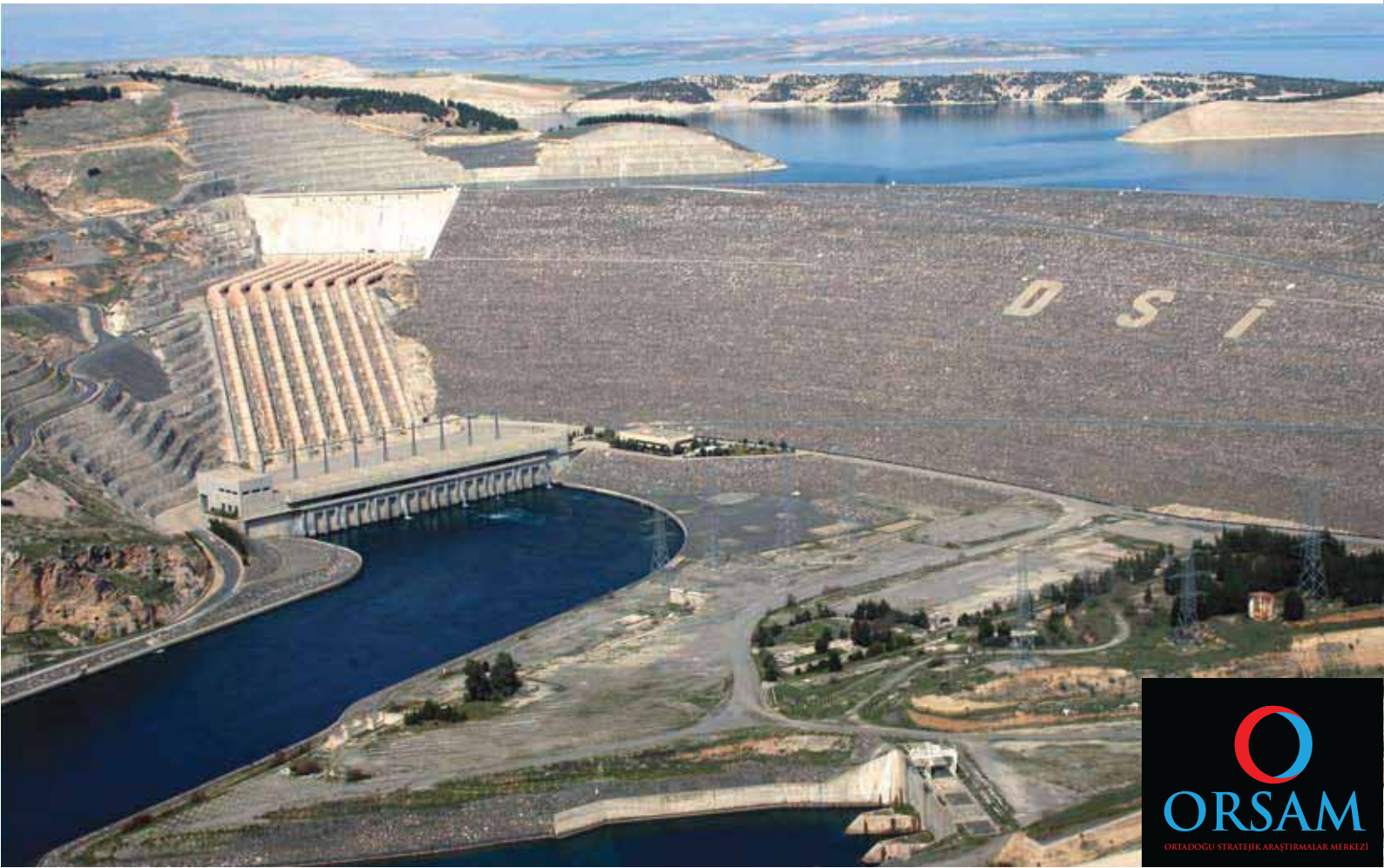


EU'S WATER FRAMEWORK DIRECTIVE IMPLEMENTATION IN TURKEY: THE DRAFT NATIONAL IMPLEMENTATION PLAN

AVRUPA BİRLİĞİ SU ÇERÇEVE DİREKTİFİ'NİN TÜRKİYE'DE UYGULANMASI: ULUSAL UYGULAMA PLANI TASLAĞI

تففيذ الإطار التنظيمي لقضية المياه المعد من قبل
الاتحاد الأوروبي في تركيا : مشروع خطة التطبيق القومي

CENTER FOR MIDDLE EASTERN STRATEGIC STUDIES
ORTADOĞU STRATEJİK ARAŞTIRMALAR MERKEZİ
مركز الشرق الأوسط للدراسات الاستراتيجية



**EU'S WATER FRAMEWORK DIRECTIVE
IMPLEMENTATION IN TURKEY:
THE DRAFT NATIONAL IMPLEMENTATION PLAN**

**AVRUPA BİRLİĞİ SU ÇERÇEVE DİREKTİFİ'NİN
TÜRKİYE'DE UYGULANMASI:
ULUSAL UYGULAMA PLANI TASLAĞI**

تنفيذ الإطار التنظيمي لقضية المياه المعد من قبل
الاتحاد الأوروبي في تركيا : مشروع خطة التطبيق القومي

ORSAM Water Research Programme Report No: 1

March 2011

CENTER FOR MIDDLE EASTERN STRATEGIC STUDIES

History

In Turkey, the shortage of research on the Middle East grew more conspicuous than ever during the early 90's. Center for Middle Eastern Strategic Studies (ORSAM) was established in January 1, 2009 in order to provide relevant information to the general public and to the foreign policy community. The institute underwent an intensive structuring process, beginning to concentrate exclusively on Middle affairs.

Outlook on the Middle Eastern World

It is certain that the Middle East harbors a variety of interconnected problems. However, neither the Middle East nor its people ought to be stigmatized by images with negative connotations. Given the strength of their populations, Middle Eastern states possess the potential to activate their inner dynamics in order to begin peaceful mobilizations for development. Respect for people's willingness to live together, respect for the sovereign right of states and respect for basic human rights and individual freedoms are the prerequisites for assuring peace and tranquility, both domestically and internationally. In this context, Turkey must continue to make constructive contributions to the establishment of regional stability and prosperity in its vicinity.

ORSAM's Think-Tank Research

ORSAM, provides the general public and decision-making organizations with enlightening information about international politics in order to promote a healthier understanding of international policy issues and to help them to adopt appropriate positions. In order to present effective solutions, ORSAM supports high quality research by intellectuals and researchers that are competent in a variety of disciplines. ORSAM's strong publishing capacity transmits meticulous analyses of regional developments and trends to the interested parties. With its web site, its books, reports, and periodicals, ORSAM supports the development of Middle Eastern literature on a national and international scale. ORSAM supports the development of Middle Eastern literature on a national and international scale. ORSAM facilitates the sharing of knowledge and ideas with the Turkish and international communities by inviting statesmen, bureaucrats, academics, strategists, businessmen, journalists, and NGO representatives to Turkey.

ORSAM WATER RESEARCH PROGRAMME



About the Programme

Water is irreplaceable, valuable and one of the most important substances for the sustainability of the life not only for human beings, plants and animals but also for the whole ecosystem. The surface and ground waters are utilized for domestic, agricultural and industrial aims. However, there is a dual pressure over water sources due to the human activities and natural changes. Especially, in the places where water shortage is experienced, over-population, immigration from rural areas to urban, food security policies, growing socio-economic wealth, agricultural, domestic and industrial based contamination, the changes in precipitation due to the global climate changes, affects the hydrological cycle. Thus, the water sources are exposed to some changes in respect of their quantity and quality. While demand for water has been gradually growing up, in water stressed areas, the water supply stays stable. While the problems on the management of water resources are experienced, on the other hand the effects of environmental problems on water resources are gradually increasing. Turkey and its close environment, especially, the Middle East are the most influenced regions by such problems.

On the other hand, Turkey's relations with Euphrates-Tigris Basin riparian neighbours are very important when taken into consideration that Turkey has more than 40 percent of the water resources potential on the transboundary basins. In order to reach the political target which both Turkey and other riparian states pursue, of establishing regional stability, augmentation of welfare and deepening the relationship among the neighbouring states, it is essential for all the parties, to have good faith and knowledge based active cooperation in the water resources utilization. In addition, during the process of Turkey's EU candidacy, the agenda of harmonization of EU Water Framework Directive with her own national legislation will along with bring the future water policies to have a new content.

In accordance with the foregoing factors, "ORSAM Water Research Programme" was established on 1st January, 2011 within ORSAM, for the aim of presentation of the enlightening findings and the observations of the current developments on water issues of Turkey's close environment and in the worldwide, to the public opinion and to the decision-makers, which have been acquired by means of analysis.

In the studies of ORSAM Water Research Programme, the Middle East engaged issues are given priority as there is a big increase in the political, economic and social problems, due to the both climate changes and inefficient utilization of water sources in the Middle East and as existing problems in the water budget.

ORSAM Water Research Programme aims to produce new ideas that offer different political alternatives on water issues, to encourage and diversify the qualified studies of competent researchers and intellectuals from different disciplines in order to form vigorous solution offers and to support the development of water literature in Turkey.

In this scope, ORSAM Water Research Programme aims both, to facilitate the hosting of academics, the representatives of the non-governmental organizations, bureaucrats, statesmen, diplomats, strategists, journalists and businessmen, who studies on the water issues in region countries and to provide the sharing of informations and considerations of those, with the public opinion both in Turkey and in the worldwide.

PRESENTATION

On October 23, 2000 the European Union adopted the EU Water Framework Directive, which aims at protection and amelioration of all waters of the European Union, as a result of the co-decision of the European Parliament and the Council of Europe. The Directive was published and it entered in force on December 22, 2000.

The European Union Water Directive is a judicially bounding document, which offers a common framework for the management and use of water in Europe, and which promises to turn this framework into a European water sector. The European Framework Directive strikes out in two stages unlike the other Directives. The first is handling the measures at national and community level. And the second is leaving the definitions, guidelines and measures of the final targets to the following political processes (to the consecutive Directives and the expert committee). The Water Framework Directive constitutes a framework for the environmental acts. The Directive, which aims at harmonizing the current EU water policies and developing the water quality all around the aquatic environment within the borders of the Community, is a new integrated approach willing to protect and develop the sustainable use of all waters.

The European Union Water Framework Directive is the most important and innovative water act of the EU within the last 30 years. This Directive has brought an approach accepting the hydrological cycle as a whole. It enables protecting the ground and surface waters and doing environmental regulations with a common approach. The Directive offers a common framework and environmental goals, and it also provides the freedom of striking out differently in achieving these goals to the actors in national, regional and basin scale. Especially, this Directive demands obligatory strategic management plans for every river basin.

The countries, who want to be a member of the European Union, have to harmonise themselves in to the EU environment acquis. The European Union Water Framework Directive is one of the difficulties, which the Turkey has faced with. The first process of the harmonization stage, which is composed of two basic stages, is trasposition and impelmentation of the EU legislation; the second is both public and private sectors' carrying out the necessary infrastructure investments for the total harmony. Turkey, who is in the process of implementing the EU Water Framework Directive, continues her works on this subject.

In this report, METU International Relations Department Research Assistant Vakur SÜMER discusses the National Implementation Plan Draft of Turkey with the Aim of Harmonizing with the Directive and the possible effect of the Water Framework Directive on Turkey's Water Management.

The ORSAM Water Research Program is going to continue its studies both on the relations with the European Union and on the water policy issues in the Middle East, in the forthcoming period. We would like to indicate that we are always open to your opinions and assessments about all the subjects related to the Water policy studies.

Hasan Kanbolat
ORSAM Director

Contents

| | |
|--|----|
| Presentation | 4 |
| Executive Summary | 7 |
| Introduction | 8 |
| The Water acquis in the European Union and the Water Framework Directive | 8 |
| The Draft Plan: An Anchorage for WFD implementation in Turkey | 11 |
| Conclusion..... | 20 |

By Vakur SÜMER
Research Assistant
Middle East Technical University (Ankara)

EU'S WATER FRAMEWORK DIRECTIVE IMPLEMENTATION IN TURKEY: THE DRAFT NATIONAL IMPLEMENTATION PLAN

Executive Summary

*Turkey is conducting accession negotiations with the European Union (EU), since 2005. Environment constitutes one of the significant Chapters in *acquis communautaire*. Water Framework Directive (WFD) of the EU, which was adopted in 2000, comprises one of the prominent legislation in water related *acquis*. As a candidate country Turkey is –in principle- obliged to get in line with the WFD in time of membership. For this purpose, efforts of Turkey have gained momentum particularly after 2003. This report discusses one of the outputs of these efforts, namely the “Draft National Implementation Plan- Water Framework Directive (2000/60/EC)” in light of the specific WFD requirements.*

The Draft Plan is a step forward with respect to WFD implementation in Turkey. However, the bulk of the steps are yet to be taken. The Draft Plan covered most of the areas to be handled within the context of the WFD, but the risks associated with the transboundary aspects of water management as embedded in the WFD is largely ignored. The main contribution of the Draft Plan is that Turkey has defined an anchor for WFD implementation process. It will be a reference document for further work. Public authorities on national, regional and local levels are obliged to perform certain duties compliant with the Draft Plan. Therefore, on the rhetorical level, the Draft Plan has a great potential for triggering the WFD tasks on multiple levels. The realization of this potential will ultimately rely on the fact that whether due consideration is given to the terms of the Draft Plan; i.e. roles and responsibilities of relevant organizations, and timetables.

1. Introduction

Turkey is conducting accession negotiations with the European Union (EU), since 2005. Harmonization with the legislation adopted by the EU, also known as *acquis communautaire* is a requirement for EU membership.

Environment constitutes one of the significant Chapters in EU legislation. It is estimated that 50 to 70 billion Euros are needed for Turkey in order to fully comply with the EU *acquis* covered in Environmental Chapter. Water is one of the policy areas, related legislation of which is considered within the Chapter of Environment. Water Framework Directive (WFD)³ of the EU, which was adopted in 2000, comprises one of the prominent legislation in water related *acquis*. As a candidate country Turkey is –in principle- obliged to get in line with the WFD in time of membership. For this purpose, efforts of Turkey have gained momentum particularly after 2003. This report discusses one of the outputs of these efforts, namely the “Draft National Implementation Plan- Water Framework Directive (2000/60/EC)”⁴ in light of the specific WFD requirements. First, an overview of the WFD will be presented. The challenges that WFD may bring about for Turkey’s water management practices will be discussed. This will be followed by an analysis of the Draft Plan. The findings of the research will be summarized in the conclusion part.

2. The Water *acquis* in the European Union and the Water Framework Directive

Water related *acquis* in the EU is mainly composed of Directives. Directives are regarded “secondary” law, following the treaties, and are binding in terms of the result, yet without ordering means of realizing that result. In other words, Directives requires the achievement of a certain results, but leaves Member States with some degree of flexibility on the way to proceed.⁵

Beginning from early 1970s, the EU⁶ has adopted a significant number of water related Directives. By late 1990s, it became apparent that European framework legislation on water was needed. This is mainly because of the fact that, “[A]s observed, current European water legislation is a mixture of different kinds of directives, resulting in a lack of coherency”⁷. The WFD itself acknowledged this by stating that “It is necessary to develop an integrated Community policy on water.”⁸

The WFD preceded a long process of preparation composed of negotiations and meetings among various stakeholders including public authorities such as the Member States’ representatives, European Commission; and NGO’s like WWF⁹. The early pioneering efforts towards the formulation of WFD started in 1988 when a Resolution laid down the need for “action to improve ecological quality of surface waters in the Community”¹⁰. The Conference at Como proposed that the new directive in water should lay down the guidelines to be followed with an aim of attaining high ecological quality with regard to surface waters. Several other declarations also contributed for the development of a setting fertile for new framework legislation in water.¹¹ Finally, in 1997, the European Commission proposed a new framework directive for water. The negotiations among multiple types of stakeholders (European Parliament, European Commission, Member States, NGOs, industry representatives) culminated into the final text of the WFD which was adopted in October 2000 and entered into force by 22 December 2000. The preparatory stages of the WFD are summarized in the Table 1.

Water Framework Directive basically focuses on “water quality”, i.e. water pollution: “Polluted water, whatever the source of the pollution, flows one way or another back into our natural surroundings – into the sea or water tables – from where it can have a harmful effect on human health and the environment.

Table-1: Drafting Process of the WFD

| | |
|--|--|
| 1997-1998 | European Commission Proposals |
| February 1999 (on the basis of the Amsterdam Treaty) | European Parliament First Reading |
| October 1999 | Council Common Position |
| February 2000 | European Parliament Second Reading |
| October 2000 | Final adoption of the Water Framework Directive is, under joint decision by the European Parliament and the Council ("co-decision procedure") and following a conciliation procedure |
| 22 December 2000 | Entry into force |

Source: http://ec.europa.eu/environment/water/water-framework/info/decision_en.htm, accessed on 15 October 2010.

One of the most important pieces of legislation in this area is the Water Framework Directive.¹² In line with this understanding, the aim of the Directive is formulated as to "to achieve the objective of at least good water status by defining and implementing the necessary measures within integrated programs of measures, taking into account existing Community requirements".¹³ This overall purpose is elaborated in the Article 2.¹⁴

However, it should be noted that the issue of "water quantity" is also considered in WFD, yet as "ancillary element in securing good water quality".¹⁵ In this context, "water quantity" is understood within a framework where measures "serving the objective of ensuring water quality" should be created.¹⁶ It is argued in the Directive that overall principles with respect to water quantity should be laid down in order to guarantee the "environmental sustainability" of the water systems concerned.¹⁷ Through this way, WFD treats "water quantity" as something subordinated to "water quality". This logic of the WFD is being criticized on the ground that it did not take into account of the specific needs of southern European countries which suffer from the problem of "water scarcity", unlike northern European countries where water is abundant and infrastructure is already completed.¹⁸

According to the Directive, the aims of the WFD shall be ensured via implementation of program of measures in the context of "River Basin Management Plans", which should be coordinated for the whole of the "River Basin District".¹⁹ All the measures and tasks relevant to the achievement of WFD goals should be completed in accordance with the deadlines that were set out throughout the Directive. The major Articles of the WFD are discussed next. A table at the end of this section summarizes the implementation process of the WFD.²⁰

The Directive stipulates that Member States have to identify all the river basins lying within their national territory and assign them to individual river basin districts.²¹ These districts are natural geographical and hydrological units of rivers regardless of administrative or political boundaries. As the Directive reads, river basin districts covering territory of more than one Member State shall be assigned to an international river basin district. In accordance with the WFD schedule, designation of competent authority for each of the river basin districts had to be completed by the end of 2003. Competent authorities would be responsible for implementation the Directive within river basin districts.

Article 4 of the WFD mentions the environmental objectives which have to be met for all types of waters with an aim to achieve at least “good status” by the end of 2015. According to the WFD, water bodies are classified into five status classes: high, good, moderate, poor and bad. Good water status is achieved when both the ecological status and the chemical status are at least “good”. “High status” is defined as the biological, chemical and morphological conditions associated with no or very low human impact. This status is also called the “reference condition” as it is the best achievable status. Quality assessments will be derived from the extent of deviation from these reference conditions. For instance, “good status” means “slight” deviation.²² These environmental objectives are elaborated separately for surface waters (including artificial or heavily modified waters), groundwater as well as for protected areas. Under certain circumstances defined in the WFD²³, the deadline of 2015 may be extended for two 6 year cycles, and the environmental objectives may be altered.

The Directive proposes a three-stage implementation: In synopsis, during the first stage, characteristics of each river basin district will be assessed (until the end of 2007).²⁴ In the second stage, the designation of programs of measures aiming at the protection and sustainable use of water resources for each river basin district is to be realized.²⁵ These programs shall include measures aiming at full cost recovery, measures to promote an efficient and sustainable water, etc. In the next stage, river basin management plans have to be set up until 2009, in accordance with the Article 13. These plans would elaborate on how the environmental objectives –such as ecological status, quantitative status, chemical status and protected area objectives– are to be reached within the time limits. The WFD stipulates that the river basin management plans are not final documents which are subject to review and updates in a cyclical process: “River basin management plans shall be reviewed and updated at the latest

15 years after the date of entry into force of the Directive and every six years thereafter.”²⁶

In accordance with the Article 9, Member States are required to realize the principle of “recovery of the costs” for water services based on the “polluter pays” principle²⁷ and economic analysis²⁸ that should be taking into account of environmental costs and resource costs. In this framework, two objectives are specified by the Article 9. First, water pricing policy should become an incentive for efficient water use and thereby contributes to achieving environmental objectives. Therefore, the first principle means that water pricing has to be seen within and used for the realization of the environmental objectives of the WFD. Second, the costs are to be disaggregated into different sectors, meaning that adequate contributions from different water users to the recovery of the cost of water services should be achieved.

The principle of “public participation”, which is central for the WFD, is basically covered by Article 14. Article 14 states that “Member States shall encourage the active involvement of all interested parties in the implementation of this Directive, in particular in the production, review and updating of the river basin management plans”. As stipulated by the same Article, “On request, access shall be given to background documents and information used for the development of the draft river basin management plan.” Within the scope of Article 14, Member States shall publish “(a) a timetable and work programme for the production of the plan, including a statement of the consultation measures to be taken, at least three years before the beginning of the period to which the plan refers; (b) an interim overview of the significant water management issues identified in the river basin, at least two years before the beginning of the period to which the plan refers; (c) draft copies of the river basin management plan, at least one year before the beginning of the period to which the plan refers.” For the achievement of

“active” involvement of the public “Member States shall allow at least six months to comment in writing on those documents”.

According to Article 3, Member States are required to assign transboundary river basin districts for basins lying within the territory of the EU. As to those cases, where international river basins extend beyond the territories of the Community (meaning EU), the WFD requires from Member States only an “endeavour” to establish appropriate coordination with the relevant non-Member States, with the aim of achieving the objectives of the WFD throughout the whole river basin district. Therefore, the WFD promotes transboundary cooperation with a demand that its rules and procedures are implemented beyond the territory of the EU, in cases where territories of river basins extend beyond Community borders.

3. The Draft Plan: An Anchorage for WFD implementation in Turkey

The Draft Plan is the output of a Twinning²⁹ Project named “Capacity Building Support to the Water Sector in Turkey”. This Project was financed by the Pre-accession Program which provides assistance for candidate countries through cooperative projects on the issues of transposition³⁰ and implementation of the European legislation.

The structure of the Draft Plan is designed to show “how, when and by whom the Water Framework Directive will be implemented” in Turkey³¹. The Draft Plan starts with an executive summary, where main framework as required by the WFD is summarized and the subsequent parts of the Plan are outlined. The Draft Plan, then, is divided into four parts: Actions to prepare for WFD implementation, actions for river basin management planning, supportive actions for river basin management planning and risks.

Before presenting the actions and costs associated with WFD implementation, the Draft Plan reiterates the need for action for achieving the main objective of the WFD, namely realization of “good status” in terms of ecology and chemistry in all water bodies. The Draft Plan illustrates that currently, only 22 to 30% of surface waters in Turkey complies with the “good status” norm.

The Draft Plan presents approximate costs of WFD and Dangerous Substances Directive (DSD). Since there is no sufficient and coherent body of data and information in Turkey³², with regards to economic analyses, total costs of implementation of these Directives are only “estimated” based on “expert judgment” and extrapolation of the costs of the program of measures calculated for Büyük Menderes river basin.³³ Therefore, there is a certain degree of uncertainty with the costs mentioned in the Draft Plan. More accurate calculations will likely to be made after the Characterization Reports (Article 5 Reports) are prepared for all river basins.

The total cost mentioned in the Draft Plan is approximately 6 billion USD (including the cost of DSD³⁴). This is a substantial amount which should be spent within a time-schedule, making certain amounts of annual allocations necessary. Nevertheless, the number set out in the Draft Plan does not include other WFD related Directives (also called “daughter directives”) such as the Nitrate Directive (91/676/EEC) or the Urban Wastewater Treatment Directive (91/271/EEC) (UWWTD). The costs of implementation of the UWWTD in particular will be sizeable as the Directive requires construction and operation of wastewater treatment plants for villages and towns with a population of 2000 or more. Therefore, the costs mentioned in the Draft Plan comprise only a small fraction of the overall costs required for the implementation of the WFD and its daughter directives.

Table-2: WFD Implementation Timetable

| Deadline | Action | Relevant Article(s) |
|------------------|---|----------------------------|
| 22 December 2003 | Identify competent authority. | Art.3 |
| 22 June 2004 | Provide Commission with list of competent authorities for each district & complete analysis of characteristics of the surface and groundwaters, review the environmental impact of human activity (industry, farming etc) and prepare economic analysis of water use. | Art.3& Art.5 |
| 22 December 2004 | Establish register or registers of protected areas. | Art.6 &Art.7 |
| 22 December 2005 | In the absence of agreement at Community level, of criteria for identifying significant and sustained upward trends in groundwater pollution and for the definition of starting points for trend reversals, Member States to establish appropriate criteria. In the absence of criteria at national level, trend reversal is to start at 75% of quality standards applicable to groundwater in existing Community legislation & make operational monitoring programs to ensure comprehensive view of water quality status within each river basin district & publish and consult on a timetable and work programs for the production of river basin management plans for each river basin district. | Art. 17 & Art. 8 & Art. 14 |
| 22 December 2006 | In the absence of agreement at Community level, for substances included on the first priority list, Member States to establish environmental quality standards for all surface water affected by discharges of those substances and controls on principal sources of discharges (same obligation to apply 5 years after subsequent inclusion of a priority substance in the list, in the absence of Community agreement). | Art. 16 |
| 22 December 2007 | Publish and consult on an interim overview of significant water management issues for each river basin district | Art. 14 |
| 22 December 2008 | Publish and consult on drafts of the river basin management plans (at least 6 months to be allowed for comments in all the above cases) & establish programs of measures in each river basin district in order to deliver environmental objectives. | Art. 14 & Art. 11 |
| 22 December 2009 | Publish first river basin management plan for each river basin district, including environmental objectives for each body of surface or groundwater and summaries of programs of measures & 2010- ensure proper water pricing policies are in place & make operational programs of measures in each river basin district to deliver environmental objectives. | Art. 13 & Art. 9 & Art. 11 |
| 22 December 2012 | Interim progress reports to be prepared on progress in implementing planned programs of measures. | Art. 15 |
| 22 December 2015 | Main environmental objectives to be met. | Art. 4 |

Source: Adapted from Anonymous, "Water Framework Directive's Implementation Timetable", in *Water Quality*, Vol. 13, October 2003.

The costs, as mentioned in the Draft Plan, broadly fall into two categories: costs for programs of measures and costs of compliance. The former type of costs is including the “direct” costs to be used for improvement of water status. Following examples are listed in the Draft Plan: “the cost of building, operating and maintenance of treatment facilities, training farmers on good agricultural practices (water, fertilizer, manure, pesticides), placing meters (electricity of water) in the industries, households, agriculture and introduce volumetric water pricing in the industries, introduce buffer strips along the watercourses”.³⁵ The latter type of costs, namely “costs of compliance” include the “indirect” costs, such as costs related with monitoring, enforcement, administrative arrangements, research, preparations for RBMPs, inspections, etc.³⁶

Following the brief discussion of the costs, the Draft Plan contains the sections discussing three actions that have been stated above. The first Chapter of actions, i.e. the Chapter on the actions to prepare for WFD implementation contains three sub-sections. The first is transposition of Directives, the second is the designation of competent authority and River Basin Districts, and the third is the Draft National Implementation Plan. With regards to the transposition, the Draft Plan provides a table summarizing the existing major water legislation and their status in terms of transposition. This table is supplemented with additional four directives which the Draft Plan did not mention. (See Table 1.) The table mostly benefited from the Strategy Document, which is published in September 2009. The full name of the document is “Plan for Setting up Necessary Administrative Capacities at National, Regional and Local Level and Required Financial Resources for Implementing the Environmental *Acquis*”.³⁷ This document was prepared as a guideline for implementation for the whole environmental *acquis*, including water related legislation. The Document is also significant in the sense that for the first time a date, 2027, is mentioned

for achieving the objectives of WFD in Turkey. This date is reiterated in the Draft Plan, now however, with a possibility of extension into 2033.³⁸

With respect to the action of “designation of Competent Authority and River Basin Districts”, Turkey refrains from making a formal announcement, simply because of the fact that Turkey is not yet bound with requirements of the WFD.³⁹ Nevertheless, the Draft Plan, elsewhere in the document, regards the Ministry of Environment and Forestry *as* the competent authority. In the section giving an overview of the Draft Plan, it is stated that “the competent authority for the implementation of the Water framework Directive is the Ministry of Environment and Forestry.”⁴⁰ Thus, taking into consideration of both statements in the Draft Plan, it becomes apparent that there is a dual approach in the Draft Plan. While Turkey declares the Ministry of Environment and Forestry as the competent authority for overall implementation process, it does not yet clearly designate the competent authority (or authorities) for implementing the WFD at the River Basin District level.

The third action in the first Chapter is preparation of a Draft National Implementation Plan. The present version of the Draft Plan is said to be final. Still, it has been recommended that the Draft Plan should be reviewed annually.⁴¹

The second chapter, which is comprised of a substantive list of actions, will be the main focus of work for WFD implementation. The Figure⁴² in this chapter lists 26 matters to be handled under 10 “items”. Turkey has a record of “sufficient progress”, only in two out of 26 matters. One of these areas is the designation of river basin districts’ boundaries. The other area is the delineation of water bodies for surface waters.⁴³ Preparation of River Basin Master Plans (RBMPs) are presented in the introductory part of this section of the Draft Plan as “significant sources for the process of

Table-3: Water Acquis and Turkey's Progress to Date

| # | European Directive | Progress | Transposition Status& Date | Leading Ministry |
|----|---|---|--|------------------|
| 1 | Water Framework Directive (2000/60/EC) | Experience gained through projects, legal gap analysis carried out | Deadline for transposition tentatively set for 2011. | MoEF |
| 2 | Dangerous Substances Directive (76/464/EEC) | Deadlines will be reconsidered based on the outcomes of <i>Twinning Project</i> (2008-09) | Accession of Turkey is not envisaged before the repeal of this Directive, no transposition is required. | MoEF |
| 3 | Daughter Directive on Priority Substances (2008/7/EC) | Priority Substances are reflected in recent legislation. | Full transposition after 2015. | MoEF |
| 4 | Bathing Waters Directive (New) (2006/7/EC) | | Date for full implementation will be determined through the proposed Project titled "Harmonisation of the New Bathing Water Quality Directive and Strengthening the Monitoring System of the MoH" submitted to 2010 IPA Program. | MoEF and MoH |
| 5 | Bathing Waters Directive 76/160/EEC | | Transposed on 09.01.2006. | MoEF |
| 6 | Directive on the Quality of Water intended or Human Consumption (98/83/EC) (Drinking Water Abstraction Directive, 75/440/EEC is repealed in 2007) | | Transposed on 17.02.2005. | MoEF |
| 7 | Urban Wastewater Treatment Directive (91/271/EEC) | | Transposed on 08.01.2006, with a period of implementation until 2023. | MoEF |
| 8 | Nitrate Directive (91/676/EEC) | | Partially transposed in 2004, full transposition no sooner than 2013. | MARA and MoEF |
| 9 | Integrated Pollution Prevention and Control Directive (96/61/EC) | | Transposition by the end of 2012. | MoEF |
| 10 | Major Accidents (Seveso) Directive (96/82/EC) | | Transposed in 2009, implementation until 2014. | MoEF |
| 11 | Sewage Sludge Directive (86/278/EEC) | | Transposed on 31.05.2005. | MoEF |
| 12 | Plant Protection Products Directive (91/414/EEC) | | Transposed in 2009 (Official Gazette No. 274131, 21.11.2009) | MARA |

| | | | | |
|----|--|---|--|---------------|
| 13 | Water for Freshwater Fish Directive (78/659/EEC-consolidated version 2006/44/EC) | | Accession of Turkey is not envisaged before the repeal of this Directive, no transposition is required. | MARA and MoEF |
| 14 | Flood Risks Assessment and Management Directive (2007/60/EC) | Twinning Project : "Capacity Building on Flood Directive in Turkey" will be carried out between 2011-2013. | | MoEF |
| 15 | Marine Strategy Framework Directive (2008/56/EC) | Application for a supporting Project to the IPA has been made. | | MoEF |
| 16 | Environmental Impact Assessment Directive (85/337/EEC) | | Partially transposed including clauses on public participation. | MoEF |
| 17 | Habitat (92/43/EEC) and Birds (79/409/EEC) Directives | | Partially transposed, full transposition after 2011. | MoEF |
| 18 | Daughter Directive on Groundwater (2006/118/EC) | Relevant legislation, institutional structure, and implementation capacity of Turkey have been reviewed, gap analysis has been made. Draft by-law prepared. | Deadline for transposition tentatively set for 2011. | MoEF |
| 19 | Water for Shellfish Directive (2006/44/EC) | | Transposed through a circular in 2008. | MoEF |
| 20 | Sampling and analysis of surface water intended for the abstraction of drinking water Directive (79/859/EEC) | | Transposed on 20.11.2005. | MoEF |
| 21 | Groundwater Directive dangerous substances (80/68/EEC) | | Accession of Turkey is not envisaged before the repeal of this Directive, no transposition is required (will be repealed in 2013). | MoEF |
| 22 | Shellfish Directive (79/923/EEC) | | Accession of Turkey is not envisaged before the repeal of this Directive, no transposition is required (will be repealed in 2013). | MoEF |

Source: Compilation based on Republic of Turkey, Ministry of Environment and Forestry, Draft National Implementation Plan- Water Framework Directive (2000/60/EC), 2010, and Özden Bilen Türkiye'nin Su Gündemi: Su Yönetimi ve AB Su Politikaları, Ankara, 2009.

river basin management planning”, however this category (RBMAsPs) is not listed as action neither in the relevant figures in this section, nor in the Annex A, which presents the planning schedules, responsibilities and expenditures of the Actions. RBMasPs will provide details of water resources utilization and investment portfolios for each of the 25 river basins. In this introductory part of this Chapter, the reason behind the differentiation of the implementation phases for river basins is elaborated. According to the approach adopted in the Draft Plan, river basins in Turkey will be divided into three groups (5+13+7 river basins). Based on this grouping, each river basin will be subject to different implementation phases. Furthermore, there will be River Basin Protection Action Plans (RBPAPs) preceding RBMPs. According to Turkish view, RBPAPs will be precursors to the RBMPs. Preparation of RBPAPs is the first action of the Chapter 2.⁴⁴ The Draft Plan presents the content of the RBPAPs as following:

Characterization of existing situation (identification of the characteristics of surface water and groundwater resources as well as pollution within the river basin; identification of pressures and impacts caused by urban, industrial, agricultural, economic, etc. activities in the river basin; examination in detail of identified pollution sources and loads; identification of water potential, utilization purposes and environmental infrastructure status)

Describing important pressures within the river basin and listing required precautions for reaching good water quality; preventing pollution; calculating environmental flows.

Carrying out studies and planning with regard to short, medium and long term measures with the participation of all stakeholders in order to protect and improve river basins. Ensuring participation of all stakeholders to the process.⁴⁵

As this description shows, RBPAPs will take the form of Article 5 Reports, or “Characterization Reports”, with additional elements of Program of Measures. The Ministry of Environment and Forestry will be the main responsible for preparation of these plans.

Although RBMPs and RBPAPs look like similar according to their scope and substance, there are significant differences between the two. Firstly, RBMPs are more comprehensive in scope. They will be more detailed and contain a “broader consideration of biological issues, as well as hydro-morphological and chemical issues.”⁴⁶ Secondly, unlike RBPAPs, they will define detailed programs of measures which aim at achieving good water status.

The second action in the Chapter 2 will be to “establish and implement monitoring approach”. Through this action, present status of water bodies as well as “reference conditions”⁴⁷ will be determined. The Draft Plan acknowledges the fact that currently monitoring responsibilities in Turkey is dispersed among a number of public authorities and that the collected and measured data do not comply with the WFD rules. In this respect, to help to improve monitoring activities in Turkey, “A Twinning Project on Capacity Building on Water Quality Monitoring” has started in late 2010. This project will contribute to the realization of monitoring responsibilities via improving data collection programs, inter-institutional coordination and triggering the monitoring activities of river basin districts. The Draft Plan proposed that the monitoring plans will be prepared centrally and will be implemented regionally. The regional execution of monitoring activities include “collection and compilation of existing data on water body status (including groundwater bodies); preparation of a basin monitoring plan (with the assistance of the Centre), which includes trend, operational and surveillance monitoring and adheres to the guidelines of the Common Implementation Strategy; identification and installation of monitoring points; sample

collection; analyzing of samples; processing and assessment of data and reporting.”

The third action to be realized within the Chapter 2 framework is the preparation of “characterization reports”. In accordance with the Article 5 of the WFD, these reports should be ready at the latest four years after the date of entry of the WFD. The Draft Plan proposes the end of 2013 as the deadline for preparation of these reports. Although the deadline is set ambitiously, it is evident that the necessary water status data will not be available for all river basins. Therefore, characterization reports will include “a degree of expert judgment” on water status.⁴⁸ The action on “characterization reports” will include a number of actions such as designation of water bodies and description of typology, analysis of pressures and impacts, analysis of economic trends and cost recovery, register of protected areas (Article 6), and significant water management issues.⁴⁹ Preparation of characterization reports one of the most important elements of the WFD implementation. A well prepared characterization report will contribute to the development of a more accurate and comprehensive program of measures, which will be fundamental for the whole success of the WFD implementation. In this sense, it could be better for Turkey to decrease the percentage of “expert judgment” in characterization reports via focusing on improving the methodologies and organizational competences for monitoring.

The fourth action will be the development of an “external communications strategy”. As stipulated by the Article 14 of the WFD, this action will produce “a time table and work programme for the production of the plan, including a statement of the consultation measures to be taken”. This action will focus on the establishment of stakeholder groups on the basis of river basin districts, as well as on promotion of their active involvement. As the Draft Plan states, RBDs will be responsible for analyzing “which stakeholders should be in-

involved”, and “how and by using which mechanisms”.⁵⁰ Although the Draft Plan provides a general approach with regard to participation, it could have been better for the Draft Plan to provide some details with regards to the issue of *active* public participation.

The fifth action will be comprised of preparation of reports discussing the significant issues in relation to the water status of RBDs. These significant water issues will be basin specific, and could be exemplified as follows: the discharge of untreated wastewater, diffuse pollution from agriculture, or point source pollution from industry, etc. These reports will be ready, as proposed by the Draft Plan, at least two years before the RBMPs. As these reports will be open to public scrutiny, they will be part of the public participation process in general terms.

“Assessments of Water Body Status” will be the sixth action within the Chapter 2. Through this activity, the present statuses of water bodies will be defined. The outcome of this activity will be used to determine not only the program of measures, but also the cost-effectiveness and alternatives of these measures. With regards to this activity, the Draft Plan gives reference to what has been done at Büyük Menderes River Basin in the framework of Twinning Project, in 2009. As already known, the RBMP prepared for Büyük Menderes River Basin in the context of Twinning Project lacked the data necessary for classification of water body status. Therefore, expert judgment is utilized in order to estimate the water bodies’ status in this river basin. This methodology is also used for four other river basins (Antalya, Akarçay, Sakarya and Yeşilirmak). As the expert judgment could only provide estimates, it will be necessary to use other criteria (biological quality elements, chemical and physicochemical quality elements, specific pollutants, hydro-morphological quality elements, priority substances and other EU-level dangerous substances) as well. While in the first group of five river ba-

sins, the level of expert judgment will remain fundamental in the preparation of RBMPs; it will possibly decrease in terms of influence for remaining twenty river basins.

The seventh action of the second Chapter will be one of the most significant steps in the whole WFD implementation process. This is the development of program of measures and setting environmental objectives. The Draft Plan mentions the use of a series of “iterations” for preparatory process of programs of measures. Although it is not clear from the text what these “iterations” will officially involve, it could be derived from the Draft Plan that these iterations will at least be done through publishing of various reports by responsible organizations and/or through a series of meetings to which relevant stakeholders (governmental and non-governmental organizations) will participate.⁵¹ It is important to note that the Draft Plan attaches importance to the consent of stakeholders, including the “wider public”, for a smooth and successful implementation of adopted program of measures.⁵² This section of the Draft Plan where program of measures is discussed, gives attention to the different interpretations of the principle of “no deterioration”. As already known, this principle aims to ensure that statuses of all water bodies, regardless of their current status or potential, are protected from further deterioration (Article 1). The Draft Plan mentions the risk of a wrong interpretation of this principle which could result in an implication of long-lasting halts for large scale hydraulic infrastructure investments. However, an accurate view of the environmental objectives should also consider the possibilities under the exemptions set out throughout the Article 4 of the Directive.⁵³ It is argued in the Draft Plan that these exemptions are “integral” part of the environmental objectives. These exemptions appear to be critically important for Turkey. Because, as reaffirmed by the Draft Plan, the continued development of hydraulic structures such as dams or flood embankments remains to be a priority for Turkey.⁵⁴ In order to guarantee its

continuous investments, Turkey also divides the preparation and implementation stages of RBMP into three successive rounds (see below). It is implied in the Draft Plan that some measures will not be implemented in the first and/or second rounds of implementation.⁵⁵ Therefore, since some of the measures will not be used in the first or second rounds of implementation, Draft Plan asserts that Turkey will be able to “seek an acceptable balance of investment over time”. According to the Figure 4 in the Draft Plan, beginning from 2028, RBMPs will be implemented with utilization of all possible measures.

The eighth action in the Chapter 2 would be making the Draft RBMPs public. The Draft Plan proposes that a Draft RBMP should be a “well-prepared draft text” and backed by the institutions responsible from WFD implementation. This backing should rely on the incorporation of the measures into institutions’ plans. However, with regards to draft RBMPs, the incorporation of the measures into plans and budgets of the implementing institutions remains to be a real difficulty.⁵⁶

The final action in this Chapter is the formal recognition of the RBMPs. The Draft Plan recalls the time schedule as stipulated by the WFD and (re)defines the Turkey’s position as previously illustrated in “the overall timeframe for implementation” figure.⁵⁷ According to this figure, there are three rounds of implementation for RBMPs. In the first round, implementations will differ at first (according to the basin grouping), then implementation for all 25 RBMP’s will become synchronized in 2018. The second round of implementation will begin in 2022, for all 25 RBMPs simultaneously. Finally, the third round of implementation will begin in 2028, again for all RBMPs at the same time. The measures adopted in each round will differ according to the interim results of RBMPs and the needs of the country which aspire to develop its hydraulic potential through sustaining a balance of investments over time.⁵⁸

As stated previously, the Chapter 3 is composed of *supportive* actions for river basin management planning. There are eight actions in this Chapter: “initiate of preparation works”, “supervise, review and approve”, “provide training to involved parties”, “guidance material”, “standard tools and formats”, “prepare national monitoring strategy”, “set criteria for environmental objectives”, and “assessments”.

The initiation of preparation works will be started by a formal document upon the decision by the National Steering Group. This formal document will include following five points:

*The MoEF is the leading ministry for the planning exercise, and ensures active involvement of other institutions and organizations, local authorities and stakeholder representatives;

*Report on the designation of the 25 RBDs;

*Formation of working groups per RBD composed of staff from regional institutions and organizations;

*Formation of central working groups for the central actions described in this Draft National Implementation Plan. Again, the groups are composed across organization boundaries. The MoEF has already worked with central working groups for the Twinning Project on Capacity Building Support to the Water Sector in Turkey; and it is necessary to expand this approach for the nationwide WFD implementation;

*Terms of reference for the regional and central working groups, which include a reference to the actions in the Draft National Implementation Plan.⁵⁹

It is proposed in the Draft Plan that the coherence and quality of the 25 RBMPs will be

centrally supervised, reviewed and approved. This will be the second action within the third Chapter. This action will be a continuous process during which all RBDs will be required to “participate in centrally organized coordination workshops; report annually on progress, plans, expected RBMP outcomes and difficulties faced; and incorporate central guidance in their plans.”⁶⁰ In order to provide overall co-ordination the Draft Plan envisages setting up of “central working groups” which would be composed of MoEF staff.⁶¹ There will be short term technical working groups which will work on a clear-cut mandate given by the Coordination Group (see below). Apart from central working groups, establishment of 25 RBD working groups, a “coordination group” which will be composed of professionals from a variety of disciplines (e.g. engineers, ecologists, economists); a “national liaison group”, which will be made up of national representatives of interest groups, including universities, agricultural and industrial interest groups as well as environmental groups; and a “national steering committee”, which will be composed of high level representatives of relevant ministries and official organizations are proposed. The Coordination Group will assign responsibilities to central and regional working groups in order to ensure the “correct and coherent” implementation of the WFD. Functioning as the Secretariat of the National Steering Group, the Coordination Group will report on the overall implementation status, and prepare meetings of the National Steering Group. The major responsibility of the National Liaison Group will be to provide expertise and to comment on WFD implementation. The National Steering Group, convening periodically, will supervise the overall implementation process of the WFD and will take policy decisions regarding implementation.⁶² Overall, the Draft Plan proposes a pyramidal organizational setting with the European Commission at the top, and the central WGs and 25 RBD WGs at the bottom.

Another action in this Chapter is to provide training to involved parties. According to the Draft Plan, parties include, members of central and regional working groups, experts from laboratories, universities, representatives from interest groups, and representatives from implementing organizations such as MARA. Within the framework of this action, a project called “Training of Trainers” was started in late 2010. It is anticipated by the Draft Plan that this project could stimulate the process of river basin management planning.⁶³

The study on the guidance material and examples will be one of the steps to be taken in the structure of the second Chapter activities. Common Implementation Strategy (CIS) guidance documents will be utilized and adapted to Turkish case as deemed necessary. Dealing with the guidance material, the Draft Plan attributes importance to the necessity that external expertise (from universities and NGOs) should also be included in the *ad hoc* working groups which will be established at the central level with an aim of elaboration of the guidance material.⁶⁴

Development of standardized tools and formats is another step to be taken with respect to Chapter 3. As main standard tool to be developed, the Draft Plan mentions the development of a tool for the Objectives and Program of Measures. This tool will be used in calculation of the costs as well as pressures on water bodies. According to the Draft Plan, this tool could be developed by a small group composed of two members, and later be tested in particular RBDs.

Acknowledging the fact that monitoring is one the most challenging parts of the WFD, the Draft Plan mentions the initiation of a national monitoring strategy as one of the supportive actions within the Chapter 3 activities. A pilot project on this issue is underway. In late 2010, a Twinning Project on Capacity Building on Water Quality Monitoring is expected to start. Financial support for this project has

already been ensured by the MoEF.⁶⁵ In order to help achieving the requirements of the WFD in terms of monitoring, a branch is established within the

Environment Reference Laboratory (“Çevre Referans Laboratuvarı” in Turkish). To recapitulate, a new Twinning Project focusing on monitoring will start in 2011, and this new branch will be main responsible for conducting this project. This project will last for three years and expected to be completed in the end of 2013.⁶⁶

Given the lack of biological water quality monitoring and criteria, river basin districts will likely find it difficult to establish objectives for the water bodies. It is stated by the Draft Plan that central working groups which would study on respective guidance documents will contribute to RBDs in overcoming this difficulty. The Draft Plan reiterates that the actions to be taken by central working groups for developing standardized tools and formats will also help RBDs in this respect.

Assessments of Program of Measures for all RBDs will be another action listed within the supportive actions chapter (Chapter 3). A Regulatory Impact Assessment document, which will also formally adopt the Draft National Implementation Plan, will be used to determine costs and benefits of the proposed actions. Within this context, the impacts of RBMPs on wider environment will be analyzed.

Conclusion

To conclude, the Draft Plan is a step forward with respect to WFD implementation in Turkey. However, the bulk of the steps are yet to be taken. As showed in the beginning of this Report, the WFD requires a number of demanding tasks to be completed on the basis of a schedule. Achievement of the WFD objectives also means a financial obligation: the WFD implementation is costly.

With respect to the transposition, Turkey is on a rapid track with a record where a number of water related Directives are already incorporated into Turkish legislation, and WFD was announced to be transposed this year (2011). Despite this, given the lack of reliable data concerning the quality of water bodies and economic analyses, the declared date of 2027 for full implementation remains an ambitious one. Therefore, whereas transposition indicate an unchallenging task for Turkey, the preparation of RBMPs and implementation of programs of measures could be difficult.

The Draft Plan covered most of the areas to be handled within the context of the WFD, but the risks associated with the transboundary aspects of water management as embedded in the WFD is largely ignored. There is no reference to what has to be done considering the requirement of “implementation of Community obligations under international conventions on water protection and management”. Thus, the issues with respect to the obligations for Turkey for becoming contracting party to each of Aarhus, Espoo and Helsinki (1992) Conventions is left aside. The second point

that needs clarification is the logic behind the separation of 25 river basins into three. Comparing the hydropower potential of the last group of river basins (7 river basins) with others, it is evident that the group of 7 river basins, the RBMPs will be prepared and implemented lastly for these RBDs. Therefore, in order not to be bound by WFD requirements in RBDs where Turkey mostly aspires to realize its hydropower potential, implementation of RBMPs for 7 RBDs are left to the final stages of implementation.

The main contribution of the Draft Plan is that Turkey has defined an anchor for WFD implementation process. It will be a reference document for further work. Public authorities on national, regional and local levels are obliged to perform certain duties compliant with the Draft Plan. Therefore, on the rhetorical level, the Draft Plan has a great potential for triggering the WFD tasks on multiple levels. The realization of this potential will ultimately rely on the fact that whether due consideration is given to the terms of the Draft Plan; i.e. roles and responsibilities of relevant organizations, and timetables.

EDNOTES

- 1 The full name of the Water Framework Directive is “Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy”. Water Framework Directive is abbreviated as “WFD”.
- 2 From now on it will be called “the Draft Plan”.
- 3 The full name of the Water Framework Directive is “Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy”. Water Framework Directive is abbreviated as “WFD”.
- 4 From now on it will be called “the Draft Plan”.
- 5 http://ec.europa.eu/eu_law/introduction/what_directive_en.htm, accessed on 14 February 2010.
- 6 Although the term “EU” was begun to be used since 1992, with Maastricht Treaty, it is mostly used throughout the text to denote the entity defined by the European integration process, for the sake of simplicity. Indeed, WFD is technically a Community (EC) legislation.
- 7 Marleen van Rijswijk, “The Water Framework Directive”, in H. van Rijswijk (ed.) : *The Waterframework directive; Implementation in German and Dutch Law*, Utrecht, 2003.
- 8 European Community (EC), Water Framework Directive (2000/60/EC), Recital 9.
- 9 World Wildlife Fund (WWF) was the original name of this NGO, however, in 1986; it changed its name to “World Wild Fund For Nature”.
- 10 WFD, Recital 2, also see Peter Chave, *The EU Water Framework Directive: An Introduction*, 2001, p. 6.
- 11 Peter Chave lists these as follows: the Proposal for an Action Program for integrated protection and management of Groundwater (1996), the Ministerial Conference on Groundwater at The Hague (1991), European Environmental Agency’s (EEA) State of environment Report (1995).
- 12 <http://www.europa.eu>, accessed on 13 February 2011.
- 13 European Community (EC), Water Framework Directive (2000/60/EC), Recital 26.
- 14 Article 2 reads “The purpose of this Directive is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater which (a) prevents further deterioration and protects and enhances the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems; (b) promotes sustainable water use based on a long-term protection of available water resources; (c) aims at enhanced protection and improvement of the aquatic environment, inter alia, through specific measures for the progressive reduction of discharges, emissions and losses of priority substances and the cessation or phasing out of discharges, emissions and losses of the priority hazardous substances; (d) ensures the progressive reduction of pollution of groundwater and prevents its further pollution, and (e) contributes to mitigating the effects of floods and droughts...”
- 15 European Community (EC), Water Framework Directive (2000/60/EC), Recital 19.
- 16 European Community (EC), Water Framework Directive (2000/60/EC), Recital 19.
- 17 European Community (EC), Water Framework Directive (2000/60/EC), Recital 42.
- 18 Henrik Larsen, “EU Water Framework Directive as ‘IWRM in the North?’ ” , PowerPoint presentation, available online at <http://www.waterforum.jp>, accessed on 01.02.2011.
- 19 European Community (EC), Water Framework Directive (2000/60/EC), Article 11.1 and Article 3.4.
- 20 Note that, the dates included in this table applies to those Member States obliged to implement the WFD beginning from its entry into force, 22 December 2000.
- 21 Article 3.
- 22 http://ec.europa.eu/environment/water/water_framework/objectives/status_en.htm#_Assessment_of_water, accessed on 3 December 2009.
- 23 The deadlines established under paragraph 1 may be extended for the purposes of phased achievement of the objectives for bodies of water, provided that no further deterioration occurs in the status of the affected body of water when all of the following conditions are met: (a) Member States determine that all necessary improvements in the status of bodies of water cannot reasonably be achieved within the timescales set out in that paragraph for at least one of the following reasons: (i) the scale of improvements required can only be achieved in phases exceeding

the timescale, for reasons of technical feasibility; (ii) completing the improvements within the timescale would be disproportionately expensive; (iii) natural conditions do not allow timely improvement in the status of the body of water. These measures and a summary of any additional measures shall be included in updates of the river basin management plan.

- 24 Article 5.
- 25 Article 11.
- 26 Article 13.
- 27 The Polluter Pays Principle is a principle in international environmental law where the polluting party pays for the damage done to the natural environment. It is regarded as a regional custom because of the support it has received in most OECD and European Community countries.
- 28 Economic analysis is defined in the Annex III of the WFD as follows: The economic analysis shall contain enough information in sufficient detail (taking account of the costs associated with collection of the relevant data) in order to: (a) make the relevant calculations necessary for taking into account under Article 9 the principle of recovery of the costs of water services, taking account of long term forecasts of supply and demand for water in the river basin district and, where necessary: estimates of the volume, prices and costs associated with water services, and, estimates of relevant investment including forecasts of such investments; (b) make judgments about the most cost-effective combination of measures in respect of water uses to be included in the programme of measures under Article 11 based on estimates of the potential costs of such measures.
- 29 Twinning is one of the major tools of “institution building” assistance in the EU. It is formally launched in May 1998. It aims to contribute beneficiary countries in developing of modern and efficient administrations, with the structures, human resources and management skills needed to implement the *acquis communautaire*. For more details, see <http://www.abgs.gov.tr/index.php?p=204&l=2>, accessed on 17.02.2011.
- 30 Transposition in the EU jargon means the incorporation of EU legislation into national legislation.
- 31 Republic of Turkey, Ministry of Environment and Forestry, Draft National Implementation Plan- Water Framework Directive (2000/60/EC), p. v.
- 32 Ibid, p.2.
- 33 As part of a MATRA Project which is conducted between 2002 and 2004 and supported by the Government of the Netherlands , a Draft River Basin Management Plan was developed for the Büyük Menderes River Basin. However, this plan was not approved by Turkish authorities. Again, within the context of the Twinning Project (Capacity Building Support to the Water Sector in Turkey) a Draft Plan is prepared with respect to Büyük Menderes river basin.
- 34 It should be noted that the DSD will be repealed in 2013 and from then on, the requirements of the DSD will be handled within the WFD.
- 35 Republic of Turkey, Ministry of Environment and Forestry, Draft National Implementation Plan- Water Framework Directive (2000/60/EC), p. 3.
- 36 Ibid.
- 37 Prepared by Republic of Turkey, emphasis added.
- 38 Republic of Turkey, Ministry of Environment and Forestry, Draft National Implementation Plan- Water Framework Directive (2000/60/EC), p.10.
- 39 Ibid, pp. 9-10.
- 40 Ibid., p. 5.
- 41 First round of annual reviews are to be made until 2017, which will update the actions, risks, enduring gaps as well as proposed solutions; and the second round of annual reviews, which will be conducted from 2018 onwards, should determine on the issue whether the deadline of 2027 should be extended or not.
- 42 Figure 3. “Summary of Progress to Date for Water Framework Directive”.
- 43 This has been done only for 5 pilot river basin districts.
- 44 Republic of Turkey, Ministry of Environment and Forestry, Draft National Implementation Plan- Water Framework Directive (2000/60/EC), pp. 15-18.
- 45 Ibid, p.16.
- 46 Ibid.
- 47 Reference condition for a water body (or water body type) is a description of the physico-chemical elements which corresponds totally or nearly totally to undisturbed conditions, with no or with only a very minor impact, from human activities.

- 48 Republic of Turkey, Ministry of Environment and Forestry, Draft National Implementation Plan- Water Framework Directive (2000/60/EC), p.19.
- 49 Ibid.
- 50 Ibid., pp. 19-20.
- 51 Ibid, p. 22.
- 52 The Draft Plan reads: “Stakeholders and the wider public needs to be involved as well in order to ensure that measures chosen are accepted once it comes to implementation.” in Ibid.
- 53 Article 4 of the WFD is titled as “Environmental Objectives.” It is relatively a long Article (1825 words), comprising of approx. %15 of the whole body of Articles. It is significant not only in the sense that it elaborates “environmental objectives”, but also the set out the exemptions related with them. Article 4.4. is associated with the “extension of the deadlines”, Article 4.5. is associated with “less stringent environmental objectives”, Article 4.6. is associated with “temporary deterioration”, and Article 4.7. is associated with “new modifications to a surface body” or alterations to the level of groundwater”.
- 54 Republic of Turkey, Ministry of Environment and Forestry, Draft National Implementation Plan- Water Framework Directive (2000/60/EC), p.23.
- 55 Ibid, p. 24.
- 56 Ibid.
- 57 Figure 4.
- 58 Ibid.
- 59 Ibid, p. 26.
- 60 Ibid, p. 27.
- 61 The Draft Plan states that the expansion of the central working group participation could later be considered. See ibid, p.27.
- 62 Ibid., pp. 28-29.
- 63 Ibid., p. 29.
- 64 Ibid, p. 30.
- 65 Ibid., p. 31.
- 66 Ibid., p. 14.

ORSAM ACADEMIC STAFF

| | |
|--|--|
| Hasan Kanbolat | Director |
| Ret. Maj. Gen. Armağan Kuloğlu | Senior Advisor |
| Habib Hüzmüzlü | Middle East Advisor |
| Assoc. Prof. Özlem Tür | Advisor & Editor of Middle Eastern Studies, METU Department of IR |
| Assoc. Prof. Harun Öztürkler | Middle East Economies Advisor, Afyon Kocatepe University |
| Assoc. Prof. Veysel Ayhan | Gulf of Basra Advisor, Abant İzzet Baysal Univ. IR Dep. |
| Asst. Prof. Serhat Erkmen | Middle East Advisor, Head of Ahi Evran University IR Dep. |
| Asst. Prof. Mehmet Şahin | Middle East Advisor, Editor of Middle Eastern Analysis, Gazi University Dep.Int.Rel. |
| Dr. Didem Daniş | Advisor, Immigration Studies & Iraqi Refugees, Galatasary University Department of Sociology |
| Dr. İlyas Kamalov | Eurasia Advisor |
| Dr. Süreyya Yiğit | Eurasia Advisor |
| Dr. Bayram Sinkaya | Middle East Advisor, Research Assitant in METU/Atatürk University |
| Assoc. Prof. Dr. Esra Pakin Albayrakoğlu | Middle East Advisor, Namık Kemal Un. |
| Bilgay Duman | Researcher, Middle East |
| Ogün Duru | Managing Editor |
| Oytun Orhan | Researcher, Middle East |
| Sercan Doğan | Assistant Researcher |
| Selen Tonkuş Kareem | Assistant Researcher |
| Nebahat Tanriverdi.0 | Assistant Researcher |
| Nazlı Ayhan | Assistant Researcher, Projects |
| Uğur Çil | Assistant Researcher, Middle East |

ORSAM Water Research Programme

| | |
|-----------------------|-----------------------------------|
| Dr. Tuğba Evrim Maden | Hydropolitics Specialist |
| Dr. Seyfi Kılıç | Hydropolitics Specialist |
| Kamil Erdem Güler | Assistant Researcher, Middle East |
| Çağlayan Arslan | Assistant Researcher, Middle East |

ORSAM ADVISORY BOARD

| | |
|--|--|
| Dr. İsmet Abdülmecid | Former Head of Iraqi Council of State |
| Prof. Muhamad al Hamdani | Cultural Advisor in Iraq's Embassy in Ankara |
| Prof. Dr. Hayati Aktaş | Head of Department of International Relations in KTÜ |
| Prof. Dorayd A. Noori | Vice-Advisor in Iraq's Embassy in Ankara |
| Hasan Alsancak | BP&BTC Turkey, Energy Security Director |
| Assoc. Prof. Dr. Esra Pakin Albayrakoğlu | ORSAM Middle East Advisor, Namık Kemal Un. |
| Prof. Prof. Dr. Meliha Benli Altunışık | METU, Director of Institute of Social Sciences |
| Prof. Dr. Ahat Andican | Former Minister & Istanbul University |
| Prof. Dr. Tayyar Arı | Uludağ University, Head of Department of International Relations |
| Prof. Dr. Mustafa Aydın | President of Kadir Has University |
| Prof. Ali Arslan | Istanbul University History Department |
| Assoc. Prof. Ersel Aydınlı | Head of Bilkent University Department of International Relations |
| Başar Ay | General Secretary, Turkish Textile Employers' Association |
| Assoc. Prof. Veysel Ayhan | Abant İzzet Baysal University Department of International Relations |
| Prof. Hüseyin Bağcı | METU, Head of Department of International Relations |
| Prof. İdris Bal | Police Academy, Head of Turgut Özal University Department of International Relations |
| İtir Bağdadi | İzmir Economy University Department of International Relations and European Union |
| Kemal Beyatlı | Head of Iraqi Turkman Press Council |
| Assist. Prof. Dr. Ersan Başar | Karadeniz Technical University |
| Barbaros Binicioğlu | Advisor, Middle Eastern Economies |
| Prof. Ali Birinci | Head of Turkish Historical Society |
| Assoc. Prof. Mustafa Budak | Deputy Director General in Prime Ministerial State Archives |
| Ret. (Air) Gen. Ergin Celasin | 23rd Commander of Air Forces |
| Assoc. Prof. Mitat Çelikkpala | Kadir Has University, Head of Department of International Relations |
| Prof. Gökhan Çetinsaya | Rector of Istanbul City University |
| Dr. Didem Daniş | Advisor, Immigration Studies & Iraqi Refugees, Galatasary University Department of Sociology |

Prof. Volkan Ediger
 Prof. Cezmi Eraslan
 Prof. Dr. Çağrı Erhan
 Asst. Prof. Serhat Erkmen
 Dr. Amer Hasan Fayyadh
 Osman Göksel
 Timur Göksel
 Numan Hazar
 Habib Hürmüzlü
 Assoc. Prof. Pınar İpek
 Assoc. Prof. Dr. Şenol Kantarcı
 Dr. İlyas Kamalov
 Assoc. Prof. Hasan Ali Karasar
 Arslan Kaya
 Selçuk Karaçay
 Assoc. Prof. Nilüfer Karacasulu
 Dr. Hicran Kazancı
 İzzettin Kerküklü
 Assoc. Prof. Mustafa Kibaroğlu
 Musa Kulaklıkaya
 Ret. Maj. Gen. Armağan Kuloğlu
 Assoc. Prof. Erol Kurubaş
 Prof. Dr. Mosa Aziz Al-Mosawa
 Murat Özçelik
 Prof. Mahir Nakip
 Assoc. Prof. Dr. Tarık Oğuzlu
 Assoc. Prof. Harun Öztürkler
 Prof. Dr. Çınar Özen
 Dr. Bahadır Pehlivan Türk
 Prof. Suphi Saatçi
 Assoc. Prof. Dr. İbrahim Sirkeci
 Bayram Sinkaya
 Asst. Prof. Mehmet Şahin
 Mehmet Şüküroğlu
 Assoc. Prof. Oktay Tanrısever
 Prof. Erol Taymaz
 Prof. Sabri Tekir
 Dr. Gönül Tol
 Asst. Prof. Özlem Tür
 M. Rağıp Vural
 Prof. Türel Yılmaz
 Dr. Süreyya Yiğit

İzmir Economy University
 Head of Atatürk Research Center, Istanbul University Department of History
 Ankara University Faculty of Political Science & Director of European Research Center (ATAUM)
 ORSAM Middle East Advisor, Head of Ahi Evran University Department of International Relations
 Dean of Political Sciences Faculty, Baghdad Univ.
 BTC & NABUCCO Coordinator
 Beirut American University
 Retired Ambassador
 Middle East Advisor
 Bilkent University Department of International Relations
 Kırıkkale University, Faculty of Economic and Administrative Sciences
 Eurasia Advisor
 Bilkent University Department of International Relations
 KPMG, Sworn-in Certified Financial Accountant
 Deputy Director, Vodafone
 Department of IR, Dokuz Eylül University
 Iraqi Turkman Front Foreign Affairs Representative
 Head of Kirkuk Foundation
 Bilkent University Department of International Relations
 Ambassador of Turkey to Nouakchott (Islamic Republic of Mauritania)
 ORSAM Senior Advisor
 Head of Kırıkkale University Department of International Relations
 President of Baghdad University
 Turkish Republic Ambassador to Baghdad
 Vice-rector of Ahmet Yesevi University
 Bilkent University Department of International Relations
 Middle East Economies Advisor, Afyon Kocatepe University Department of Economy
 Ankara University, Director of Institute of Social Sciences
 TOBB ETU Department of International Relations
 Secretary-General of Kirkuk Foundation
 Reader in Demography and Marketing Regent's College, London, UK
 Middle East Advisor, Research Assistant in METU/Atatürk University
 Gazi University Department of International Relations
 Energy Expert
 METU Department of International Relations
 Vice President of the METU North Cyprus Campus
 Dean of İzmir University Faculty of Economics and Administrative Sciences
 Director of Middle East Institute Turkish Studies
 METU Department of International Relations
 General Coordinator of 2023 (Magazine)
 Dean of Ahi Evran University, Faculty of Economics and Administrative Sciences
 ORSAM Eurasia Advisor

EDITORIAL BOARD OF MIDDLE EAST STUDIES

| | |
|--------------------|----------------------------|
| Meliha Altunışık | METU |
| Bülent Aras | Işık University |
| Tayyar Arı | Uludağ University |
| İlker Aytürk | Bilkent University |
| Recep Boztemur | METU |
| Katerina Dalacoura | London School of Economics |
| F. Gregory Gause | Vermont University, USA |

MIDDLE EAST ANALYSIS EDITORIAL BOARD

| | |
|--------------------------------|---|
| Prof. Meliha Altunışık | METU, Director of Institute of Social Sciences |
| Hasan Kanbolat | ORSAM Director |
| Assoc. Prof. Hasan Ali Karasar | Bilkent University Department of International Relations |
| Asst. Prof. Serhat Erkmen | ORSAM Middle East Advisor, Head of Ahi Evran University Department of International Relations |



Mithatpaşa Caddesi 46/6 Kızılay-ANKARA
Tel: 0 (312) 430 26 09 Fax: 0 (312) 430 39 48
www.orsam.org.tr, orsam@orsam.org.tr