article 17 WFD), and the recovery of costs for water services (Article 9 WFD). It is worth remembering that the 1976 bathing water and the 1980 drinking water directive as well as all “second wave” legislation aiming at water protection will remain in force indefinitely. This includes the 1991 Nitrates Directive, the 1991 Urban Waste Water Directive, and the 1996 IPPC Directive. Therefore, specific measures required under this earlier legislation will continue to be relevant under the WFD regime. Furthermore, the WFD regime evidently operates in the context of other EC environmental legislation compliance with whose provisions likely will also contribute to achieving the environmental objectives set by the WFD. Consequently, Member States have to include measures required under this other EC environmental legislation in the programmes of measures to be established under Article 11 WFD.⁵⁹

aa) Identification of RBDs and Designation of Competent Authorities

Member States’ first task under the WFD involves identifying river basins lying within their territory and assigning them to river basin districts (RBDs) which in turn will be the principal water management units (Article 3(1) WFD). The management system established by the WFD is not based on political or administrative boundaries. Rather, it uses specific aquifer management units consisting of all surface water, groundwater and coastal water bodies which are geographically or hydrologically connected.⁶⁰ Article 3(4) expressly stipulates that the requirements of the Directive including the programmes of measures to be established with a view to achieving the environmental objectives set by Article 4 WFD are to be coordinated within each RBD. A river basin which covers the territory of more than one Member State is to fall within an international RBD.⁶¹ Evidently, the Danube River basin qualifies for designation as an in-

⁵⁹ Article 11(3)(a) in conjunction with Annex VI, part A WFD.

⁶⁰ *Grimeaud* [2991] EELRev, p. 125; *Bloech* [2004] JEEPL, p. 173. Article 2(13) defines a river basin as “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”. As defined in Article 2(15) WFD, a river basin district is “the area of land and sea, made up of one or more neighbouring river basins together with their associated groundwaters and coastal waters, which is identified under Article 3(1) as the main unit for management of river basins.”

⁶¹ See Article 3(3) WFD.

ternational RBD. With regard to international RBDs, Article 3(4) provides that the relevant Member states have to ensure trans-boundary coordination, and are authorized to utilize existing international structures or regimes. Here, the International Commission set up under Article 18 of the Danube River Protection Convention likely comes into play. Indeed, the International Commission already has taken up its role as a forum for coordinating river management activities in the Danube international RBD. In particular, it prepared the WFD Roof Report 2004 as part of the analysis required under Article 5, Annex II and Annex III WFD which includes an inventory of protected areas, as required under Article 6, Annex IV WFD.⁶²

Each Member State has to make appropriate administrative arrangements for applying the WFD rules within the portion of any international river basin district lying within its territory. This obligation includes the identification of the appropriate competent authority.⁶³ The period granted for establishing river basin districts and for designating competent authorities ended in December of 2003.

bb) Analysis of RBD Characteristics and Economic Analysis

Pursuant to Article 5(5) in conjunction with Annexes II and III WFD, Member States have to carry out an analysis of the characteristics of each RBD, a review of the impact of human activities on the status of surface waters and groundwater, and an economic analysis of water uses. The period allowed for completing this task ended in December of 2004.⁶⁴ As provided by Article 15(2) WFD, summary reports of the analyses required under Article 5 undertaken for the purposes of the first RBMP had to be submitted to the Commission within three months of their completion.

Annex II sets out extensive technical specifications according to which the analysis of water body characteristics and human activities impact has to be undertaken. As mentioned above,⁶⁵ the information gathered in this manner will be used for determining what is to be considered as “high”, “good” and “moderate” ecological water status for each category of water body in a particular RBD. With regard to reviewing human activity impacts, Annex II provides, among other things, that Member States have to identify “significant” point and

⁶² See ICPDR, The Danube River Basin District, Part A – Basin-wide overview, 18 March 2005, available at www.icpdr.org.

⁶³ Article 3(3) WFD. In addition, Member States are required by Article 3(8) WFD to provide the Commission with a list of their competent authorities.

⁶⁴ Article 5(2) provides that the analysis has to be reviewed at the latest in 2013 and every six years thereafter.

⁶⁵ See *supra*, after footnote 22.

diffuse source pollution, “significant” water abstractions” and “significant” morphological alterations and anthropogenic impacts on water bodies and on the status of surface water. It goes without saying that the term “significant” leaves scope for interpretation. Ultimately, Member States have to decide on a case-by-case basis what impacts are to be regarded as significant.⁶⁶

Annex III addresses the content of the economic analysis of water uses under Article 5(1) WFD. This analysis has to provide “enough information in sufficient detail” in order to make the relevant calculations for taking into account the principle of recovery of the costs of water services, and to make judgements about the most cost-effective combination of measures in respect of water uses to be included in the programme of measures. For cost-recovery purposes, the analysis has to consider long-term forecasts of supply and demand for water in the RBD and, where necessary, estimates of the volume, prices and costs associated with water services as well as estimates of relevant investment. With regard to determining the most cost-effective combination of measures, estimates of the potential costs of such measures have to be included in the analysis. Obviously, determining which measures are cost-effective largely depends on a wide range of factors which include the relevant types of anthropogenic impacts such as water abstraction, flow control or point and diffuse source pollution, as well as local conditions and the technical, societal and financial framework in a particular river basin. Developing a reasonable methodological structure which is capable of combining procedural stages with the information available is a useful first step towards a meaningful selection of cost-effective measures. In a research project funded by the German Federal Environment Agency such a methodology was proposed. It takes into account relevant guidance documents and the pressure categories identified in the initial characterisation of the water body concerned and consists of seven distinct steps: With regard to terminology, it distinguishes technological “measures” and “instruments” which include administrative, economic and information-based approaches to facilitate and support the implementation of measures.⁶⁷

Stage 1	Selection of potentially effective measures based on pressures identified pursuant to Annex II WFD
Stage 2	Selection of effective measures based on a cause-effect matrix
Stage 3a	Combining measures with a view to achieving the best possible improvements given different pressure categories
Stage 3b	Determining supporting instruments and assessing their effectiveness

⁶⁶ Grimeaud [2001] EELRev, p. 126.

⁶⁷ For details, see Kranz, N. / Goerlach, B. / Interwies, E., Making the Right Choice – a Methodology for Selecting Cost-Effective Measures for the Water Framework Directive [2004] JEEPL, p. 228, in particular pp. 230 – 233.

Stage 4	Describing interactions of instruments and combinations of measures ranked on their effectiveness
Stage 5	Determining costs
Stage 6	Identifying the most cost-effective sets of measures and instruments
Stage 7	Coordinating programmes of measures across different RBDs

It is worth noting that this methodology is considered a first step towards selecting the most cost-effective measures for inclusion in the programme of measures under Article 11 WFD. In the process of implementation, however, further specification and modification of the methodology will be necessary, taking account of, among other things, the results of the ongoing Common Implementation Strategy working process as well as an evaluation of the need for coordination of WFD implementation among different jurisdictions and of the appropriate institutional framework in which this coordination should take place.⁶⁸

cc) Monitoring Schemes

Article 8 and Annex V WFD provides that Member States have to set up programmes for monitoring water status with a view to establishing a coherent and comprehensive overview of water status within each RBD. These monitoring programmes have to be operational by 2009 and will be a further source of information for determining what amounts to “high”, “good” or “moderate” water status. More particularly, monitoring is required to aim at supplementing and validating the initial RBD analyses under Article 5, at determining the status of water bodies considered to be at risk of failing to meet applicable environmental objectives, and at identifying any changes in the status of water bodies resulting from implementation of the programmes of measures set up under Article 11 WFD.⁶⁹ Article 15(2) requires Member States to submit summary reports on the monitoring programmes undertaken for the purposes of the first RBMP to the Commission within three months of their completion.

dd) Programmes of Measures

Article 11 WFD requires each Member State to establish a programme of measures for each RBD, or for the part of an international RBD within its territory. The programme will aim at achieving the applicable environmental

⁶⁸ *Kranz et al.* [2004] JEEPL, p. 233.

⁶⁹ For a more extensive discussion of the monitoring programmes, see *Grimeaud* [2001] EELRev, pp. 126 – 127.

objectives and will take into account the results of the analyses carried out pursuant to Article 5 WFD (characteristics of RBDs, review of the environmental impact of human activity and economic analysis of water use). As stated in Article 11(2) WFD, each programme of measures will include the mandatory “basic” measures. By contrast, “supplementary” measures have to be included only when it is shown that the basic measures will not be sufficient to achieve the environmental objectives. Importantly, clause 2 of Article 11(1) WFD provides that the programme of measures may make reference to measures following from legislation adopted at national level and covering the whole of the territory of a Member State. This implies that the programme of measures itself is not intended to have legally binding effect. Rather, its function is to compile for administrative planning purposes all measures necessary in order to achieve the environmental objectives set out in Article 4 WFD.⁷⁰

In particular, the mandatory basic measures comprise those measures required to implement existing Community environmental legislation, in particular the directives specified in Article 10 and in part A of Annex VI WFD.⁷¹ Furthermore, measures dealing with cost-recovery under Article 9 WFD and with protection of water bodies used for drinking water abstraction pursuant to Article 7 WFD are defined as “basic” measures. There follows a long catalogue of additional “basic” measures aimed at limiting a wide range of impacts of human activity on the status of surface waters and groundwater bodies.⁷² For reasons of limited space, it is considered necessary to refrain from going into further details. Suffice it to mention that most basic measures are of the command-and control type of regulation. In particular, there has to be a system of permits or prior authorization covering all major human impacts on water. By contrast, supplementary measures, as listed in part B of Annex VI WFD, include activities aimed at encouraging individuals to contribute voluntarily to the achievement of the environmental objectives. For instance, economic and fiscal measures, negotiated environmental agreements and codes of good practice belong to this category of measures. There is also a catch-all clause in that supplementary measures expressly include “other relevant measures” Member States may choose to adopt in order to achieve the environmental objectives. By

⁷⁰ See to this effect *Fassbender, K.*, *Gemeinschaftsrechtliche Anforderungen an die normative Umsetzung der neuen EG-Wasserrahmenrichtlinie* [2001] *Neue Zeitschrift fuer Verwaltungsrecht*, p. 247.

⁷¹ In addition to the “first wave” and “second wave” water legislation remaining in force, this includes among other measures the forthcoming directives on the discharge of hazardous substances to be adopted pursuant to Article 16 WFD, the Birds Directive 79/409 EEC, the Habitats Directive 92/43/EEC, the Major Accidents Directive 96/82/EC, the Sewage Sludge Directive 86/278/EEC and the Environmental Impact Assessment Directive 85/337/EC.

⁷² See Article 11(3)(e) through (l) WFD.

making command-and control measures mandatory, the WFD accords them primary importance in relation to economic tools or self-regulation. This implied policy choice probably is a wise one for the following reasons. The advantages of the command-and-control approach to environmental protection include the ability to provide uniformity, rationality and fairness between those who are regulated. Some form of accountability is also produced by having a public body responsible for regulation. In addition, as long as there is a sufficient degree of effective enforcement, command-and-control regulation will achieve its environmental protection goals with reasonable certainty. Economic tools, by contrast, are designed to use prices or economic incentives or deterrents to encourage consumers and industry to make environmentally beneficial choices about their actions. Self-regulatory mechanisms, in turn, are based on voluntary action. The triggers for such action may be diverse, including the threat of compulsory action, commercial benefit (for instance, through cost savings or green marketing initiatives), or even a shift in values which attaches greater importance to environmental protection. The advantages of both economic and self-regulatory mechanisms lie in that they are flexible, less or even non-interventionist and therefore politically more acceptable to individuals and companies who are regulated. The drawbacks are that the price-based or voluntary nature means that there are no explicit enforcement mechanisms. Furthermore, there is a lack of transparency and accountability. And there often is the problem that these mechanisms result in a level of environmental protection which either cannot be assessed with any degree of certainty or which is at the lower end of what is achievable.⁷³ Thus it would appear that the appropriate role for both economic tools and self-regulatory mechanisms is to provide further measures which are complementary to command-and-control regulation.

ee) River Basin Management Plans

Article 13 WFD provides for the production of a river basin management plan (RBMP) for each river basin district by 2009 at the latest. There are special provisions dealing with production of the RBMP for an international river basin district such as the Danube RBD:⁷⁴ In principle, Member States are required to ensure coordination with the aim of producing a single international river basin management plan. Where such an international RBMP is not produced, Member States have to produce RBMPs covering at least those parts of the international

⁷³ For a brief discussion in English of the advantages and drawbacks, respectively, of command-and-control regulation, economic tools and self-regulatory mechanisms, see *Bell & McGillivray* (footnote 13), pp. 178, 200, 206, 212.

⁷⁴ Article 13(2) WFD.

RBD falling within their territory to achieve the objectives of the WFD. Thus, the duty to produce a coordinated international RBMP has prevalence over the duty to produce RBMPs for an international RBD in a piecemeal fashion. Pursuant to Article 13(7) WFD, RBMPs have to be reviewed and updated at the latest in 2015 and every six years thereafter.

As to contents of the RBMP, Article 13(4) WFD provides that each RBMP shall include the information detailed in Annex VII WFD. Annex VII in turn is a rather expansive list. For reasons of limited space it is considered necessary to restrict its further explanation to the following outline. The mandatory contents of each RBMP include a general description of the characteristics of the RBD and a summary of significant pressures and impacts of human activity on water status. The term “summary” in this context is further explained to mean that it is sufficient to provide in the RBMP only an estimate of, for instance, point or diffuse source pollution, rather than the more specific information on pollution sources required under Article 5 and Annex II WFD. Furthermore, RBMPs are to comprise a list of the environmental objectives established under Article 4 WFD, including in particular identification of instances and associated explanation of reasons where use has been made of the derogations from the generally applicable environmental objectives.⁷⁵ In addition, Member States have to provide in the RBMPs a summary of the economic analysis of water use, a summary of the programme of measures and a list of the competent authorities. There are special provisions specifying the contents of RBMP updates. In particular, updates have to include an assessment of the progress made towards achieving the environmental objectives, an explanation for any failure to meet applicable environmental objectives and a summary of the required reviews as to whether the reasons presented for derogations from environmental objectives are still valid.

Article 14(1) WFD calls upon Member States to encourage the active involvement of all “interested parties” in the implementation of the Directive, in particular in the production, review and updating of the RBMPs. For this purpose, Member states are expressly required to publish and make available for comments to the public the documents specified in clause 2 of Article 14(1) WFD. More particularly, a timetable and work programme for the production of the plan must be made available to the public at least three years before the beginning of the period to which the plan refers. At least two years before the start of the operative period of the plan, the public must be granted access to an interim overview of the significant water management issues identified in the river basin. Finally, one year before the start of the plan’s operative period, draft copies of the RBMP must be made available for public comment. On request,

⁷⁵ For a discussion of the permissible derogations, see *supra* at footnotes 49 *et seq.*

access has to be given to background documents and information used for the development of the draft RBMP. As specified in Article 14(2) WFD, the minimum comment period shall be six months. The final RBMP has to be published and has to include a summary of the public information and consultation measures taken, of their results and of the changes made in the plan as a consequence.⁷⁶

The WFD also imposes duties on Member States to inform the Commission of the RBMPs. Within three months of their publication, copies of the final RBMP and of all subsequent updates have to be sent to the Commission and to any other Member State concerned.⁷⁷ Within three years after publication of an RBMP or update, Member States must send an interim report describing progress in the implementation of the planned programme of measures to the Commission.⁷⁸

ff) Programme of Measures and Management Plan Compared

Having outlined the contents and the procedural requirements for the production of, respectively, the programme of measures and the RBMPs it is now possible to point out the intended function of each document. Member States are not required to publish the entire programme of measures. Only a summary of the programme will be made public as part of the RBMP. Furthermore, in the context of establishing the programme of measures, the WFD only encourages rather than expressly requires participation of the public. This indicates that the programme of measures is intended to be an internal planning document addressed to the public authorities charged with implementing the measures necessary to achieve the environmental objectives. By contrast, the process of preparing the RBMP includes detailed requirements for public participation and comment. In addition, the final RBMP as well as all subsequent updates have to be published in their entirety. The first RBMP will in conjunction with its updates provide summary information on the progress made towards achieving applicable environmental objectives and on the extent to which permissible derogations from the general objectives have been made use of. The purpose of the RBMP therefore is to assemble in a single comprehensive document and under conditions which aim at ensuring transparency all relevant information on applicable environmental objectives, on current water status, on measures taken or to be taken and on difficulties encountered in endeavouring to achieve the

⁷⁶ Article 13(6), Annex VII A.9 WFD.

⁷⁷ Article 15(1) WFD.

⁷⁸ Article 15(3) WFD.

environmental objectives. Neither device is required to have a binding legal effect.⁷⁹

gg) Pollution Control

There are three sets of provisions in the WFD which address water pollution control. Article 17 WFD dealing with groundwater pollution control has already been discussed briefly.⁸⁰ What is left to do therefore is to present a summary explanation of Articles 10 and 16 WFD which provide for protection of surface water against pollution.

Article 10 WFD introduces a “combined approach” to controlling discharges from point and diffuse sources into surface waters.⁸¹ This approach consists, firstly, of emission controls in order to limit pollution at the source and, secondly, of quality objectives established for bodies of water in order to ensure that those reduced emissions fit into the local or regional environment and are compatible with achieving good water status. In the absence of emission limit values or controls established at Community level, Member States are required to establish emission controls based on best available techniques⁸² or, in the case of diffuse impacts, on best environmental practices.⁸³ Where a quality objective or quality standard requires stricter conditions than those which would result from applicable Community emission controls or from those established at national level, more stringent emission controls shall be set accordingly.⁸⁴ For purposes of this clause, relevant quality standards are those established pursuant to the WFD, in the daughter Directives enacted under the 1976 dangerous substances directive, as listed in Annex IX WFD, or pursuant to any other Community legislation.

Article 16 WFD establishes a new EC strategy against pollutant contamination of surface water which ultimately will replace the one incorporated in the 1976 dangerous substances directive and its daughter directives. As to the relevant pollutants, a list of such substances was enacted in late 2001 and became Annex X of the WFD.⁸⁵ As provided in Article 16(2) and 16(3) WFD, the list distinguishes “priority substances” and “priority hazardous substances”. As defined in Article 2(29) WFD, the latter category includes substances that are toxic, persistent and liable to bio-accumulate, or give rise to an equivalent level

⁷⁹ *Fassbender* (footnote 70), pp. 247/248.

⁸⁰ See *supra* at footnotes 40 *et seq.*

⁸¹ For a brief discussion of the combined approach, see *Bloech* [2004] JEEPL, pp. 173/174.

⁸² For an explanation of the BAT standard, see *supra* at footnote 13.

⁸³ Article 10(2) WFD.

⁸⁴ Article 10(3) WFD.

⁸⁵ Decision 2455/2001/EC, O.J. 2001 L 331, p. 1.

of concern. These substances have to be made subject to controls for the cessation or phasing out of discharges and losses. The timetable for phase-out shall not exceed 20 years after the adoption of pertinent controls at Community level. Less stringent provisions apply to pollutants which only fall in the category of “priority substances.” With regard to this group of pollutants, the WFD only requires controls for the “progressive reduction of discharges, emissions and losses” as well as quality standards, without specifying a timetable.⁸⁶ The Commission failed to meet the September 2003 deadline for submitting proposals for emission controls and/or quality standards for the pollutants included in the current list of priority substances. In the absence of agreement at Community level by 2006, Member States are required to establish emission controls for major sources of discharges as well as environmental quality standards. In doing so, Member States will have to consider all technical reduction options.⁸⁷ According to one commentator, this implies the use of best available techniques.⁸⁸ Similarly, if subsequent lists of priority substances add new pollutants and there is no agreement at Community level, Member States will have to adopt emission controls and environmental quality standards within five years of the inclusion of the new substances in the list.

hh) Recovery of Costs for Water Services

Article 9 WFD on the recovery of costs for water services is considered one of the key innovative elements of the Directive.⁸⁹ Pricing the use of water may provide an incentive for sustainable water use and thus contribute to achieving the environmental objectives of the WFD. As reflected in the first sentence of Article 9(1) WFD, there is an obvious link of water pricing and the polluter pays principle enshrined in Article 174(2) EC. This principle basically means that the producer of goods or other items should be responsible for the costs of preventing or dealing with any pollution or environmental deterioration which the production process causes.⁹⁰

The first sentence of Article 9(1) somewhat vaguely⁹¹ provides that Member States shall “take account of” the principle of recovery of the costs of water services, including environmental and resource costs, having regard to the

⁸⁶ Article 16(6) WFD.

⁸⁷ Article 16(8) WFD.

⁸⁸ *Grimeaud* [2001] EELRev, p. 132.

⁸⁹ *Grimeaud* [2001] EELRev, p. 133.

⁹⁰ For an explanation of the polluter pays principle in the EC law context, see *Bell & McGillivray* (footnote 13), pp. 128, 207.

⁹¹ For a criticism of the vague language of Article 9 on grounds of ineffective environmental protection, see *Grimeaud* [2001] EELRev, p. 133/134.

economic analysis conducted according to Annex III.⁹² It is to be welcomed that the cost recovery principle will apply not only to water industry costs, but also to environmental and resource costs, even though there are serious methodological problems in assessing the latter cost categories. The term “take account of” implies some degree of discretion on the part of the Member States in deciding to what extent cost recovery is to be implemented. Somewhat more specifically, Article 9(1) WFD further requires Member States to ensure by 2010 that their water-pricing policies provide adequate incentives for users to use water resources efficiently, and thereby contribute to achieving the environmental objectives set out in the WFD. In addition, Member States have an obligation to ensure by 2010 an adequate contribution of the different water users, disaggregated into at least industry, households and agriculture, to the recovery of the costs of water services. The basis for determining what is to be considered an “adequate contribution” will be the economic analysis conducted under Annex III WFD. In addition, the polluter pays principle is to be taken into account, a requirement which given the inherent vagueness of this principle does not provide any meaningful guidance. In implementing the cost-recovery principle, Member States may have regard to the social, environmental and economic effects of the recovery as well as the geographic and climatic conditions of the region or regions affected. To summarize, in deciding what amounts to an adequate incentive or an adequate contribution, Member States may take into account a considerable range of conflicting factors. Thus their discretion with regard to giving effect to cost-recovery probably is rather wide.⁹³ For reasons of transparency, Article 9(2) WFD directs Member States to report in the RBMP on the planned steps towards implementing cost-recovery. Article 9(4) grants Member States the authority to exempt a water use activity from the application of cost recovery provided this does not compromise the purposes and the achievement of the objectives of the WFD. Member States wishing to make use of this authority have to report the reasons for such exemptions in the RBMP. Presumably, such exemptions also have to be compatible with the E.C Treaty provisions on state aid.⁹⁴ Having dealt with the

⁹² Article 2(38) WFD defines water services as “all services which provide, for households, public institutions or any economic activity: (a) abstraction, impoundment, storage, treatment and distribution of surface water or groundwater; (b) waste-water collection and treatment facilities which subsequently discharge into surface water.” As specified in Article 2(39) WFD, the term “water use” includes “water services together with any other activity identified under Article 5 and Annex II having a significant impact on water.”

⁹³ To this effect, see also *Grimeaud* [2001] EELRev, p. 134.

⁹⁴ For a general discussion of the law on state aid, see *Wyatt & Dashwood's European Union Law*, Fourth Edition, 2000, pp. 679 et seq. In 2001, the Commission published new Community guidelines on State aid for environmental protection. See [2001] O.J. C 37, p. 3.

existing EC water law, we will now turn to the scope and meaning of the duty to implement directives.

II. The Duty to Implement Directives by Binding National Rules

The third paragraph of Article 249 E.C. provides that a directive shall be binding, as to the result to be achieved, upon each Member State to which it is addressed, but shall leave to the national authorities the choice of form and methods. However, decisions of the Court of Justice⁹⁵ indicate that the Member States' power to choose form and methods for the implementation of directives is limited by their duty under Article 10(1) E.C. to take all appropriate measures, whether general or particular, to ensure fulfilment of the Community obligations. Thus the freedom left to the Member States by Article 249 E.C. does not affect their obligation to choose the most appropriate forms and methods.⁹⁶ In essence, the case law of the Court requires that a directive has to be transposed into binding rules of national law. Before discussing what requirements apply to national transposing legislation, we will first answer the question whether every provision of a directive has to be transposed into national law.

1. Scope of the Implementation Duty

a) Provisions Exclusively Addressed to Community Institutions or Member States

The Court has made it clear that the duty to transpose directives is applicable to all provisions "intended to create rights and obligations for individuals."⁹⁷ The case law also shows that the Court interprets the concept of "rights and obligations" in a rather broad and flexible manner. However, there are limits to the Member States' duty of transposition, namely in relation to provisions of a directive which are practically incapable of affecting the conduct of individuals. This is true for provisions which are not directed at the Member States but at the Council or Commission. For example, Article 18 WFD provi-

⁹⁵ For a discussion in English of the relevant ECJ decisions, see generally *Wyatt & Dashwood* (footnote 94), pp. 89 – 92; for the scope of the duty to transpose directives in the environmental law context, see *Jans* (footnote 8), pp. 135 – 159; and *Kraemer* (footnote 1), pp. 278 – 281.

⁹⁶ Case 48/75 *Royer* [1976] E.C.R. 497.

⁹⁷ Case 361/88 *Commission v. Germany* [1991] E.C.R. I-2567.

des that the Commission shall report to the Council and the European Parliament on the implementation of the Directive. Similarly, Article 19 WFD requires the Commission to present to the regulatory committee an indicative plan of measures having an impact on water policy which it intends to propose in the near future. By their very nature, provisions like these, which are not addressed to the Member States and thus do not impinge on individuals at all, do not require transposition into national law by the Member States.⁹⁸ With regard to provisions exclusively concerning the Member States' relations to the Community institutions, the case law appears to support the conclusion that as a rule their transposition into national law is not required.⁹⁹ This category includes obligations for Member States to provide information to the Commission, such as the obligation to notify the Commission of the texts of implementing legislation,¹⁰⁰ or to send reports to the Commission.¹⁰¹

However, the fact that in a particular Member State regional authorities rather than the central government have legislative powers in the field of law regulated by a directive arguably expands the scope of that Member State's duty of implementation. The leading case in this regard involves Germany's alleged failure to transpose Article 10(1) of directive 80/778 relating to the quality of water intended for human consumption.¹⁰² This provision required Member States to inform the Commission immediately when they would use their authority under the directive to derogate from pollutant limit values in cases of emergency. In Germany, regional authorities of the constituent regions (*Länder*) were responsible for granting such derogations. The Court noted that Germany had failed to ensure that its national laws contained provisions requiring the *Länder* to notify the central government of any derogation granted so that the central government could in turn carry out its duty to inform the Commission. For this reason, Germany was found not to have fulfilled its obligations under Article 10(1) of directive 80/778. Apparently, Member States whose constituent regions are in charge of applying the law affected by a directive have a duty expressly to implement the directive's provisions requiring national authorities to submit information to the Commission. Thus, the Union of Serbia and Montenegro where the constituent republics are responsible for environmental protection¹⁰³ and the central government is in charge of external affairs¹⁰⁴ has to

⁹⁸ *Jans* (footnote 8), p. 138; *Kraemer* (footnote 1), p. 279.

⁹⁹ See Case C-58/89 *Commission v. Germany* [1991] E.C.R. I-4983, and *Jans* (footnote 8), p. 139.

¹⁰⁰ See, e. g., Article 24(2) WFD.

¹⁰¹ See, e. g., Article 15 WFD.

¹⁰² Case C-237/90 *Commission v. Germany* [1992] E.C.R. I-5973.

¹⁰³ See Article 72(5) of the Constitution of the Republic of Serbia.

¹⁰⁴ See Article 15 of the Constitutional Charter of the State Union of Serbia and Montenegro.

ensure that its national laws contain provisions requiring the republics to provide the central government with all types of information Member States have to send to the Commission under the WFD. Article 15 WFD, Article 3 WFD, paragraphs 8 and 9, and Article 24(2) WFD are the principal sources of reporting requirements which are relevant in this context.

b) Substantive and Procedural Provisions

Of course, the categories just mentioned do not contain the most important provisions of a directive. The core of an environmental directive usually is formed by the substantive and procedural provisions aimed at achieving specific environmental objectives. These provisions frequently regulate or, at least, influence relations between individuals or between individuals and the state. In other words, they will generally be intended to create or to modify rights and obligations of individuals. Such provisions must be implemented not only in fact, but also in law. This implies that they must be transposed into national law. The case law of the Court of Justice indicates that the concept of “rights or obligations for individuals” is to be interpreted very broadly.¹⁰⁵ For instance, procedural rules such as Articles 7 to 11 and 13 of Directive 80/68 on the protection of groundwater against pollution caused by certain dangerous substances¹⁰⁶ may contain rights and obligations for individuals.¹⁰⁷ Article 7 requires prior investigation of the hydro-geological conditions of the area concerned before authorizations are issued, and Articles 8 to 11 and 13 impose further conditions on the issuance of authorizations. The Court held that these procedural provisions were intended to create rights and obligations for individuals. In case 361/88¹⁰⁸ the Court indicated that the obligation imposed on Member States by Article 2 of Directive 80/779 on air quality limit values and guide values for sulphur dioxide and suspended particulates¹⁰⁹ was created “in order to protect human health in particular”, and that it therefore implied rights for individuals. Similar considerations can be found in a decision which dealt with Germany’s alleged failure to implement directive 75/440/EEC concerning the quality required of surface water intended for the abstraction of drinking water.¹¹⁰ In deciding that Germany had been required by Article 3(1) of the di-

¹⁰⁵ *Pernice, I.*, Kriterien der normativen Umsetzung von Umweltrichtlinien der EG im Lichte der Rechtsprechung des EuGH [1994] *Europarecht*, p. 339.

¹⁰⁶ [1980] O. J. L 20 p. 43.

¹⁰⁷ Case 131/88 *Commission v. Germany* [1991] E.C.R. I-825.

¹⁰⁸ Case 361/88 *Commission v. Germany* [1991] E.C.R. I-2567.

¹⁰⁹ [1980] O.J. L 229, p. 10.

¹¹⁰ Case C-58/89 *Commission v. Germany* [1991] E.C.R. I-4983; directive 75/440/EEC, [1975] O.J. L 194 p. 26.

rective to promulgate the limit values applicable to each abstraction facility in binding national rules, the Court explained that whenever a failure to apply the measures mandated by the directive might endanger human health, the individuals concerned needed to be able to rely on binding rules in order to safeguard their rights. Furthermore, the fixing of limit values in a provision whose binding nature was undeniable was also considered necessary in order that the operators of surface water abstraction facilities might ascertain precisely the obligations to which they would be subject. Provisions of the WFD falling within this category arguably include Article 4 and Annex V on environmental objectives; Article 7, paragraphs 2 and 3, on protection standards applicable to waters used for drinking water abstraction; Article 9 on cost recovery; Article 10(2) on emission limits set by existing and forthcoming directives; Article 10(3) on the necessity of more stringent emission controls in order to meet environmental quality objectives; Article 14 on public participation; and requirements for permits or prior authorization concerning human activities affecting water quality, as specified in Article 11(3).¹¹¹ In addition, Article 16(8) and Article 17(4), (5) WFD which specify Member States' obligations with regard to surface water and groundwater protection against pollution also influence the conduct of individuals and are therefore subject to the implementation requirement.

In view of the broad approach adopted by the Court as to whether an environmental directive is intended to create rights and obligations for individuals, it would seem reasonable to conclude that obligations for national administrations to establish cleanup programmes or waste management plans also require a binding legal basis in national law.¹¹² Indeed, such programmes or plans contain information for individuals about future objectives, about measures to be taken etc., and thus are capable of affecting the conduct of individuals. This is also true for the programmes of measures or the river basin management plans specified by Articles 11 and 13 WFD. Thus the WFD not only requires that programmes of measures and river basin management plans are prepared. It also requires that the national law contains compulsory rules obliging the authorities to prepare the programmes and plans in accordance with the provisions of the directive. Implementation of the WFD thus includes creating such a legal duty for the authorities.¹¹³

The case law indicates that there are substantive provisions whose transposition into domestic law is not required. In 1991, the Court of Justice rejected the Commission's claim that Germany had failed to implement Article 2 of Di-

¹¹¹ See to this effect *Fassbender* (footnote 70), pp. 245 – 247.

¹¹² *Jans* (footnote 8), p. 140; *Kraemer* (footnote 1), p. 279.

¹¹³ See to this effect *Fassbender* (footnote 70), p. 248.

directive 75/440/EEC.¹¹⁴ Article 2 provides that “surface water will be classified according to three groups of limit values [...] which correspond to the appropriate standard treatment processes specified in Annex I. These groups indicate three different water quality levels with the physical, chemical and microbiological characteristics specified in the table contained in Annex II.” This classification of surface water is vital to implementing the directive, in particular to the fixing of limit values applicable to each drinking water abstraction facility. However, the Court believed that Article 2 of the directive did not create an independent obligation for Member States. Therefore the Commission’s complaint of failure to implement Article 2 was dismissed. One commentator has argued that the provisions in Article 3 WFD concerning identification of river basins, assigning them to river basin districts and identification of competent authorities also do not create independent obligations for Member States and, therefore do not have to be implemented by means of an act of legislation. According to this commentator, similar arguments can be submitted regarding Article 5 WFD on water bodies analysis, Article 6 WFD on compiling a register of protected areas, Article 7(1) WFD on identification of water bodies intended for drinking water abstraction, and Article 8 WFD on water status monitoring.¹¹⁵ Whatever the merits of this reasoning in general, in the case of the Danube river the duty to assign river basins to river basin districts as well as the duty to identify competent authorities is inextricably intertwined with issues of trans-boundary water management. In addition, the effort to be made with regard to a specific water body in order to achieve applicable environmental objectives presumably is dependent on which river basin district the water body is assigned to. Therefore the assignment of water bodies to river basin districts is capable of affecting the conduct of individuals. For these reasons, it is submitted that the duties specified in Article 3 WFD have to be transposed by means of a formal act of legislation. The provisions on water status analysis and monitoring are intended to provide the information necessary to set more specific criteria for assessing compliance with applicable environmental objectives. Consequently, they are capable of affecting the conduct of individuals, as defined by the Court of Justice. Therefore, it is submitted that Articles 5 and 8 WFD also have to be transposed by formal legislation. For similar reasons, the duty to implement by means of binding national rules also is applicable to Articles 6 and 7(1) WFD.

¹¹⁴ Case C-58/89 *Commission v. Germany* [1991] E.C.R. I-4983; Directive 75/440/EEC, [1975] O.J. L 295, p. 34.

¹¹⁵ See *Fassbender* (footnote 70), p. 244/245, with additional references.

c) Definitions

The Court of Justice has not yet had to decide whether definitions contained in a directive have to be transposed into national law. The necessity of transposing definitions probably depends on the legal context of the definition: the more directly individual rights and obligations might be affected by a definition, the greater the need to transpose a directive's definitions into national law.¹¹⁶ Good examples are the definitions of "pollutant", "hazardous substances" and "priority substances" in paragraphs 29 to 31 of Article 2 WFD. If a specific substance meets the criteria set by one of these definitions, it will be subject to the applicable emission limitation, phase-out or monitoring requirements of the WFD which in turn affect the conduct of individuals, industry or administrations. For this reason, paragraphs 29 to 31 of Article 2 WFD probably have to be transposed literally into binding national law.

d) Provisions Relating to Trans-boundary Issues

A final category which can reasonably be distinguished includes provisions which relate to trans-boundary environmental issues. The Court of Justice has consistently held that a faithful transposition becomes particularly important in cases in which the management of the common heritage is entrusted to the Member States in their respective territories.¹¹⁷ Thus provisions on conducting trans-boundary consultations or exchanging environmental information among Member States arguably require precise transposition into domestic law. WFD provisions falling within this category include Article 12 on water management issues which cannot be dealt with at Member State level, and Article 3(3), (4) on international river basin districts.

2. Requirements Applicable to Measures Implementing a Directive

a) Need for Binding Provisions of National Law

In essence, the case law of the Court means that a directive has to be transposed into binding provisions of national law, in a manner which fully satisfies the requirements of clarity and legal certainty, and which affords interested

¹¹⁶ *Kraemer* (footnote 1), p. 279.

¹¹⁷ Case 252/85 *Commission v. France* [1988] E.C.R. 2243; see also case 262/85 *Commission v. Italy* [1987] E.C.R. 3073; for a discussion, see *Jans* (footnote 8), pp. 136, 141.

parties recourse to the courts. It is important that the result intended by the directive is achieved not only in fact, but also in law.¹¹⁸ Thus directives cannot in principle be transposed by means of rules which are not legally binding. Rather, implementation of a directive requires the transposition of the provisions of the directive by binding measures of national law, that is by acts of the national legislature or by binding administrative regulations. By contrast, plans which contain nothing more than nonbinding guidelines for administrative authorities cannot be considered sufficient for the purpose of implementing a directive.¹¹⁹ Similarly, circulars, policy rules and other legal instruments alone which are binding only on the administration and have no binding effect in respect of third parties will not be enough to satisfy the requirements of Article 249(3) EC.¹²⁰ For lack of legal certainty, they will neither be sufficient in conjunction with binding administrative decisions issued in individual cases.¹²¹

b) Implementation by “Compliance in Fact”?

A defence frequently used by national governments in actions for Treaty infringement is that of “implementation by compliance in fact”:¹²² Member States will argue that national administrative practice fully meets the requirements of the directive at issue. This defence is likely to be invoked in two situations. The first is where implementing legislation exists but the administrative powers granted under this legislation are too wide compared to the underlying directive. The second is where the specific practice which is prohibited by the directive does not occur within a particular Member State, and there would thus seem to be no reason to adopt national legislation.

If the national implementing legislation grants too much discretion to the administrative body concerned, the directive may well turn out not to have been correctly implemented. For example, case 291/84 addressed the manner in which the Netherlands had implemented Directive 80/68 on the protection of groundwater.¹²³ Article 6 makes artificial recharges of groundwater subject to a special authorization to be issued by the Member States on a case-by-case basis under the condition that there is no risk of groundwater pollution. The

¹¹⁸ Case C-83/97 *Commission v. Germany* [1997] E.C.R. I-7191; case 361/88 *Commission v. Germany* [1991] E.C.R. I-2567.

¹¹⁹ Case 96/81 *Commission v. Netherlands* [1982] E.C.R. 1791.

¹²⁰ Case 361/88 *Commission v. Germany* [1991] E.C.R. I-2567; case C-59/89 *Commission v. Germany* [1991] E.C.R. I-2607; case C-13/90 *Commission v. France* [1991] E.C.R. I-4327.

¹²¹ Case 58/89 *Commission v. Germany* [1991] E.C.R. I-4983.

¹²² For a more extensive discussion, see *Jans* (footnote 8), pp. 149-152.

¹²³ Case 291/84 *Commission v. Netherlands* [1987] E.C.R. 3483; Directive 80/68/EEC, [1980] O.J. L 20, p. 43, later amended.

Commission took the view that this condition had not been included in Dutch implementing legislation. Article 14 of the Dutch Law on Groundwater merely had provided that the authorization would be issued on terms such as to ensure the proper management of groundwater. Thus, the national legislation had granted greater latitude than had been permitted by the Directive to the national authorities in charge of issuing authorizations. The Netherlands Government averred that as a matter of policy authorization was granted only when there was no danger of pollution. The Court of Justice accepted the Commission's argument that Article 6 of Directive 80/68 had not been transposed into national law with sufficient precision. If a provision of national law grants the administrative bodies too much latitude in exercising their discretion, it cannot be successfully argued that the obligations included in a directive have been implemented by the national legislation.

Case 339/87 illustrates the second type of situation where the compliance in fact defence is frequently employed. Under Article 5(c) of the Wild Birds Directive, Member States are required to enact legislation prohibiting taking birds' eggs in the wild and keeping them, even if empty.¹²⁴ Under the provisions of Dutch hunting law it was permitted to seek, collect or possess the eggs of five specific bird species. The Dutch Government contended that in fact eggs of these species were not sought or collected in the Netherlands, and that legislation was therefore unnecessary. Rejecting this defence, the Court pointed out that the fact that a number of activities incompatible with the prohibitions contained in the directive were unknown in a particular Member State could not justify the absence of appropriate legal provisions. By contrast, in case C-290/89 Belgium argued that no transposition of directives 75/440 and 79/869 concerning surface water intended for drinking water abstraction was required for the Brussels region, since surface water intended for the abstraction of drinking water did not exist in this region. Somewhat surprisingly, the Court accepted this position. The underlying principle appears to be that a Member State can only be relieved of its duty to implement the provisions of a directive if the situation envisaged by the directive cannot in fact occur on that Member State's territory. Some legal scholars have severely reprimanded the Court for taking an unduly formalist approach.¹²⁵ On closer inspection, however, there appear to be good reasons for the Court's way of dealing with deficient imple-

¹²⁴ Case 339/87 *Commission v. Netherlands* [1990] E.C.R. I-851; Directive 79/409/EEC, [1979] O.J. L 103, p. 1, last amended by Directive 97/49/EC, [1997] O.J. L 223, p. 9.

¹²⁵ Indeed, this view appears to be the prevailing opinion in Germany. See, for example, *Salzwedel, J. / Reinhardt, M.*, *Neue Tendenzen im Wasserrecht* [1991] *Neue Zeitschrift fuer Verwaltungsrecht*, p. 946; *Breuer, R.*, *Entwicklungen des Europäischen Umweltrechts*, 1993, pp. 74 *et seq.*; *v. Danwitz, T.*, *Normkonkretisierende Verwaltungsvorschriften und Gemeinschaftsrecht* [1993] *Verwaltungsarchiv*, pp. 81 *et seq.*

mentation of directives.¹²⁶ If the Court took a more lenient approach to the formal side of implementation, it would become impossible for the Commission to exercise any meaningful control on Member States' compliance with directives. The Commission would then be unable to rely on national legislation; rather, it would have to look at the actual extent of compliance in practice. In view of the limited size of the Commissions and its extremely narrow powers to conduct investigations within the Member States, such control of actual practice can hardly be regarded as a realistic proposition. For the effectiveness of the European legal order it is therefore of great importance that the obligations enshrined in directives are properly transposed into national law. In this light the Court's decisions should be regarded not as unduly formalistic, but as providing legal certainty in European environmental law.¹²⁷

c) Use of Different Wording in National Legislation

The law as to the circumstances in which transposition of a directive requires word-for-word incorporation of its rules in domestic law is rather uncertain. The Court of Justice has indicated that literal repetition of the directive's provisions in an express, specific act of national legislation is not always necessary. Depending on the directive's content, a general legal context may be satisfactory provided that it effectively ensures full application of the directive in a way which is sufficiently clear and precise so that, if the directive aims to create rights for individuals, they will be able to ascertain the full extent of their rights and to rely on them before the national courts.¹²⁸ Where a directive sets numerical values such as emission limit values, environmental quality standards or targets, national legislation will for reasons of legal certainty have to adopt these numerical values verbatim. The same principle applies to implementation of bans of substances or products contained in a directive.¹²⁹ In other cases, if a Member State chooses not to adopt provisions of a directive literally, it will still run the risk of being found in breach of its duties under Article 249(3) EC. There are several examples which illustrate the ambiguity of the Court's relevant case-law. For instance, in case 412/85 Germany attempted to rely on a provision of its Nature Protection Act in order to rebut the Commission's assertion that Article 5 of the Wild Birds Directive had not been properly im-

¹²⁶ *Jans* (footnote 8), pp. 151-152..

¹²⁷ For a similar line of reasoning see also *Ruffert, M.* in: *Calliess, C. & Ruffert, M. (editors)*, *Kommentar zu EU-Vertrag und EG-Vertrag*, Second Edition, 2002, Article 249 E.C., annotation 58.

¹²⁸ Case C-190/90 *Commission v. Netherlands* [1992] E.C.R. I-3265.

¹²⁹ See case C-361/88 *Commission v. Germany* [1991] E.C.R. I-2567; *Kraemer* (footnote 1), p. 281.

plemented.¹³⁰ Article 5 provides that Member States shall prohibit deliberate killing or capture of wild birds and deliberate destruction of their nests and eggs. Unintentional acts are not prohibited by the directive. Paragraph 22(3) of the Nature Protection Act allowed a departure from the prohibitions in respect of species protection where the acts take place in the course of “the normal use of the land for agricultural, forestry or fishing purposes.” The German Government argued that the derogations provided for in Paragraph 22(3) presuppose the absence of any intentional acts to the detriment of protected bird species. The activities defined by Paragraph 22(3), such as the normal use of land could never be regarded as constituting a deliberate failure to protect bird species, because actions performed with the intent to kill, capture, or disturb wild birds could not properly be described as forming part of normal agricultural, forestry or fishing activities. However, the Court refused to accept this reasoning. It found that Paragraph 22(3) of the German Nature Protection Act failed to define precisely the extent to which damage to the environment was permitted. The concept of “normal use of the land” and the concept of an unintentional infringement of the provisions protecting wild birds did not coincide. Since the German legislation did not define the concept of “normal use of the land”, intentional damage to life and habitat of birds was not precluded by Paragraph 22(3) in so far as such damage inevitably occurred in the course of the normal use of the land. Thus the German Government’s attempt to translate the concept of unintentional infringement by means of the national concept of “normal use of the land” failed.

Other examples illustrating the ambiguity of the Court’s approach to the necessity of literal incorporation are the cases dealing with the implementation of Article 9 of the Wild Birds Directive into Belgian and Dutch law. Article 9 authorizes Member States to derogate from the provisions on bird protection contained in Article 5 for a variety of reasons which includes the need “to prevent serious damage to crops, livestock, fisheries and water.” In case 247/85¹³¹ the Commission argued that it was essential that the expression “serious damage” rather than just “damage” should be used in the Belgian legislation. The Court, however, noted that the Commission had failed to prove that the concept of “damage” in the Belgian rules was not interpreted and applied in the same way as the concept of “serious damage” in Article 9 of the directive. In case 236/85, the Court accepted the Netherlands Government’s claim that the exceptions from the rules on bird protection contained in Dutch law related only to certain bird species which were indeed capable of causing serious damage, so

¹³⁰ Case 412/85 *Commission v. Germany* [1987] E.C.R. 3503; Directive 79/409/EEC, [1979] O.J. L 103, p. 1, last amended by Directive 97/49/EC, [1997] O.J. L 223, p. 9.

¹³¹ Case 247/85 *Commission v. Belgium* [1987] E.C.R. 3029.

that the requirements of Article 9 were satisfied.¹³² Apparently literal transposition is not necessary as long as the Member State demonstrates that the national law is interpreted and applied as intended by the directive. By contrast, in case 236/85 the Court rejected the Dutch Government's argument that the clause in Article 9 of Wild Birds Directive which makes derogations from the provisions on bird protection conditional on there being no other satisfactory solution had been properly implemented by compliance in practice.

The Post-Seveso case,¹³³ on the other hand, took a much more global approach as to whether obligations created by a directive had been properly transposed. The Commission claimed that the Netherlands had not completely implemented Article 3 of the Post-Seveso Directive.¹³⁴ This Article provided that Member States had to ensure that, in the case of the industrial activities specified in the directive, the manufacturers take all the measures necessary to prevent major accidents and limit their consequences for man and the environment. The Court observed that, like the directive, all the national legislation to which the Dutch Government had pointed as serving to implement Article 3 aimed at taking specific, effective measures to prevent major accidents and any consequences they might have outside the industrial facilities concerned. In this case the Court apparently attached great importance to the objectives of both the directive and the national legislation coinciding. The judgment expressly made reference to all the national legislation which served to implement Article 3. This would indeed seem to indicate a more global approach to the issue of correct implementation, because the Court refrained from examining the extent to which each specific provision of national law contributed to implementation.

To summarize, if a Member State chooses not to adopt provisions and concepts of a directive literally, it is in principle free to do so as long as it succeeds in fully achieving all the results envisaged by the directive. It should bear in mind that the Court will be the final arbiter as to whether a directive has been correctly implemented, and that the Court's decisions in this respect have been somewhat inconsistent. Thus a national legislature wishing to apply its own national concepts when implementing a directive would be well advised to proceed with extreme care.

d) Implementation by Regional and Local Authorities

Under Community law, each Member State is free to attribute or delegate powers to its public authorities as it considers fit and to implement directives by

¹³² Case 236/85 *Commission v. Netherlands* [1987] E.C.R. 3989.

¹³³ Case C-190/90 *Commission v. Netherlands* [1992] E.C.R. I-3265; for a discussion, see *Jans* (footnote 8), p. 155.

¹³⁴ Directive 82/501/EEC, [1982] O.J. L 230, p. 1, later amended.

means of measures adopted by regional or local authorities. This right to maintain its own system of attribution of powers and its federalist system of government, however, does not release a Member State from its duty to ensure that the provisions of a directive are properly implemented in national law.¹³⁵ It is therefore irrelevant whether a directive is implemented by the national legislature adopting rules which are universally applicable within the Member State's territory, or by regional or local authorities, provided that the Member State ensures adoption and application of Community environmental law throughout the national territory in accordance with the provisions of the directive. For instance, upon a showing that only 11 of Italy's 20 regions had made the required designation of shellfish waters, the Court held that Italy had failed to implement directive 79/923 properly.¹³⁶ Similarly, in the Court's view the fact that Italy had failed to fulfil its obligations under the Waste Framework Directive only in the San Rocco valley could not have a bearing on a finding of Treaty infringement.¹³⁷ This duty to ensure universal applicability of EC directives throughout the national territory presumably has special importance for the State Union of Serbia and Montenegro where the constituent republics are in charge of environmental protection.

III. Recommendations

In order to adapt their domestic law to existing EC water legislation, it is recommended that the State Union of Serbia and Montenegro and/or its constituent republics transpose the following provisions of the WFD into national law:

- Article 3 on assignment of water bodies to river basin districts and identification of competent authorities;
- Article 4 and Annex V on environmental objectives and permissible derogations with regard to surface water, ground water, artificial and heavily modified water bodies and protected areas;
- Article 5 on analyses of water status, human impact and economic aspects of water use;
- Article 8 on monitoring of water status;
- Article 6 on a register of protected areas;

¹³⁵ Joint cases 227-230/83 *Commission v. Belgium* [1988] E.C.R. 1; case C-225/96 *Commission v. Italy* [1997] E.C.R. I- 6887; case C-236/99 *Commission v. Belgium* [2000] E.C.R. 5657.

¹³⁶ Case C-225/96 *Commission v. Italy* [1997] E.C.R. I-687.

¹³⁷ Case C-365/97 *Commission v. Italy* [1999] E.C.R. 7773; see also case C-339/03 *Commission v. Germany*, judgment of 14 October 2004, <http://curia.eu.int>, where the Court held that Germany had failed to transpose Directive 1999/22/EC correctly because several of the constituent regions had not adopted the necessary legislation in time.

- Article 7(1) on identification of water bodies intended for drinking water abstraction;
- Article 7(2), (3) on protection of water bodies intended for drinking water abstraction;
- Article 10(2) on compliance with emission limits set by existing and forthcoming directives;
- Article 10(3) on the necessity of more stringent emission controls in order to meet applicable quality standards;
- Article 16(8) on Member States' obligations concerning control of surface water pollution;
- Article 17, paragraphs 4 and 5, on Member States' obligations concerning control of groundwater pollution;
- Article 9 on cost recovery;
- requirements for permits or prior authorization of human activities affecting water bodies, as specified in Article 11(3);
- Article 14 on public participation.

For purposes of implementing the WFD, it is also recommended to enact legislation which creates

- a duty to establish programme of measures according to Article 13,
- a duty to prepare river basin district management plans according to Article 13 and Annex VII;
- duties of constituent republics to send information to the central government with a view to fulfilling the central government's obligations under Article 15, Article 24(2) and Article 3 WFD, paragraphs 8 and 9, in relation to the Commission.

In addition, it is recommended to implement the following EC measures:

- Directives on emission limits for hazardous substances, as specified in Annex IX WFD;
- 1991 Nitrates Directive; 1991 Urban Waste Water Directive, 1996 IPPC Directive;
- Directives specifying "basic measures" to be included in the programmes of measures, as specified in Annex VI Part A WFD.

Furthermore, it is considered advisable to transpose the 1978 fish water directive and the 1979 shellfish water directive into national law, because by virtue of Article 4(9) WFD these directives will continue to be relevant as baseline criteria even after their repeal in 2013.