# Convergence with EU Water Policies

## Short Guide for ENP Partners and Russia

*water*

EUROPEAN COMMISSION

environment

# Convergence with EU Water Policies

## Short Guide for ENP Partners and Russia

**October 2007**

**Eleftheria Kampa**
**Jessica G. Ward**
**Anna Leipprand**

With contributions by **Zach Tagar** (Friends of the Earth Middle East) and **Malkhaz Dzneladze** (WWF-Caucasus)

This guide was prepared and composed by
Ecologic – Institute for International and European Environmental Policy
Pfalzburger Str. 43-44, D-10717 Berlin, Tel. +49 30 86 88 00, Fax +49 30 86 88 0100
www.ecologic.eu, raggamby@ecologic.de



ISBN number 978-92-79-08279-5
Catalogue number KH-30-08-207-EN-C

# Contents

# 1 Introduction

The European Neighbourhood Policy (ENP) was created in 2003/2004 and is now well established as the principal vehicle for cooperation with the neighbour countries. It is a collective EU response to the aspirations of its Eastern and Southern neighbours to jointly promote prosperity, stability and security in our region.

The recent historic enlargement of the EU in 2004 and 2007 contributed to the creation of a large zone of democracy and prosperity in Europe. The political, economic, social and environmental gaps between the Union and its neighbours to the East – Belarus[1], Ukraine, Moldova and the Southern Caucasus, and to the South, in the Mediterranean region, are worryingly large and in certain cases increasing. The EU wants to prevent the emergence of new dividing lines between the enlarged EU and its neighbours.

The European Neighbourhood Policy represents a new approach in the EU's relations with its neighbours. This "partnership for reform" is offered by the EU to 16 partner countries to the South and to the East of the EU[2]. It goes beyond classical co-operation: it consists of intensified political dialogue and deeper economic relations, based on shared values and common interest in tackling common problems. The ENP is not about membership of the EU – if an accession perspective were to be offered at some point in the future to any of the countries covered by the ENP, this would be a separate process.

The necessary legal and institutional framework for intensified cooperation with ENP partners are Partnership and Cooperation Agreements or Association Agreements. The tools, however, to deliver concrete results are jointly agreed, tailor-made ENP Action Plans[3] with short and medium term priorities (3–5 years). They cover a wide range of issues: political dialogue and macro-economic reforms, trade, co-operation in Justice, Liberty and Security, various sector-policies (transport, energy, environment and climate change, research, information society, social policy and employment) as well as a deep human dimension – people to people contacts, education, health, civil society. The ENP Action Plans also provide a means of technical and financial support in the partner's own reform efforts and modernisation.

The European Neighbourhood and Partnership Instrument (ENPI), as a "policy driven" financial instrument, will support in the period 2007–2013 the implementation of the ENP Action Plans, and, in the case of Russian Federation, which is not covered by the ENP[4], the road-maps for the four common spaces. In that context, it goes further than promoting sustainable development and fighting poverty to encompass, for example, considerable support for measures leading to progressive participation in the EU's internal market. Legislative and regulatory convergence and institution building is supported through mechanisms such as the exchange of experience, long term twinning arrangements with Member States or participation in Community programmes and agencies. The ENPI replaces MEDA and TACIS and other existing geographical and thematic instruments.

The Commission has set up a web-site explaining the ENP and its processes and containing key ENP documents such as the Strategy Papers, the Action Plans and Progress Reports. Please refer to: http://ec.europa.eu/world/enp/index_en.htm.

ENP partner countries are expected to benefit considerably from full implementation of the ENP Action Plans, including from enhanced convergence with the EU approaches. For benefits resulting from enhanced environment protection, including convergence, please refer to Chapter 3.

1 Belarus, while covered by the European Neighbourhood Policy, does not participate fully in it and has no ENP Action Plan. In line with Council Conclusions, the EU's relationship with Belarus is governed by a two-track policy whereby a policy of restricted contacts at Ministerial level is paralleled by the EC.

2 Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, Moldova, Morocco, the Occupied Palestinian Territory, Syria, Tunisia, Ukraine.

3 With exception of Algeria, Belarus, Libya and Syria ENP Action Plans have been agreed with all the countries mentioned.

4 The EU and Russia are linked by the Strategic Partnership.

In order to help partner countries to realise these benefits, the European Commission has decided to provide information on EU environment policy and legislation in key policy areas. To this end, the European Commission has initiated the production of **six short guides** on the following topics:

- **Water quality**, with a focus on the Water Framework Directive and related developments, such as the Flood Directive or the Groundwater Directive;
- **Waste management**, with a focus on the Waste Framework Directive;
- **Air quality**, with a focus on the Framework and Daughter Directives;
- Environmental **Impact Assessment**, Strategic Environmental Assessment, Access to Information, Participation in Decision-Making, and Reporting;
- **Nature protection**, with a focus on the Habitats and Birds Directives (e.g. cross-border co-operation) and the Natura 2000 network (e.g. ways to establish measures or monitoring);
- **Industrial pollution**, including the Integrated Pollution Prevention and Control Directive.

Where relevant the guides address the seven Thematic Strategies under the 6th Environment Action Programme (EAP).[5] The Thematic Strategies constitute the framework for action at EU level in each of the concerned priorities and cover the following fields: soil and the marine environment (in the priority area of biodiversity), air, pesticides and urban environment (in the priority area of environment, health and quality of life) and natural resources and waste recycling (in the priority area of natural resources and waste).[6]

Climate change issues are becoming an increasingly important component of the EU's environmental cooperation with partner countries, which bilateral dialogues will increasingly address. Documents on this crucial topic of common interest will be issued separately from this series of guides.

The **purpose** of this policy guide on water is to provide information on EU policy and legislation by describing the policy background and explaining how progress can be achieved through the prioritisation and sequencing of activities. The guide shows how gradual or partial convergence with the EU environment policy and legislation can assist the ENP partner countries and Russia in addressing environmental concerns.

The policy guide sets out the key principles and concepts of the relevant pieces of legislation and outlines the main policy instruments used within the EU. This includes summarising the main provisions of the legislation. The guide also addresses the current general policy situation of Eastern and Mediterranean ENP partners and looks at potential challenges to convergence. Finally, it identifies useful steps to be taken to promote convergence. Since the individual situation in partner countries varies considerably, the guides take a general approach and references to specific countries are not made. The relevance of full or partial convergence is also to be seen in this light.

5 For the 6th EAP please refer to: http://ec.europa.eu/environment/newprg/index.htm.
6 For the seven Thematic Strategies please refer to: http://ec.europa.eu/environment/newprg/strategies_en.htm.

# 2 In a Nutshell

## The problems that this policy aims to address

- Water is a precondition for life, as well as an indispensable resource for economic activities.
- Human activities exert pressures on water, reducing the availability of water in sufficient quantity and quality and creating the possibility of safety and supply risks.
- The main threats for water result from:
    - water pollution, in particular from urban and industrial waste water and agricultural runoff,
    - overexploitation of water resources and unsustainable use.

## How the policy addresses these problems

- European water policy addresses these issues by a set of legislative acts that follows two different approaches:
    - setting water quality objectives for specific water types,
    - setting emission limit values for specific water uses in reference to the concept of best available technologies (BAT).
- A common framework is provided by the Water Framework Directive that introduces a number of key principles, such as integrated management of all waters, river basins as management units, water pricing and cost recovery, and public participation.

## Benefits to be expected

Convergence to European water legislation may create the following benefits:

- more sustainable use and management of water, more efficient and effective management at the river basin level,
- reduced pollution and improved treatment of wastewater,
- benefits for human health in relation to drinking and bathing water, benefits for ecosystems, improved conditions for economic activities (e.g. tourism),
- instruments to address water scarcity,
- water pricing as a tool to raise funds and steer consumer behaviour,
- ownership among stakeholders as result of public participation.

# 3 Expected Benefits of Convergence

Convergence towards EU water legislation might bring a number of benefits to ENP partner countries by contributing to more sustainable water management and reducing pollution.

Convergence to the **Drinking Water Directive** might yield major benefits for the protection of human health and ensure that special attention is given to water intended for human consumption. This Directive is also likely to be beneficial for many economic sectors, including food industry export and tourism.

Uncontrolled discharge of untreated waste water is a major problem in many ENP partner countries and a large source of water pollution; immediate action on waste water treatment is considered crucial by regional environmental organisations. Using the **Urban Waste Water Treatment Directive** as a model could help ENP partner countries control discharges and ensure sufficient treatment of waste water, thereby improving water quality and reducing health risks. In regions where water is scarce, waste water treatment can also reduce the pressure on freshwater resources, for instance if treated waste water is used for irrigation or in industry.

Legislation similar to the **Bathing Water Directive** could improve the quality of freshwater bodies and coastal waters. Convergence to this Directive might be particularly attractive to countries where basic pollution control systems are already in place. Improving the quality of bathing water can alleviate public health problems and improve recreation for the local population, while also making a region more attractive for tourism.

The **Nitrates Directive** is highly relevant for the control of water pollution from diffuse agricultural sources. In countries where intensive agriculture is widespread and exerts significant pressure on water resources, convergence towards the Nitrate Directive can contribute significantly to improving water quality and preserving ecosystems.

The **Water Framework Directive** (WFD) is a very complex piece of legislation, making full convergence not possible in all cases. However, even the adoption of individual elements of the Directive might yield considerable benefits. Water management at the river basin level is more effective than managing waters according to administrative borders, as it takes all factors into account that may influence the resource and co-ordinates the actions of all riparian countries. It also helps to avoid that what is done in one section of the river counteracts efforts undertaken in another.

Water pricing and cost recovery, another concept central to the WFD, could be a way to raise funds and improve the financial base for water-related services and infrastructure, currently a key problem in many ENP partner countries. At the same time, water pricing can positively influence consumer behaviour and create incentives to use the resource more efficiently, making those who use and pollute water resources pay.

Convergence to the WFD would also strengthen public participation in ENP partner countries, and thus foster ownership among stakeholders. Participation helps to ensure that stakeholders support the measures taken to address water problems, to find the most effective and efficient solutions by drawing on local experience and knowledge, and to solve potential conflicts between different interests *before* decisions are taken. Through the implementation of appropriate water management plans and associated programmes of measures, the WFD can also be an important instrument for addressing drought and water scarcity, two most salient problems in the Mediterranean ENP partner countries.

In countries where groundwater resources are threatened, the provisions of the WFD and the **Groundwater Directive** ("Daughter Directive") could be very helpful for achieving effective protection of both groundwater quantity and quality.

For ENP partner countries with coastal waters, the **Marine Strategy** could serve as a potential model. Copying its approach (assessing impacts first, then defining environmental targets and implementing measures based on impact assessments at a regional level) could be an effective and efficient way to address the serious environmental problems that exist in the coastal waters of many ENP partner countries. The Caspian Sea, the Black Sea, the Baltic Sea and the Mediterranean currently suffer from a number of environmental pressures, such as pollution, high nutrient loads from rivers, and overexploitation of the fish stock, impacting human health, ecosystems, coastal landscapes, and economic sectors (e.g. fisheries, tourism) negatively. Regional and co-operative approaches are needed, given that these waters are shared among several countries and problem-solving can only be successful if based on concerted action.

# 4 Overview of EU Water Policy

Water and water pollution were among the first environmental concerns in the EU. The first pieces of EU water legislation were accepted by the European Council as early as 1973. Since then, European water legislation has taken a leading and innovative role in the design of national water policy in many EU Member States.

There have been two important periods of EU water legislation. The first period occurred between 1975–1980, resulting in a number of Directives and Decisions that either lay down water quality objectives for specific types of water (e.g. the Surface Water, Fish Water, Shellfish Water, Bathing Water and Drinking Water Directives) or establish emission limit values for specific water uses (e.g. Dangerous Substances Directive and the old Groundwater Directive). In the Water Quality Objective (WQO) approach, minimum quality requirements of water are defined in order to limit the cumulative impact due to emissions, both from point sources and diffuse sources. In the Emission Limit Value (ELV) approach, focus is on the maximum allowed quantities of pollutants that may be discharged from a particular source into waters. This approach looks at the end product of a process (waste water treatment, discharges from industry) or what quantities of pollutants may go into water. The concept of best available technology (BAT) has developed as a key element of setting ELVs, especially for the larger, more polluting industries. BAT denotes the most effective and advanced techniques that are currently available and that are sufficiently developed to allow implementation under economically and technically viable conditions. The concept is used to define how practical individual techniques are for preventing or reducing emissions of pollutants, and can serve as a basis for the definition of ELVs.

The second major period of EU water legislation, between 1980 and 1991, introduced additional Directives, including the Nitrates Directive, the Urban Waste Water Treatment Directives, the Integrated Pollution Prevention and Control (IPPC) Directive, as well as several Daughter Directives implementing the Dangerous Substances Directive. These second-period Directives mainly followed the ELV approach with respect to water pollution control at the source, both from point and from diffuse sources.

However, this piecemeal evolution on a problem-by-problem basis has led to a complex picture of water Directives with differing and often conflicting methodologies, definitions and aims. Furthermore, the water Directives were often less successful in environmental outcome than expected. The need for new and more co-ordinated EU water legislation was recognised, and a major revision of EU water policy was launched, finally resulting in the adoption of the Water Framework Directive (WFD) 2000/60/EC. The WFD provides a framework for the protection of all water bodies and is based on a combined approach of WQOs and ELVs.

The current water policy of the European Union recognises the following over-arching **principles:**

- High level of protection, taking into account the diversity of situations in the various regions of the Community;
- Precautionary principle;
- Preventative action;
- Rectification of pollution at source;
- Polluter pays principle;
- Integration of environmental protection into other Community policies – e.g. agriculture, transport and energy;
- Promotion of sustainable development.

All principles are reflected in the WFD. Placing these principles at the centre of water policy has major implications for further policy development and implementation, as they support the following **policy objectives and elements:**

- the development of integrated policies for the long-term sustainable use of water, and its application in accordance with the principle of subsidiarity;
- expanding the scope of water protection to all waters: surface waters, including coastal waters, and groundwater;
- achieving "good status"[7] for all waters by a certain deadline, and preserving such a status where it already exists;
- water management based on river basins, with appropriate co-ordination provisions for international river basin districts;
- setting prices for water use, taking into account the principle of cost recovery and in accordance with the polluter pays principle;
- encouraging greater participation by citizens; and
- streamlining legislation.

Box 1 lists all main pieces of EU water and related legislation. The following sections present selected elements of EU water policy in more detail. More information about EU water policy and the full text of legislation and other documents is available at the Commission's website.[8]

### *Box 1 EU water and related legislation*

**The Framework Legislation**
- Water Framework Directive (WFD) (2000/60/EC).

**Water Quality Objective oriented**
- Bathing Water Directive (76/160/EEC; to be repealed and replaced by the new Bathing Directive 2006/7/EC at the latest by 2014).
- Drinking Water Directive (98/83/EC).
- Directive on Surface for Drinking Water Abstraction (75/440/EEC; integrated into the WFD, to be repealed under the WFD 2000/60/EC as from 22.12.07).
- Freshwater Fish Directive (78/659/EEC); integrated into the WFD, to be repealed under the WFD 2000/60/EC as from 22.12.13).
- Shellfish Water Directive (79/923/EEC; integrated into the WFD, to be repealed under the WFD 2000/60/EC as from 22.12.13).

**Emission-Control oriented**
- Urban Waste Water Treatment Directive (91/271/EEC) and related Decision 93/481/EEC.
- Nitrates Directive (91/676/EEC).
- Ground Water Directive (80/68/EEC; integrated into the WFD, to be repealed under the WFD 2000/60/EC as from 22.12.13; after 2013 the protection regime should be continued through the WFD and the new Groundwater Daughter Directive (2006/118/EC) adopted on 12/12/2006).
- Dangerous Substances Directive (76/464/EEC; to be repealed under the WFD 2000/60/EC as from 22.12.2013; proposal for a new Directive setting limits for 41 substances was adopted on 17/07/2006 (COM(2006)397 final)).
- Daughter Directives of the Dangerous Substances Directive (to be replaced and repealed under the Directive proposed 17/07/2006).
- Integrated Pollution Prevention and Control Directive (96/61/EC).

**Diffuse source emission controls**
- Plant Protection Products (91/414/EC).
- Marketing and Use of Dangerous Substances and Preparations (76/769/EEC).
- Biocides (98/8/EC).

**Monitoring and Reporting**
- Directive on the Measurement of Surface (Drinking) Water (79/869/EEC; to be repealed under the WFD 2000/60/EC as from 22.12.07).
- Common Procedures for Exchange of Information (Decision 77/795/EEC).

*Source: Handbook on the Implementation of EC Environmental Legislation; Guide on Convergence with EU Environmental Legislation in Eastern Europe, Caucasus and Central Asia.*

7 See explanation in section 4.5.
8 http://ec.europa.eu/environment/water/index_en.htm.

## 4.1 Drinking Water Directive 98/83/EC

The key aim of the Directive is to protect human health from the adverse effects of water contamination. It applies to all water intended for human consumption, as well as water used in the production and marketing of food.

The main instruments used for managing drinking water quality are standard-setting and the specification of detailed monitoring requirements. The Drinking Water Directive sets standards for a number of microbiological and chemical parameters, scientifically based on WHO guidelines. Member States may include additional parameters or use higher standards, but they may not go below the standards set by the Directive. Member States are required to monitor the quality of drinking water and take measures to ensure that it complies with minimum quality standards. The quality targets need to be met at the point of use, i.e. the tap.

Monitoring results are reported to the Commission at regular intervals and information on drinking water quality has to be made available to the public.

The Drinking Water Directive has led to large investments in water distribution networks. In a Synthesis Report on the quality of drinking water in the EU Member States in the period 1993–95, it was concluded that the general quality of drinking water supplied to European citizens had reached a high status.

The Drinking Water Directive requires that five years after its entry into force, i.e. by 2003, Member States had to ensure that the quality of water intended for human consumption complies with newly established provisions.

## 4.2 Bathing Water Directive 76/160/EEC, 2006/7/EC

The general objective of EU legislation on bathing water has been to ensure the good quality of bathing water, both freshwater and coastal water, over time. This objective was not only motivated by public health considerations, but also by reasons of amenity. The main issue in achieving this goal is the prevention of the pollution of bathing waters by sewage effluents. The 1976 Bathing Directive is one of the oldest pieces of environmental legislation in Europe. A new Directive was adopted in 2006 that will replace and repeal the older one by 2014 at the latest.

The main instruments of the Bathing Directive are water quality standards for bathing water, monitoring requirements, reporting requirements and requirements for measures to ensure compliance with the standards.

Under the Bathing Water Directive, Member States are required to designate coastal and inland bathing water and to monitor the quality of the water throughout the bathing season. Bathing waters are designated where bathing is authorised by the competent authority (the public authority responsible for a particular water body) and also where bathing is traditionally practised by a large number of bathers. The quality of the water has to be monitored every two weeks during the bathing season and also two weeks beforehand.

While the 1976 Bathing Directive required the monitoring of 19 parameters, the new Directive reduced this list to just two microbiological indicators of faecal contamination, E. Coli and Intestinal Enterococci. This reflects the fact that faecal material, for instance due to inadequate sewage treatment and pollution from animal waste, is the primary health threat to bathers, and that all other relevant pollutants are monitored under the WFD. On the basis of water quality data compiled during the bathing seasons, sites are to be classified into 4 levels: poor, sufficient, good and excellent. Classification will be determined on the basis of a three-year trend instead of a single year's result as at present. As such, the classification will be less susceptible to bad weather or one-off incidents. Where water quality is consistently good over a three-year period the frequency of sampling may be reduced, thereby reducing costs.

The new Directive requires Member States to draw up a management plan for each site to minimise risks to bathers, based on an assessment of the sources of contamination likely to affect it. Users of the site should

be actively involved in the development of the management plan. Where bathing sites have a history of poor water quality, preventive measures should be taken to close the bathing area when such conditions are expected. If the quality standards are not respected, remedial measures must be taken.

Information on a bathing site's quality classification, the results of water quality monitoring, the site's management plan and other relevant information is to be made readily available to the public, both through on-site displays and through the media and internet.

The success in meeting the Bathing Directive is ultimately connected with other environment improvement measures, particularly the measures adopted under the Urban Wastewater Treatment Directive, the IPPC Directive and the Nitrates Directive.

### *Box 2 Improvement of water quality from implementing the Bathing Water Directive*

The quality of water at designated bathing beaches in Europe (coastal and inland) has improved throughout the 1990s. In 2002, 96% of coastal bathing waters and 91% of inland bathing waters complied with the mandatory standards. In 2002, The Netherlands even reached 100% compliance with the mandatory standards in coastal waters. In general, Member States have invested significant amounts of money to achieve the prescribed standards. The implementation of the Urban Wastewater Treatment Directive has also contributed significantly to the general improvement of surface water quality including bathing waters.

*Source: European Environment Agency.*[9]

## 4.3 Urban Waste Water Treatment Directive 91/271/EEC

The Urban Waste Water Treatment Directive (UWWTD) concerns:

- the collection, treatment and discharge of urban waste water from agglomerations; and
- the treatment and discharge of biodegradable waste water from certain industrial sectors.

Its objective is to protect the environment from the adverse effects of such waste water discharges. Member States must ensure that urban waste water is collected and treated prior to discharge according to specific standards and deadlines. In terms of the treatment objectives, secondary (i.e. biological) treatment is the general rule, with additional nutrient removal in so-called sensitive areas (tertiary treatment); for certain marine areas, primary treatment might be sufficient.

The deadlines for implementing the Directive vary according to the size of the agglomeration and the characteristics of the receiving waters.

The so-called "sensitive areas" are classified according to the sensitivity of their water sources (i.e. used as a drinking water source, high level of eutrophication, compliance with EU water standards). Standards of differing stringency apply to the various classes (sensitive, normal and less sensitive areas). According to the three categories of receiving waters, different minimum standards for sewage treatment are set. The Directive introduces mechanical-biological treatment as a minimum standard, and further treatment (i.e. tertiary treatment) in sensitive areas. Furthermore the Directive foresees that all agglomerations greater than 2000 population equivalent (p.e.) are required to have collecting systems for waste water by the end of either 2000 or 2005, depending on their size (cut-off size: 15,000 p.e.). The treatment requirements are more stringent for larger agglomerations. Those smaller towns or villages (less than 2000 p.e.), which are not obliged by the Directive to install secondary treatment systems, are still required to provide 'appropriate' treatment sufficient to ensure compliance with quality objectives or the requirements of other EU legislation.

---

9 http://themes.eea.europa.eu/Specific_media/water/indicators/WEU11%2C2004.05;
http://themes.eea.europa.eu/Specific_media/water/indicators/WEU11%2C2004.05/WEU11_BathingWater_final.pdf;
http://themes.eea.europa.eu/IMS/IMS/ISpecs/ISpecification20041007132021/IAssessment1116508884876/view_content.

The Directive sets targets and limit values which the treatment efforts must reach. Moreover, monitoring and evaluating procedures for the results are specified. In the case of excessive costs for treatment systems, alternative systems may be used to achieve the same level of environmental protection. Additionally, the Directive regulates the disposal of sewage sludge. The dumping of sludge at sea or other surface waters was mandated for phase out by 1998.

With respect to industrial waste water, discharges into collecting systems and treatment plants are subject to prior regulation and/or specific authorisation, and subject to forms of specified pre-treatment. These include the provision that the resulting sludge can be disposed of safely in an environmentally acceptable manner.

### *Box 3 Improvement of wastewater treatment from implementing the UWWTD*

Since the 1980s, marked changes have occurred in the proportion of European population connected to wastewater treatment and in the technology involved. Implementation of the Urban Waste Water Treatment Directive (UWWTD) has largely influenced this trend. The Directive has resulted in increased treatment capacity. Especially in several countries in north-western Europe, there has been a marked increase in the population connected to tertiary waste water treatment in the 1990s resulting in reductions in phosphorus and nitrogen discharges. In central European countries, more than half of the wastewater is treated by tertiary treatment. In southern and eastern countries, as well as the Accession countries, only around half of the population is currently connected to any wastewater treatment plants and 30 to 40 % to secondary or tertiary treatment. This is because policies to reduce eutrophication and improve bathing water quality were implemented earlier in the Nordic and central than in the southern, eastern and Accession countries.

Improved treatment of wastewater has resulted in improvement of the state of water bodies with a decrease in concentration of pollutants over the past ten years, although nitrate pollution continues to be a problem in many regions. In EU countries, these decreases are linked with the implementation of European legislation. In fact, Member States have made considerable investments to achieve these improvements. In the Accession Countries, decrease of wastewater pollution is due to the general increase in the level and extent of waste water treatment and to the recession associated with the transition to market-oriented economies.

*Source: European Environment Agency.*[10]

## 4.4 Nitrates Directive 91/676/EEC

The Nitrates Directive aims at mitigating the negative effects of fertilisation on drinking water sources and ecosystems by limiting the input of inorganic fertilisers and manure on farmland.

To this aim, Member States must identify waters affected by pollution caused or induced by nitrates from agricultural sources, as well as waters that could be affected by such pollution. Those waters and all known areas draining into those waters must be designated as 'vulnerable zones'. For these zones Member States must then establish and implement action programmes to reduce pollution. Alternatively, action programmes may be implemented throughout the national territory; in this case the designation of vulnerable zones is not necessary. Action programmes under the Nitrates Directive include limits for the spreading of manure and chemical fertilisers. For areas outside the vulnerable zones reduction of pollution has to be promoted by (voluntary) codes of good agricultural practice. Member States are in this context obliged to monitor the nitrate concentrations in groundwater and surface waters, as well as eutrophication in surface waters.

[10] http://themes.eea.europa.eu/Specific_media/water/indicators/wastewater;
http://themes.eea.europa.eu/Specific_media/water/indicators/WEU16%2C2004.05;
http://themes.eea.europa.eu/IMS/IMS/ISpecs/ISpecification20041007132045/IAssessment1116503171170/view_content.

The Member States are furthermore required to report on the designation of vulnerable zones, the results of water quality monitoring, the action programmes and the codes of good agricultural practice to the Commission on a four-year basis.

The relationship with the UWWTD is also an important consideration, since the designation of "sensitive areas" under the UWWTD uses similar criteria and requires action plans which may have an impact on action taken under the Nitrates Directive.

Phasing proposed for the implementation of the Nitrates Directive is differentiated for the case of designating individual nitrate vulnerable zones and for the case of applying action programmes throughout a national territory.

In the case of individual vulnerable zone, first a monitoring programme should be established to collect information (over at least one year) to identify waters polluted by nitrates. In addition, areas of agricultural land should be identified that may be classified as vulnerable zones, the causes of high nitrate levels from land activities should be identified, as well as means to reduce nitrate inputs to water including consultation with farmers and others to differentiate agricultural from non-agricultural sources. Secondly, action programmes should be prepared, including mandatory measures and voluntary codes of good agricultural practice for each vulnerable area. Third, action programmes should be implemented, undertaking training of farmers and establishing an ongoing monitoring programme and making frequent review of the programmes' effectiveness.

In case of action programmes for the entire country, first the causes of high nitrates throughout the country should be identified and a series of measures prepared to improve nitrate levels throughout the country (action programmes). Secondly, the action programmes should be implemented, establishing a monitoring programme and a review of the effectiveness of measures taken.

The alternative of designating individual vulnerable zones requires extensive monitoring and investigation. The alternative of adopting nitrate reduction action programmes for a whole country limits the amount of monitoring that must be undertaken in the first instance, but applies any agricultural changes that are required to the whole country.

## 4.5 Water Framework Directive 2000/60/EC

The overall purpose of the Water Framework Directive (WFD) is to establish a framework for the protection of European inland surface water, transitional waters, coastal waters and groundwater. The environmental objective of the WFD is to achieve 'good status' for all ground waters and surface waters by 2015 at the latest.

"**Good status**" is a concept that on the one hand ensures protection of all water bodies in a holistic way, and on the other hand integrates quality objectives for specific bodies of water derived from other legislation, e.g. the Drinking Water and the Bathing Water Directives. For surface water, it consists of a general requirement for ecological protection ("good ecological status"), and a general minimum chemical standard ("good chemical status").

Good ecological status is defined in terms of the quality of the biological community, the hydrological characteristics and the chemical characteristics. The controls are specified as allowing only a slight departure from the biological community that would be expected in conditions of minimal anthropogenic impact, thus accounting for ecological variability between different waters. Good chemical status is defined in terms of compliance with all the quality standards established for chemical substances at European level.

For groundwater, the WFD takes a precautionary approach, and defines 'good status' both in terms of chemical purity and of balance between abstractions and natural recharge. Direct discharges are generally prohibited. To control pollution from indirect discharges, there is a requirement to monitor groundwater bodies in order to detect changes in chemical composition and reverse pollution trends. In addition, the Directive also deals with groundwater quantity. There is only a certain amount of recharge back into groundwater each year; of this recharge, some is needed to support connected ecosystems (whether they be surface water bodies, or terrestrial systems such as wetlands).

The key requirements of the WFD related to its implementation are the following.

## River basin management

The new approach to water management requires water to be managed at the river basin level, rather than according to administrative, geographical or political boundaries. This enables assessment of all activities that may affect the waters, and their control by measures which may be specific to the conditions of the river basin. **River Basin Management Plans** must be drawn up for each river basin; however, larger river basins may be sub-divided into smaller units. The adoption of suitable institutional structures to achieve river basin management is one of the major challenges facing Member States. Some options include:

- Utilising existing regional structures, but organised and adapted to ensure co-ordination of functions related to the river basin;
- Appointing a central oversight body with river basin-based subsidiary departments or institutions to organise and undertake day-to-day work in the river basins; or
- Appointing individual river basin institutions with direct control over the activities of each river basin.

International co-ordination is also required for those river basins that cross international boundaries.

## Programme of Measures

Central to each River Basin Management Plan is a Programme of Measures to ensure that all waters achieve good water status. This requires, at least, the full implementation of all national and Community legislation on water and related issues. If this basic set of measures is not sufficient to reach the goal of good water status, then the programmes must be supplemented by additional measures, such as stricter controls on pollution from industry or agriculture or from urban waste sources. This may also require consideration of land use planning measures.

## Combined approach

Pollution control should take a combined approach. Water quality objectives (WQOs) and emission limit values (ELVs) must be established, with the stricter approach applying in any given situation. WQOs and/or ELVs already set in Community legislation have to be taken into account, such as the IPPC Directive, the Urban Waste Water Treatment Directive and the Directive on Discharges of Dangerous Substances to Water. Water used for the abstraction of drinking water is subject to greater protection.

The WFD addresses water quantity insofar as it is relevant to water quality. Any abstraction of surface water or groundwater, except minor abstractions, has to be subject to a permitting procedure.

## Monitoring

The monitoring of all waters in terms of quantity and quality, especially surface waters and groundwater, is an essential feature of the WFD. This requires surveillance monitoring, operational monitoring, investigative monitoring and compliance monitoring. Data on monitoring must be made available to the public.

## Water pricing and cost recovery

The Directive requires Member States to apply the principle of cost recovery for providing water services, including environmental and resource costs, based on an economic analysis and in accordance with the polluter pays principle. Costs must therefore be considered for the consumer/user of water, whether domestic, industry or agriculture. These costs should include construction, financing and maintenance of such measures as drinking water treatment and supply, the collection, treatment and discharge of waste water and water used for irrigation purposes.

## Public consultation and information

An important aspect of the River Basin Management Plans is the need to involve the public. The authorities must inform the public of the proposals contained in the plans and obtain the opinions of the public and relevant stakeholders such as local communities, industry, other water users, water utilities, and relevant government departments and institutions. The authorities must ensure public access to draft River Basin Management Plans, finalised River Basin Management Plans, results of monitoring and permit conditions and state of the environment reports, so that stakeholders and NGOs are enabled to participate actively in the discussion process.

## Implementation process and Common Implementation Strategy

The WFD sets deadlines for individual requirements. For instance, River Basin Districts and authorities had to be identified by 2003, in 2006 the monitoring network had to be established and public consultation to be started, first draft River Basin Management Plans have to be presented in 2008, pricing policies need to be implemented by 2010, and Programmes of Measures are to be made operational by 2012.

The implementation of the Water Framework Directive raises a number of shared technical challenges for the Member States. In addition, many of the European river basins are international, crossing administrative and territorial borders; therefore, a common understanding and approach is crucial to successful and effective implementation of the Directive. For this reason, the Member States, Norway and the Commission agreed on a Common Implementation Strategy (CIS) for the Water Framework Directive only five months after the entry into force of the Directive.

The main aim of the Common Implementation Strategy is to allow a coherent and harmonious implementation of the WFD. Focus is on methodological questions related to a common understanding of the technical and scientific implications of the WFD. The Strategic Document on the Common Implementation Strategy for the WFD, as well as the guidance documents for the implementation of the Water Framework Directive and many other relevant documents are available at: http://forum.europa.eu.int/Public/irc/env/wfd/library.

## Costs for implementing the WFD

The main costs, apart from administrative costs, for implementing the WFD include costs for an appropriate monitoring system, wastewater treatment beyond the provisions of the UWWTD, compliance with the IPPC Directive and compliance with new standards and requirements on the priority substances list. Moreover, the real cost impact of the WFD depends on the extent to which a country has already embarked on the charging of water costs closely aligned to financial costs, or even taking into account true environmental and resource costs.

## 4.6 Groundwater Directive 2006/118/EC

European policy on groundwater is concerned both with the quality and quantity of groundwater. The current legislative framework consists of the provisions of the WFD concerning groundwater and those of the newly adopted Groundwater Directive.

For groundwater, the WFD sets the key provisions concerning quantitative and chemical status objectives (while the objectives for surface waters concern ecological and chemical status; see above). The quantitative status objectives are clearly formulated by the WFD, aiming to ensure a balance between abstraction and recharge of groundwater, however chemical status criteria were left to a Daughter Directive. For this reason, the Daughter Directive for groundwater was adopted on 12 December 2006 as a complement to the WFD, clarifying good chemical status criteria and specifications related to the identification and reversal of pollution trends.

It establishes a regime that both sets water quality standards for underground water and introduces measures to prevent or limit inputs of pollutants (e.g. from agricultural residues such as pesticides and other harmful chemicals) into groundwater. Member States establish the standards at the most appropriate level, taking into account local or regional conditions.

The main requirements of the Groundwater Directive are:

- groundwater quality standards to be established by the end of 2008;
- pollution trend studies to be carried out using existing data and data collected under WFD monitoring;
- pollution trends to be reversed so that environmental objectives are achieved by 2015 (by using the measures set out in the WFD);
- measures to prevent or limit inputs of pollutants into groundwater to be operational so that WFD environmental objectives can be achieved by 2015;
- reviews of technical provisions of the Directive to be carried out in 2013 and every six years thereafter;
- compliance with good chemical status criteria (based on EU standards of nitrates and pesticides and on threshold values established by Member States).

## 4.7 Further recent developments in EU Water Policy

### EU policy on flood risk management

On 18 September 2007, a new Directive on Flood Risk Management was adopted. The aim of the new Directive is to reduce and manage the risks that floods pose to human health, the environment, infrastructure and property. The Directive requires Member States to first carry out a preliminary assessment to identify the river basins and associated coastal areas at risk of flooding. For such zones, they will need to draw up flood risk maps and then flood risk management plans focused on prevention, protection and preparedness. Further, coordination and coherence between flood risk management and the Water Framework Directive has to be ensured.

### A Marine Strategy to save Europe's seas and oceans

The European Commission has proposed an ambitious Thematic Strategy on the Protection and Conservation of the Marine Environment that aims to achieve good environmental status of the EU's marine waters by 2021 and protect the resource base upon which marine-related economic and social activities depend. This Marine Strategy will lay the environmental groundwork for future maritime policy of the European Commission.

The key document of the Marine Strategy is a proposal for a Framework Directive. This Marine Strategy Directive will establish European Marine Regions on the basis of geographical and environmental criteria. Each Member State, in close co-operation with the relevant other Member States and third countries within a Marine Region, will be required to develop Marine Strategies for its marine waters. Regional Seas Conventions will serve as the coordination platform for implementation.

The Marine Strategies will contain a detailed assessment of the state of the environment, a definition of "good environmental status" at a regional level and the establishment of clear environmental targets and monitoring programmes. Each Member State will also draw up a programme of cost-effective measures. Impact assessments, including a detailed cost-benefit analysis of the measures proposed, will be required prior to the introduction of any new measure. Where impossible for a Member State to achieve environmental targets, special areas and situations will be identified in order to devise specific measures tailored to their particular contexts.

The Marine Strategy is consistent with the Water Framework Directive 2000/60/EC.

## Communication on Water Scarcity and Droughts

In recognition of the acuteness of water scarcity and drought challenges in Europe, the Commission has recently taken steps to address these problems. In July 2007, a Communication on Water Scarcity and Droughts was launched, based on a current assessment of the water scarcity problem. The Communication presents an initial set of policy options at the European, national and regional levels to address and mitigate the challenge posed by water scarcity and drought within the Union. A Stakeholder Forum that involved interested parties and stakeholders supported the development of the Communication.

## EU Water Initiative

At the 2002 World Summit for Sustainable Development in Johannesburg (WSSD), the EU launched a Water Initiative (EUWI)[11] designed to contribute to the achievement of the Millennium Development Goals (MDGs) and the WSSD targets for drinking water and sanitation, within the context of an integrated approach to water resources management.

The EUWI aims to bring different stakeholder activities together within a common framework, and to improve collaboration with partners in other regions. As a result of a recent review, the EUWI will in future increasingly focus on regional components.

The EUWI has four regional components, two of which are of direct relevance for the ENP partner countries. **EUWI-EECCA** is a partnership that seeks to improve the management of water resources in Eastern Europe, Caucasus and Central Asia. The partnership is intended to build on and reinforce existing partnerships and bilateral and regional programmes by bringing partners with related water activities together within a common framework. It is open to all stakeholders – governments, inter-governmental organisations, NGOs, academia, financing institutions, the private sector, etc. The focus is on two thematic areas: 1) water supply and sanitation, including financing of water infrastructure, and 2) integrated water resources management, including transboundary river basin management and regional seas issues.

**EUWI-MED** is the regional component for the Mediterranean and includes all ENP partner countries in the area. EUWI-MED focuses on the areas of 1) water supply and sanitation (focus on the poor), 2) integrated water resources management (emphasis on management of transboundary water bodies), 3) water, food and environment interaction, and 4) non-conventional water resources. Under the MED component, a joint process with the Water Framework Directive has been set up that aims to ensure Mediterranean partners benefit from the principles, approach and experience of the WFD and to improve integrated water resources management in the region. Three working groups address thematic topics of groundwater, water scarcity, and rural development. It is envisaged to create a network of Mediterranean Pilot Basins, with the aim of sharing specific experiences and giving concrete examples of water resources management according to the WFD.[12]

In addition, country policy dialogues have been set up with several countries under EUWI-MED.

[11] See www.euwi.net.

[12] Progress update on MED EUWI; January – May 2006; 6th EUWI Steering Group Meeting; Brussels 17 May 2006.

# 5 Current situation with respect to the water policy sector in ENP partner countries and Russia

## 5.1 EU's Eastern ENP partner countries and Russia

In the ENP Action Plans of these countries, the adoption of legislation and planning for water management as a key environmental concern are one of the primary objectives. Participation in the EECCA component of the EU Water Initiative (see section 4.7) is envisioned by most of the Action Plans (Armenia, Azerbaijan, Georgia, Moldova). In addition, regional co-operation, application of Integrated Water Resources Management, and improved trans-boundary water management cooperation are defined as strategic objectives.

The Common Economic Space roadmap under the EU-Russia Strategic Partnership provides for 'cooperation in the field of water policy, taking into account the experience gained in Russia and in the EU, in particular with the Main Development Directions of the Water System Management Complex of Russia until 2010, the Water Framework Directive and regional component of the EU Water Initiative […] and co-operation in the field of trans-boundary river basins between the EU and Russia'.

### 5.1.1 Main Environmental Pressures

Water pollution is a serious problem in the eastern ENP partners, and deficits with regard to access to safe drinking water persist. In some countries or regions, drinking water fails to meet sanitary standards, and high pollution of surface and groundwater water bodies presents a challenge to water management. The most common pressures responsible for this pollution include:

- **Radioactive pollution,**
- **Untreated or insufficiently treated urban and industrial wastewater,**
- **Toxic chemicals, oil spills and industrial pollution,**
- **Agricultural run-off.**

Due to outdated water supply systems and insufficient maintenance, leakage rates are often high.

### 5.1.2 Institutional Set-up

In general, water policies in most of the eastern ENP partners cover a range of topics such as protection and management of both surface and ground waters with an emphasis on surface watercourses. In the eastern ENP partners water management (except drinking water and water for irrigation) is mainly a responsibility of the central environmental agencies. Watershed-based integrated management systems have already been introduced by some countries and are being developed by others. The successful cooperation within the Danube river basin, based on the Danube Protection Convention, involving inter alia Ukraine, should serve as an encouraging example for other shared river basins as well. For river basins shared between EU Members and Belarus, the Russian Federation and/or the Ukraine, the Council has adopted a mandate aiming at the conclusion of river basin agreements between these countries, Member States and the EU, similar to the Danube Protection Convention.

## 5.2 Mediterranean ENP partners

Water management plays a role in all of the existing ENP Action Plans,[13] although the strategic objectives are very different. Enhanced regional co-operation on water management issues is an aim for many countries. Water pollution is an issue for many countries as well, and the adoption of plans and programmes on water quality is a widespread objective. Institutional and administrational improvements are envisioned by Israel (reporting), Lebanon (monitoring network), and Morocco (administrative structures). Enhanced water-use efficiency in agriculture is mentioned in the Egyptian ENP, while enhanced management of demand in all sectors is an aim for Lebanon. The importance of strategic planning, including financial strategies, is emphasised in the Action Plan of Morocco. The Palestinian Authority places a focus on improvements in the overall water and sanitation management system, in particular in rural areas.

### 5.2.1 Main Environmental Pressures

Environmental problems related to water resources are severe in many Mediterranean regions. They include:

- **Water scarcity,**
- **Overexploitation of water resources and unsustainable use,**
- **Untreated or insufficiently treated urban and industrial wastewater,**
- **Water pollution,**
- **Pollution of coastal water.**

### 5.2.2 Institutional Set-up

All countries in the region have set up environmental authorities and ministries. Different authorities may be responsible for different aspects of water policy, with water ministries dealing with water quantity and environmental ministries managing water quality. The Ministry of Health also sometimes monitors water quality. Often the environment ministries have only limited jurisdiction over water issues.

In the Middle East, water management tends to focus on water supply, with wastewater management playing a minor role.

[13] No ENP Action Plans exist yet for Libya and Syria. For Libya, no Association Agreement exists; for Syria the Association Agreement has not yet been ratified.

# 6 Conclusions for ENP and Russia: Steps toward convergence

### *Box 4 EU funding for ENP*

From the beginning of the new Financial Framework 2007–2013, the EU is providing financial support for the ENP through a dedicated **European Neighbourhood and Partnership Instrument (ENPI)**. It targets various areas of co-operation including sustainable development and the environment, supporting jointly agreed reform priorities in the ENP Action Plans. The ENPI will target sustainable development and convergence with EU policies and legislation, and bring a radical improvement in capacity to support cross-border cooperation along the EU's external borders – thus giving substance to the aim of avoiding the creation of new dividing lines and promoting harmonious territorial development across the EU external border. The ENPI replaces MEDA (for the Southern Mediterranean neighbours) and TACIS (for the Eastern neighbours and the Russian Federation).

Guided by the agreed priorities in the ENP Action Plans, the ENPI provides for assistance under national, regional, cross-border and interregional programmes. There are also a certain number of thematic programmes with global scope from which the ENPI countries can benefit. This includes a thematic programme for environment and sustainable management of natural resources including energy.

The ENPI budget is fixed at around € 12 billion for the period 2007–2013. In real terms it means as increase of 32% as compared with the previous financial framework.

As a means of delivering technical assistance under the ENP, the **Technical Assistance and Information Exchange (TAIEX) instrument** and long-term **twinning** arrangements have been made available to the ENP partner countries:

- **TAIEX** provides technical support and training in areas related to the implementation of the ENP Action Plans, including with regard to the convergence, application and enforcement of legislation. It is largely demand driven and channels requests for assistance and contributes to the delivery of appropriate tailor-made expertise to address problems at short notice[14].
- **Twinning** aims to help beneficiary countries in the development of modern and efficient administrations. It can also facilitate gradual convergence to EU legislation where relevant and appropriate.

The following paragraphs suggest potential steps toward convergence and issues for consideration during the process. **Stakeholder involvement** should be ensured in all stages of implementation. It is recommended to involve all actors and stakeholders contributing to policy development, as well as those affected by the changes. Consultation processes should involve other central government ministries, regional and local government, water utility companies, industry, farmers groups, fishery groups, other water users, NGOs and the general public.

14 http://taiex.ec.europa.eu/

### *1. Create the necessary conditions for strategic planning*

- General **administrative and institutional reform and capacity building** will be necessary in many ENP partner countries in order to develop human resources and make sufficient financial resources available for re-organisation and training, both at central and lower administrative levels.
- Institutional reforms should aim to achieve **better co-ordination between different authorities**. This will require a clear definition of responsibilities and assignment of competencies, as well as an improvement of accountability and transparency.
- The preconditions for **public participation** may need to be created or further developed by improving environmental awareness and information, as well as establishing public information and consultation processes.

### *2. Develop a strategy for convergence*

Strategic planning is necessary to define the aims of convergence and identify priorities and barriers and select options. Action taken should include the following steps:

**Set convergence priorities and targets**. It should be realistically assessed to what extent the ENP partner country can align with the EU Directives and in what areas convergence can bring the greatest benefits. This should lead to a prioritisation of tasks that may be based on the following criteria:

- **Urgency of issues:** For instance, the Drinking Water Directive should be implemented early in the implementation plan as it is of great importance to public health. Also, the UWWTD should be implemented at an early stage in areas with basic sewerage needs and in countries with severe water pollution from untreated wastewater and uncontrolled discharges.
- **Legislative considerations:** Framework-type legislation, such as the Water Framework Directive, may be adopted at an early stage, as it provides the outline for other daughter legislation. Usually the requirements for competent authorities and administrative infrastructure set up to meet framework legislation will suffice for the whole water sector. Adopting WFD elements at an early stage will also facilitate the implementation of integrated water management approaches. However, it also must be kept in mind that the Water Framework Directive is a very complex legislation and that its functioning requires the existence of relatively advanced water legislation and institutional systems (see Box 6).
- **Cost-effectiveness:** Legislation that gives the greatest benefit relative to the cost of implementation may be given higher priority than legislation with lower cost/benefit ratios. However, this will need to be decided on a case-by-case basis. Legislation that will require major infrastructure renewal or capital spending on industrial improvements should also be given an early place in the phasing process.
- **Economic considerations:** The relevance of legislation the (national) economy should be taken into account. Legislation affecting industrial or commercial sectors that make significant contributions to the economy should be addressed before those that relate to small or insignificant industries. For instance, if agriculture plays an important role and if agricultural water pollution is a significant concern, convergence to the Nitrate Directive could be a priority issue. Similarly, if a country plans to support tourism as a key activity, the protection of drinking water (Drinking Water Directive) and of bathing water (Bathing Water Directive) should be a priority.

**Legal gap analysis**. The legal form of convergence that best fits with the existing legal framework needs to be identified – for instance, whether a new water management law needs to be developed, or whether it is sufficient to amend the existing law or issue additional regulations.

**Institutional gap analysis and implementation gap analysis**. In addition to the legal gap analysis, it may be helpful to compare the existing institutional structure and implementation of existing water legislation to those required under convergence to identify necessary changes and improvements.

**Linking processes and creating synergies**. If convergence with different EU Directives is envisaged, it may be useful to link the different processes, since institutional and administrative requirements may be similar for different Directives.

### *Box 5 Financial challenges related to implementing EU water Directives – experiences in the New Member States*

Before the enlargement of the EU in 2004, assessments were carried out on the efforts that would be needed in the New Member States (NMSs) to implement European environmental policy. The EU requirements related to water quality and water pollution control were expected by the NMSs to be among the most difficult and expensive to implement. Most, if not all, of the accession countries asked for – and received – transition periods in this sector.

In the case of the UWWTD, transition periods of up to ten years were granted. The total investment cost was estimated to be around 15 billion EUR in all NMSs; per capita cost estimates were in the range of 200 to 400 Euro. Cost estimates largely depended on the existing level of connection to the public sewer system in the accession countries, and on the extent and intensity of treatment before implementation of the Directive. Similarly, implementing the Drinking Water Directive also represented a major challenge for the NMSs, since it required large investment in drinking water distribution networks.

Once investments in sewerage and wastewater treatment are made, relatively little additional effort is needed to comply with bathing water standards, since these will normally be met via proper wastewater treatment and/or proper location of discharge points.

Implementation of the Nitrate Directive can also be considered less challenging in terms of investment costs. In the NMSs, nitrate pollution was less of a problem at the time of accession than in the intensely farmed parts of the EU. However, in regions with intensive animal rearing, farmers had to invest in manure storage facilities.

Finally, implementing the Water Framework Directive is challenging with respect to fulfilling the institutional, administrational and monitoring requirements.

Costs for implementing EU Directives were estimated to be substantial, in particular in the case of the more investment-heavy Directives such as the UWWTD. However, large economic benefits in the range between 5 to 14 billion EUR were also predicted for the NMS from compliance with EU legislation in the water sector.

### **3.** *Develop a financing strategy*

The costs of implementing convergence should be estimated at an early stage and a financing strategy should be prepared. Financing investments and operation of water supply and sewerage systems will be a particular challenge (e.g. Drinking Water Directive and UWWTD) and should be planned carefully, but institutional development may also require considerable resources.

In addition, charging systems and the cost recovery principle inherent in EU legislation may be a way to raise funds. Potential charging systems include sewerage and supply charges for private households, effluent charges for operations of waste water treatment plants and industries, charges for abstraction of water, and taxes on fertilisers and pesticides. However, such systems need to be designed carefully. Poverty issues need to be taken into account, and affordability of water services for the poor must be a priority.

### *4. Develop an implementation plan*

On the basis of the strategic and financial planning, an implementation plan should be developed detailing the steps necessary to implement convergence according to the priorities and objectives identified in the earlier planning phases. Implementation plans should allow sufficient time to give all actors and stakeholders affected time to adjust to the changes and make the necessary investments. The most important elements of implementation plans are:

- Development or adjustment of **regulation**.
- Adjustment and strengthening of **administrative structures**, for instance decentralisation or creation of organisations for water management at the river basin level, and **procedures for monitoring and enforcement**.

- Provisions for **training and additional staff**.
- Setting up the necessary **technical systems**, such as monitoring networks and laboratories for testing.

### *Box 6 Convergence towards the Water Framework Directive*

The WFD is supposed to replace other Directives in the future. Currently, however, the more traditional EU water directives must be applied alongside the WFD, and the Directive may require Daughter Directives to be adopted in order to specify or clarify certain issues (e.g. Groundwater Directive). For convergence, this means that the implementation of the WFD will only be effective and beneficial if well-established water quality objectives and procedural and administrative rules are already part of the national legal and institutional framework. A sound legal framework, democratic and effective institutions and well-functioning courts are prerequisites.

**Water legislation** must be in place that regulates permitting for water use and discharge, designation and protection of water bodies, compliance and enforcement. WFD implementation also requires the adoption of water quality objectives and emission limit values.

With regard to **institutions**, the WFD requires management on the basis of river basins, as well as regional, national and transnational co-ordination between authorities, and inter-agency co-ordination of activities. Clear and comprehensive mandates for all institutions, as well as precise responsibilities and accountability mechanisms are essential for the functioning of the system. Activities on water quality and water quantity must be co-ordinated.

An optimal **transnational and regional river basin management** requires co-operation between authorities in the different states sharing the specific river basin in question. This may require a change of attitude and/or changes in legal/political structures, and it may be very difficult to achieve in situations where conflicts dominate.

Furthermore, an effective implementation of the WFD requires a **general legal system** that protects access to environmental information, provides for environmental impact assessments, and supports the involvement of stakeholders.

# 7 Further Information

## 1. Websites

Information on EU Water Policy and individual Directives:
http://ec.europa.eu/environment/water/index.html
European Commission DG Environment's website on enlargement and Neighbouring Countries:
http://ec.europa.eu/environment/enlarg/index_en.htm,
see also http://ec.europa.eu/environment/enlarg/links_en.htm.

## 2. Further guidance on convergence and implementation of EU environmental and water policy:

Convergence with EU environmental legislation in Eastern Europe, Caucasus and Central Asia: a Guide (available at http://ec.europa.eu/environment/enlarg/russianis_en.htm), see Annex 3 for convergence towards WFD.
EU Handbook on Implementation of EC Environmental Legislation. Available at
http://ec.europa.eu/environment/enlarg/handbook/handbook.htm.

KH-30-08-207-EN-C

ISBN 978-92-79-08279-5