<u>Standard Summary Project Fiche – IPA decentralised National programmes</u> (maximum 12/<u>15</u> pages without the annexes)

1. Basic information

1.1 CRIS Number : TR2009/0327.02

1.2 Title : Capacity Building on Water Quality Monitoring

1.3 ELARG Statistical code: 27 (Environment)

1.4 Location : Turkey

Implementing arrangements:

1.5 Implementing Agency:

The Ministry of Environment and Forestry will undertake complete responsibility for administration related to the preparation, technical control and implementation of the project.

The CFCU will be Implementing Agency and will be responsible for all procedural aspects of the tendering process, contracting matters and financial management, including payment of project activities. The director of the CFCU will act as Programme Authorizing Officer (PAO) of the project.

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1.6 **Beneficiary (including details of SPO):**

Beneficiary: Ministry of Environment and Forestry

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Financing:

1.7 Overall cost (VAT excluded)¹: 4.000.000 €

1.8 EU contribution: 3.650.000 €

1.9 Final date for contracting: 2 years after the signature of the Financing Agreement

1.10 Final date for execution of contracts: 2 years after the last date of the contracting deadline

1.11 Final date for disbursements: 3 years after the last date of the contracting deadline

2. Overall Objective and Project Purpose

2.1 Overall Objective:

To achieve a good environmental status for surface waters.

2.2 Project Purpose:

Strengthening Turkey's capacity to implement the EU Water Framework Directive (2000/60/EC-Art. 8/Annex 5)

2.3 Link with AP/NPAA / EP/ SAA

Accession Partnership (AP) Priority;

(COUNCIL DECISION of 18 February 2008 on the principles, priorities and conditions contained in the Accession Partnership with the Republic of Turkey and repealing Decision 2006/35/EC)(2008/157/EC)

The total cost of the project should be net of VAT and/or other taxes. Should this not be the case, the amount of VAT and the reasons why it should be considered eligible should be clearly indicated (see Section 7.6)

Accession Partnership Document sets out the principles, priorities, intermediate objectives and conditions decided by the European Council. One of the short-term priorities related with environment;

- Adopt a comprehensive strategy for the gradual transposition, implementation and enforcement of the acquis, including plans for building up the necessary administrative capacity at national, regional and local level and required financial resources, with an indication of milestones and timetables,
- continue transposition, implementation and enforcement of the acquis, in particular horizontal and framework legislation, such as the environmental impact assessment, including transboundary aspects, as well as strengthening of administrative capacity,

According to the 2008 Accession Partnership Document, the medium-term priorities in the field of Environment include "Continue to transpose and implement the acquis related to the framework legislation, international environmental conventions and legislation on nature protection, water quality, chemicals, industrial pollution and risk management and waste management, — pursue integration of environmental requirements into other sectoral policies."

NPAA priority; NP describes strengthening institutional, administrative and control capacity and continuing harmonization of EU legislation inside national legislation in order to support environmental and nature protection.

The main parts of the Strategy would be: "Institutions", "Legislative Approximation and Implementation", "Strengthening the Institutional Capacity" and "Financial Resources":

- Under the "Institutions" part, the institutions at national, regional and local level responsible for the environment sector, responsibilities and units having inspection authority would be included.
- Under the "Legislative Approximation and Implementation" part, orders of the topics/subjects as in the screening report are taken into account and targeted calendar would be given.
- "Strengthening The Institutional Capacity "part would cover the future plans for national, regional and local levels.
- Under the "Financial Resources" part, the estimated financial burden to adopt and implement the whole EU environmental acquis would be given.

Under the Schedule of institutional capacity building requirements necessary for legislative approximation and implementation Chapter 27.3.6.2 include monitoring.

Determination of sensitive and less sensitive areas and revision thereof needs monitoring of surface waters and coastlines as mentioned under the schedule of legislative harmonization calendar, Chapter 27.3.6.1.

2.4 Link with MIPD

In MIPD, environment is one of the key intervention sectors. In the document, it is stated that one of the priority areas for support will be environment for the period 2007-2009 of preaccession assistance strategy in adoption and implementation of the Acquis Communautaire, and that actions undertaken in the framework of IPA can assist Turkey in improving the protection of during the pre-accession phase in the scope of the *Institution Building* component. Considering the current situation described in the Regular Report on Turkey's

progress towards accession, and depending on project maturity and on the outcome of projects under on-going programmes, the priorities for assistance under the Institution Building component will cover the adoption of a revised programme for transposition and implementation of the Acquis; transposition of framework legislation, international environmental conventions, water quality, strengthening the relevant institutions in the scope of "Environment Chapter". Concerning the harmonization with the Acquis, environmental approximation is one of the major programmes proposed on which the focus of assistance is directed. Also it is specified that Institution Building support will continue to be provided principally through technical assistance and twinning, supplemented by supplies of equipment where appropriate.

As it is mentioned in the document, Turkey will have to make significant investments to put in place the Community "Acquis" in regard to the environment. Environmental projects to be financed under IPA need to be closely linked to the implementation of environmental plans for the relevant sectors (water, waste, etc.) and based on a strategic and integrated approach (including, river basin management plans in the water sector). This approach requires the drawing up of an overall investment strategy for the environment, in which prioritization in project identification and integrity with other sources of funding are key elements. The environmental dimension of sustainable development should be the basis for the activities. Additionally, in the Annex-A of MIPD, meeting environmental norms are described as: "they will constitute one of the most expensive aspects of Turkey's EU integration effort". Owing to these statements mentioned above, a national monitoring system is strongly required for a strong environmental policy and sustainable water management.

2.5 Link with National Development Plan (where applicable)

Turkey has completed the Preliminary National Development Plan (PNDP), which was prepared by the State Planning Organization. It includes development axis. Four development axes forming the basis of the PNDP Strategy are derived from the medium-term objectives and priorities of Turkey. One of the development axes of the PNDP is the improvement of the infrastructure services and environmental protection and the medium term objective with respect to environment is the preservation of the water resources, increase in productivity of drinking water and sewerage services and of solid waste management.

As is known, monitoring of coastlines and surface waters is executed by the Ministry of Environment and Forestry with the collaboration of relevant Turkish Institutions including the Turkish Coast Guard Command and Undersecreteriat for Maritime Affairs in Mediterranean and Black Sea regions under the framework of the Barcelona and Bucharest Conventions with a view of the land base pollution sources. Although different implementations have taken place within the context of the monitoring activities, to fulfill international obligations in the framework of the principle of sustainable development, which is stated as a purpose in the Ninth Development Plan, there is a need on characterization and classification of coastlines and surface waters.

2.6 Link with national/ sectoral investment plans(where applicable)

With a view to effectuating investments stipulated in the National Action Plan, prepared by TUBITAK-MAM, in line with the SAP targets, addressing the land based pollution problems, the priorities and the investment portfolio were elaborated. Criteria to be taken as basis to the elaboration of investment portfolios have been established as benefit, economical development, feasibility, financial sustainability and estimated cost.

After establishing the investment portfolios matrix, projects have been listed as sorted by priority. Projects have been sorted by priority according to the results of the investment portfolio matrix as list of high priority projects, list of medium priority projects, and list of low-priority projects. There are the tables of projects belonging to each basin in Annex VI.

3. Description of project

3.1 Background and justification:

Turkey, being a peninsula, has a surface of 779,452 km² and most of the population and industry concentrate on coastal provinces. Turkey is one of the countries that have the longest shoreline of Europe with its 8.333 km shoreline. The seas surrounding Turkey on three sides are faced with pollution problem. Vessels and land based pollution are the key actors in marine pollution. Due to the fact that Turkey is a peninsula, coastline management is an important issue, especially for 28 coastal provinces. It is fact that shores of Turkey are under the threat of pollution problems originated from discharging of domestic and industrial solid and liquid wastes, sea transportation, filling of shores with various purposes, disasters like earthquake and flood.

Turkey has 25 river basins and over 120 natural lakes. Consumable ground and surface water potential of Turkey is 112 billion m³/year. Turkey is not a country rich in water resources and it is anticipated to be a water-stressed country by 2030. Most of Turkey is situated in a semi-arid region. Precipitation is limited to 5 to 6 months per year. Surface water pollution is a serious problem in Turkey. Domestic, industrial and agricultural pollution threatens the quality of surface waters. Thus, there is a need to protect limited amount of water against pollution and it would only be possible by establishing an efficient water quality monitoring system.

Turkey has developed its water resources policy taking into consideration the present and future water needs for its growing population, developments at global levels as well as the ongoing EU accession process. Priority has been given to policies and plans to fully utilize Turkey's water potential in an efficient manner through necessary measures and projects. The focus has been on securing the quantity and the protection of the quality of water resources.

In order to achieve the main targets conducive to protect water resources for both the present and future generations, it is necessary to reach a series of interim targets that take into consideration:

- human health and environmental objectives,
- economic and social progress that can be attained only by the efficient, reasonable and equitable use of water.

Ministry of Environment and Forestry is responsible for the harmonization of national environmental legislation with the EU legislation and for its implementation. Some studies are conducted in order to reduce surface waters pollution within the coordination of MoEF with contribution of relevant organizations and institutions taking in to consideration the relevant European Union Directives as appropriate.

Article 8 of the Water Framework Directive establishes the requirements for the monitoring of surface water status, groundwater status and protected areas. Monitoring programs are required to establish a coherent and comprehensive overview of water status within each river basin district. The Directive mentions the parameters and quality elements that should be

monitored for surveillance monitoring, operational monitoring and investigative monitoring. It also sets the requirements for international monitoring and the monitoring of groundwater.

From 2007 till 2009 an EU twinning project "Capacity building support to the water sector in Turkey" has been executed. This project has analyzed the present monitoring situation in the basin of the Buyuk Menderes River and has made recommendations on how to upgrade this regional monitoring system to the standards of the Water Framework Directive. This present proposal for a new twinning project on monitoring is in line with the recommendations of the twinning project "Capacity building support to the water sector in Turkey".

A common strategy, by the name of Mediterranean Action Plan (MAP), is being executed by all Mediterranean countries and European Union in order to implement the Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention) and its Protocols to which Turkey is a party as well. As is known, Black Sea countries established an association with the Convention for the Protection of the Black Sea Against Pollution (Bucharest Convention) (Black Sea Convention) in 1992, having a worry of environmental degradation in their common sea. Turkey does the honors for this association.

Additionally, Turkey is a part of Emergency Response Protocols which are from the annex protocols of Barcelona and Bucharest Conventions and MARPOL 73/78 Convention and its annexes, OPRC, CLC and FUND Conventions as well. Besides prevention of land sourced pollution, studies with regard to prevention of the pollution originating from coastline transportation, preparedness for possible accidents, response and indemnity of the damages are being carried out.

Monitoring of surface waters can be an important tool in order to determine the environment policy of Turkey; and to choose BATs / BEPs for reducing pollution. Although water quality monitoring of surface waters is carried out by different institutions in Turkey, there is still a need for a monitoring network system and administrative capacity building in order to prevent the deficiency of coordination between institutions and duplications.

Within the scope of the Water Framework Directive, the objectives and targets have been determined and the strategies to be implemented to achieve the objectives have been established taking in to consideration the relevant European Union Directives as appropriate, especially for irrigation systems, re-injection systems, Nitrate Directive, Directive concerning the quality required of surface water intended for the abstraction of drinking water in the Member States, and Urban Waste Water Treatment Directive. Within this frame, the priorities with respect to investment are indicated in Urban Wastewater Treatment Directive, Drinking Water Directive, Water Framework Directive, Dangerous Substances Directive, Nitrate Directive and Bathing Water Directive. According to EU Directives mentioned above, the pollution level of the ground, surface waters and coastlines should be monitored, pollution level should be reduced to minimum and their further pollution should be prevented. For this purposes, to establish a monitoring network for national water sources is main strategy.

The activities executed within the scope of this project in reaching the defined objectives will enable the liable parties to fulfill the obligations of the international conventions and EU Directives mentioned before, and will pave the way to EU accession.

For the goals of this project, the Ministry is highly aware of the importance of a healthy cooperation with the universities in the basins, The Scientific and Technological Research Council of Turkey (TUBITAK) and related NGOs.

3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact (where applicable)

This project meeting the requirements of WFD will support the activities of Barcelona and Bucharest Conventions.

Other impacts are listed below:

This Project,

- will enhance the harmonization of environmental Acquis Communautaire, especially for WFD with regarding to surface waters, and make the decision making and the implementation more accelerated and more effective;
- will be a good instrument for the preparation of plans and programs for the National Policy;
- will make the supervision system more effective;
- will be a good example for Turkey's other basins and also neighboring countries in terms of the objectives of integrated and holistic approach;
- will enable better environmental management, and to protect environment,

The project will give an overview of the present gap between the Turkish monitoring situation and the EU requirements. And also, it will support the establishment of the programme of measures within the scope of WFD in a good manner. These will enable the Beneficiary to plan the necessary investments and capacity building training. Via this project, determination of environmental objectives will also be performed in a selected basin.

The investments and capacity building training will lead to sustainable capacity in the Ministry of Environment and Forestry in order to execute the monitoring activities and to take care of the operation and maintenance of the facilities. In addition the project on monitoring will strengthen the institutional cooperation of the Ministry of Environment and Forestry with the other Ministries like Ministry of Public Health and Ministry of Agriculture and Rural Affairs.

Furthermore, the project will provide a concrete ground for sustainable management of local administration and especially of basin protection unions. Especially with the pilot implementation and the trainings planned to be given within the scope of this project, awareness of the local authorities will be strengthened.

3.3 Results and measurable indicators:

Results	Objectively Verifiable Indicators			
1. The legal and institutional gap analysis is	1.1. Detailed report on lessons learned from previous			
executed between Turkey and EU in terms of WFD requirements.	projects like "Capacity building support to the water sector, the MATRA project on the WFD, the MATRA			
W1D requirements.	groundwater project etc. at the end of first year of project. 1.2. Legal and institutional Gap Analyses Report including the future options at the end of the first year of the project.			
2. Capacity building of related institutions is provided on water quality monitoring, analysis and assessment of surface water bodies in line with WFD	2.1. Trained staff of 150 persons at least from beneficiary institutions (100 local and 50 central) on monitoring issues at the end of 8 th Quarter of the project. 2.2. 2 workshops for each year by the participation of public and NGO's at the end of 12 th Quarter of the project. 2.3. 3 Study visit tour reports at the end of the visits.			
3. Pilot implementation is executed related to monitoring of surface water bodies for selected basins.	 3.1. The number of determined monitoring point in pilot areas to meet WFD at the end of 4th Quarter of the project. 3.2. The number of monitored point in pilot areas at the end of 11th Quarter of the project. 3.3. Prepared guidelines and manual for EU monitoring. 3.4. The number of equipments purchased by the dates of Supply. 			

3.4 Activities:

One twinning contract, one technical assistance contract and one supply contract will be deployed for all below described three activity sets. Co-financing source for all these activities is budget of Ministry of Environment and Forestry.

- **1.1.** Assessment of current EU and Turkish legislation on water monitoring and existing administrative structures to implement these legislation, including recommendations for an extended implementation in the future.
- **1.2.** Analysis of institutions, their capacities (staffing, expertise, and analytical equipment), identification of options for strengthening the current institutional system and definition of training needs based on the analysis of the water acquis requirements in the context of project purpose.

- **1.3.** Preparation of a detailed institutional and legal analysis report including possible options for strengthening the current system.
- **2.1.** Conducting 3 study tours for beneficiary(ies) and stakeholder institutions to be able to draw lessons on various implementation practices.
- **2.2.** Arranging 6 workshops on water quality monitoring.
- **2.3.** Preparation of guidelines and manuals to adapt the CIS guidance document to specific Turkish situation for the implementation of the WFD monitoring requirements and background technical, administrative and legal documents to establish Turkish integrated national monitoring institute for surface waters.
- **2.4.** Applying comprehensive training programs including training of trainers in Turkey to understand various aspects of water acquis and European standardized methods for monitoring.
- **2.5.** Training of the staff of the relevant authorities on analytical methods in general, on internal laboratory procedures, quality control etc.
- **2.6.** Training of the staff on determination of EQS and EQR by using the data from monitoring results of pilot basin.
- **3.1.** Analysis of the data available with regard to their completeness and the monitoring requirements established; identification of the needs and gathering additional data required.
- **3.2.** Purchasing of necessary monitoring equipment and preparation ToR and full tender dossier according to EC PRAG Rules and in-situ installation of them. Determination of the specifications for the soft- and hardware, state of the art back-up and recovery support, training and quality control (of system).
- **3.3.** Determination of specifications and locations of required monitoring stations in line with WFD and daughter directives for selected 5 basins. (sampling locations and sampling frequencies, etc.)
- **3.4.** Monitoring the parameters in Buyuk Menderes River Basin within the framework of WFD and daughter directives
- **3.5.** Assessment of monitoring results and determination of EQS and EQR in Buyuk Menderes River Basin.
- **3.6.** Report on technical specifications for future investment needs for monitoring laboratory and institutional infrastructure and establishment of real time operational river basin management information system (online monitoring).
- **3.7.** Preparation of detailed Integrated Monitoring Network plan and programme for the WFD (including estimations of costs for compliance).
- **3.8.** Preparation of guidelines and manuals to adapt the CIS guidance documents to specific Turkish situation for the implementation of the WFD monitoring requirements.

3.5 Conditionality and sequencing:

TA will start at the beginning of the project and continue two years. Twinning Contract will start in the 5th Quarter and continue two years, which will be executed for one year synchronously with TA Contract.

	1 th Q	2 th Q	3 th Q	4 th Q	5 th Q	6 th Q	7 th Q	8 th Q	9 th Q	10 th Q	11 th Q	12 th Q
Gap Analysis												
Institutional Analysis												
Draft Plan for IMS												
Pilot Implementation												
Study Visits												
Workshops												
Training												

3.6 Linked activities

Capacity building support to the water sector in Turkey TR06-IB-EN-01

The purpose of the project is to assist Turkey in the water management in line with the EU water legislation, in particular the Water Framework Directive (WFD) 2000/60/EC of 23 October 2000, Urban Wastewater Treatment Directive (UWWTD) 91/271/EEC of 21 May 1991 and Dangerous Substances Directive (DSD) 76/464/EEC of 4 May 1976 and daughter directives in order to enable the full implementation of the EU water acquis by the date of Turkey's accession to the EU.

The results are ordered by the five components of the project. These components are:

Component 0: Project kick off and closing event

Component 1: Legal and institutional analysis of the three directives

Component 2: Implementation plans for the Water Framework Directive

Component 3: Pilot implementation in the Buyuk Menderes

Component 4: Internal and external communication plan

Therefore, further efforts are needed to transpose and implement the Acquis, including a new framework law on the management of water resources in line with the WFD. The project will contribute to Turkey for meeting the European Union environmental policy. In the EU twinning project "Capacity building support to the water sector in Turkey" the present monitoring situation in the basin of the Buyuk Menderes River and recommendations were made on how to upgrade this regional monitoring system to the standards of the Water Framework Directive.

Implementation of the Water Framework Directive in Turkey (MATO1/TR/9/3):

The aim of the Project was to support Turkey with the implementation of the WFD. In this project legal and administrative analysis was performed. However, the final report of the project which is under consideration still needs major revisions.

In "Implementation of the Water Framework Directive in Turkey" project supported by the MATRA pre-accession program of Netherlands, a report on the legal and institutional developments required to meet EU legal requirements in the field of water management in Turkey was prepared. It is still under consideration.

<u>Technical Assistance for Environmental Heavy-Cost Investment Planning For Turkey (Tr/0203.03/001)</u>

The specific objective is to enable the Turkish authorities to meet Turkey's environmental infrastructure requirements for EU accession by identifying and prioritizing project in the priority environmental sectors: water, waste, air, industrial pollution control (IPC) and identify and catalogue the existing financial instruments available for environmental investments and their characteristics.

Implementation of Nitrate Directive in Turkey TR-07/EN/01

Effective monitoring on surface and ground water for agricultural nitrate pollution obtained by developing network system and vulnerable areas determined.

Institutional and technical capacity of MARA has been strengthened and farmer awareness and knowledge has been increased in pilot areas and information and knowledge share has been developed by MARA to MoEF.In this project a monitoring scheme for nitrate is developed.

It is mandatory that every country, liable party to Barcelona and Bucharest Conventions, will execute the obligations of Strategic Action Plan with the prepared National Action Plans. Monitoring the Sea Areas is executed by the Ministry of Environment and Forestry in Mediterranean and Black Sea regions under the framework of the Conventions with a view of the land-based pollution sources. However, in Marmara region there is not any proper monitoring activity yet. But a pollution monitoring programme will be executed.

The Marine Pollution Assessment and Control Component of MAP(MED POL) Project

Within the scope of Land Based Sources Protocol, a sub protocol of Barcelona Convention, and Strategic Action Program Mediterranean Pollution Monitoring Program, called MED POL, a multi-annual program, is being executed by the Ministry of Environment and Forestry by means of related institutions. The Monitoring Programme of Turkey under MED POL Phase IV includes the monitoring of pollution hot spots (estuaries of rivers, sites subjected to urban and industrial waste-water), river inputs, the compliance monitoring of effluents and the monitoring of contaminant levels in biota and sediments to follow-long term changes of the chemical pollution status of the sea areas. Eutrophication monitoring and assessment is included in the programme as a pilot activity for an affected site (Mersin Bay). The monitoring activities related to the Program having been executed since 1987 by the Ministry of Environment and Forestry. This program comprises the main purposes as follows.

- Determination of the pollution level of Mediterranean Sea, in terms of sectoral activities and the materials listed in the Annex-I of the Protocol.
- Evaluation of the effectiveness of taken measurements within the framework of the Protocol, and action plans and programs to prevent the pollution.

Pollutant Release and Transfer Register (PRTR) Project

The activity dealing with the development of a public tracking and reporting systems of pollutant, known generically as Pollutant Release and Transfer Register (PRTR) is also part of the activities of the Strategic Action Programme (SAP). A PRTR system for selected chemicals and industries in İzmir (PETKİM Aliağa), Turkey has been established at the end of 2007, as a model for similar activities in other Mediterranean countries. Besides, a new proposal to UNEP/MAP has been made to disseminate the system through the Mediterranean provinces in Turkey.

<u>Support to the transposition and implementation of EU legislation related to accidental or deliberates sea pollution with oil and other harmful substances in Turkey (PPA06/TR/7/6)</u>

The project aimed to contribute to the accession of Turkey to the European Union. In particular, the project aimed to assist Turkey in the transposition and implementation of EU legislation related to accidental or deliberates marine pollution with harmful substances in Turkey. The activities and results of said project, whose commencement date is 1 January 2007 and completion date is 31 December 2008, can be summarized as;

- 1. Relevant national legislation (including secondary legislation such as guidelines) in the area of accidental or deliberate marine pollution with oil and other harmful substances on the prevention of marine pollution is analyzed and recommendations and drafts for amendments are given in accordance with European requirements and other international obligations;
- 2. The capacity of the MoEF, the UMA and the TCG in relation to legislative responsibilities in the area of accidental or deliberate marine pollution with oil and other harmful substances and the provisions of MARPOL Convention in the area of marine pollution is strengthened;
- 3. A strategy is developed for an effective and efficient co-operation structure between MoEF, UMA, TCG and in the area of accidental or deliberate marine pollution with oil and other harmful substances in Turkey.

3.7 Lessons learned

Capacity building support to the water sector in Turkey TR06-IB-EN-01

The purpose of the project is to assist Turkey in the water management in line with the EU water legislation, in particular the Water Framework Directive (WFD) 2000/60/EC of 23 October 2000, Urban Wastewater Treatment Directive (UWWTD) 91/271/EEC of 21 May 1991 and Dangerous Substances Directive (DSD) 76/464/EEC of 4 May 1976 and daughter directives in order to enable the full implementation of the EU water acquis by the date of Turkey's accession to the EU.

The approach to establish a river basin management plan was gathered with this project by current monitoring data. However, data gap has been realized for a successful river basin management. It has been understood that a strong institutional cooperation is a need for an efficient monitoring system. The project is beneficial for aligning the Turkish monitoring system to the EU requirements.

Implementation of the Water Framework Directive in Turkey (MATO1/TR/9/3):

The project called as "Implementation of the Water Framework Directive in Turkey (MATO1/TR/9/3)" is the first project related with EU Water Framework Directive 2000/60/EC. In the project, a legal and institutional analysis report, a draft river basin management plan for a pilot basin, a handbook for the implementation of WFD, and some practical guidance for some basic topics included in WFD such as characterization, environmental objectives, etc. were produced. But, because of the limitations both in time and budget, the project could not serve the expected results to the beneficiaries for all parts of the Directive in detail. The above mentioned MATRA Project is a good introductory activity in understanding the WFD phenomenon during the accession period of Turkey.

All related stakeholders in the water sector in Turkey became aware of the EU implementation in the water sector and WFD.

<u>Technical Assistance for Environmental Heavy-Cost Investment Planning For Turkey (Tr/0203.03/001)</u>

The EHCIP project has three main components, viz.:

• The strategic planning component

- The investment packages component
- The capacity building component

The strategic planning component is intended to develop strategies / plans at three different levels, viz.: macro level, sectoral level and (EU) directive level while defining the priorities in the sector.

Directive Specific Investment Plan for the Council Directive on Urban Wastewater Treatment; The plan describes the current situation in the wastewater treatment sector, specifies the implementation of necessary technical measures, identifies technical gaps, makes cost assessments and identifies possible financial sources to close the gaps and presents recommendations on the investment schedule and transition period for the implementation of the directive.

The investment packages component, on the other hand, is limited with identifying the demand and aimed to select some (six) top priority projects in Turkey and developing these into investment packages. A methodology developed for the prioritization of the projects proposed.

The capacity building component, □nalyzin programme has been arranged.

The Marine Pollution Assessment and Control Component of MAP(MED POL) Project

This project has shown that monitoring systems and executing institutions need capacity-building, and that the number of related institution should be increased.

Despite the big potential, there are quantitative and qualitative insufficiencies of human resources in projects requiring new and high techniques

Resources allotted for environment sector are insufficient and can not be managed and directed properly.

4.Indicative Budget (amounts in EUR)

					SOURCES OF FUNDING								
			TOTAL EXP.RE	TOTAL PUBLIC EXP.RE		IPA COMMUNITY CONTRIBUTION NATIONAL PUBLIC CONTRIBUTION			PRIVATE CONTRIBUTION				
ACTIVITIES	IB (1)	INV (1)	EUR (a)=(b)+(e)	EUR (b)=(c)+(d)	EUR (c)	% (2)	Total EUR (d)=(x)+(y)+(z)	% (2)	Central EUR (x)	Regional/ Local EUR (y)	IFIs EUR (z)	EUR (e)	% (3)
Activity													
*Twinning contract	Х	-	2.000.000€	2.000.000€	1.900.000 €	95	100.000 €	5	100.000 €			_	_
**Supply contract	-	Х	1.000.000 €	1.000.000 €	850.000 €	85	150.000 €	15	150.000 €			_	-
***TA contract	Х	-	1.000.000 €	1.000.000€	900.000 €	90	100.000 €	10	100.000 €			_	_
TOTA	AL IB		3.000.000€	3.000.000€	2.800.000€		200.000 €		200.000 €				
ТОТА	L INV		1.000.000€	1.000.000€	850.000 €		150.000 €		150.000 €				
TOTAL F	PROJE	СТ	4.000.000 €	4.000.000 €	3.650.000 €		350.000 €		350.000 €				

5.Indicative Implementation Schedule (periods broken down per quarter)

Contracts	Start of	Signature of	Project
	Tendering	contract	Completion
Twinning Contract	QR1 2011	QR4 2011	QR3 2013
Supply Contract	QR1 2010	QR4 2010	QR3 2011
TA Contract	QR1 2010	QR4 2010	QR3 2012

All projects should in principle be ready for tendering in the 1ST Quarter following the signature of the FA

6. Cross cutting issues (where applicable)

6.1 Equal Opportunity

Participation in this project will be open to both males and females involved in the sector. Records of professionals' participation in all project related activities will reflect this and will be kept with the project documentation.

6.2 Environment

The Project itself is focused on the achievement of long-term environmental improvements in Turkey. The Project itself will probably not have any adverse environmental impacts, other than those due to normal activities (e.g. transport). Nevertheless, as an example to others and as a matter of principle, the environmental impact of activities must be minimised as far as possible, e.g. by conserving paper.

6.3 Minorities

According to the Turkish Constitutional System, the word minority encompasses only groups of persons defined and recognized as such on the basis of multilateral or bilateral instruments to which Turkey is a party. This project has no negative impact on minority and vulnerable groups. Besides; the disabled people shall be provided the same level of access to the project as all other participants, via a sensitive design of activities

6.4 Civil Society

All related ambitious NGOs [TÜDAV (Turkish Marine Researches Foundation), SAD (Underwater Researches Association) AFAG (Mediterranean Seal Research Group), WWF Turkey, REC Turkey and Universities, etc.] shall be informed of the activities and results of this project and shall be provided the participation to the meetings and workshops.

ANNEX 1: Logical framework matrix in standard format

LOGFRAME PLANNING MATRIX FOR	ati ix ili Standard format	Programme name and number	
Project Project		1 Togramme name and number	
TR2009/0327.02 Capacity Building on Water Quality Monitoring		Contracting period expires :FA+2years	Disbursement period expires: 3 years after the last date of the contracting
	<i>S</i>		deadline
		Total budget : 4 M EUR	IPA budget: 3,650 M EUR
			1
Overall objective	Objectively Verifiable Indicators	Sources of Verification	
To achieve a good environmental status	Recognition by EC that	EC Regular Reports	
for surface waters.	considerable progress is being made	State of Environment reports	
	in this area at the end of 2015.	 Turkish national statistics 	
		EEA Regular Reports	
Project purpose	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Strengthening Turkey's capacity to implement the EU Water Framework Directive (2000/60/EC-Art. 8/Annex 5)	 Number of Monitoring Areas Monitoring results for pilot areas 	 EC Regular Reports Interim Evaluation Reports Annual Activity Reports of MoEF and DSI 	 Collaboration and cooperation among the stakeholder institutions Willingness of staff at ministries to work in collaboration and coordination with each other and with project team Available Data
Results	Objectively Verifiable Indicators	Sources of Verification	Assumptions
1. The legal and institutional gap analysis are executed between Turkey and EU in terms of WFD requirements.	1.1. Detailed report on lessons learned from previous projects like "Capacity building support to the water sector, the MATRA project on the WFD, the MATRA groundwater project etc. at the end of first year of project.	 Quarterly report, mission reports, workshops, presentations The Related Project Reports and Guidelines Report on the study tours, workshops 	Data, maps and reports and persons to be interviewed are available
	1.2. Legal and institutional Gap Analyses Report including the future	Furthermore;	Relevant countries will have to be

 Capacity building of related institutions is provided on water quality monitoring, analysis and assessment of surface water bodies in line with WFD. Pilot implementation is executed related to monitoring of surface water bodies for selected basins. 	options at the end of the first year of the project. 2.1. Trained staff of 150 persons at least from beneficiary institutions (100 local and 50 central) on monitoring issues at the end of 8 th Quarter of the project. 2.2. 2 workshops for each year by the participation of public and NGO's at the end of 12 th Quarter of the project. 2.3. 3 Study visit tour reports at the end of the visits. 3.1. The number of determined monitoring point in pilot areas to meet WFD at the end of 4 th Quarter of the project. 3.2. The number of monitored point in pilot areas at the end of 11 th Quarter of the project. 3.3. Prepared guidelines and manual for EU monitoring. 3.4. The number of equipments purchased by the dates of Supply.	 Monthly Implementation Schedules for NPAA Training Evaluation Reports Signed Off Reports Submitted to EC as Output from Project 	Furthermore; • Maintenance of close collaboration and consensus between relevant ministries and institutions in Turkey • Maintenance of close collaboration between twinning and TA experts and relevant ministries and institutions • Support (technical and time) is made available at local levels • Related ministerial, provincial and municipal staff are released for training and that they are capable of developing new skills • Sufficient stability of related ministerial staff at all levels • Sufficient weather situation • Available Data
Activities	Means	Costs	Assumptions
1.1. Assessment of current EU and Turkish legislation on water monitoring and existing administrative structures to implement these legislation, including	 Twinning Contrat, Necessary staff, accommodation and other resources from MoEF, MARA and other stakeholder 	Twinning:2 M EUR TA: 1 M EUR	 Data, maps and other required information available in an adequate format and timely manner Field visits possible

recommendations for an extended implementation in the future. 1.2. Analysis of institutions, their capacities (staffing, expertise, and analytical equipment), identification of options for strengthening the current institutional system and definition of training needs based on the analysis of the water acquis requirements in the context of project purpose. 1.3. Preparation of a detailed institutional and legal analysis report including possible options for strengthening the current system.	and other resources from local offices	Supply :1M EUR	
 2.1. Conducting 3 study tours for beneficiary(ies) and stakeholder institutions to be able to draw lessons on various implementation practices. 2.2. Arranging 6 workshops on water quality monitoring. 2.3. Preparation of guidelines and manuals to adapt the CIS guidance document to specific Turkish situation for the implementation of the WFD monitoring requirements and background technical, administrative and legal documents to establish Turkish integrated national monitoring institute for surface waters. 2.4. Applying comprehensive training programs including training of trainers in 	 Twinning Contract (Activitity 2.1, 2.2, 2.3, 2.4) Technical Assistance (2.5, 2.6) 		

Turkey to understand various aspects of water acquis and European standardized methods for monitoring. 2.5. Training of the staff of the relevant authorities on analytical methods in general, on internal laboratory procedures, quality control etc. 2.6. Training of the staff on determination of EQS and EQR by using the data from manitoring results of pilot.		
the data from monitoring results of pilot basin. 3.1. Analysis of the data available with regard to their completeness and the monitoring requirements established; identification of the needs and gathering additional data required. 3.2. Purchasing of necessary monitoring equipment and preparation ToR and full tender dossier according to EC PRAG Rules and in-situ installation of them. Determination of the specifications for the soft- and hardware, state of the art back-up and recovery support, training and quality control (of system).	 Twinning Contract (3.3, 3.5, 3.6, 3.7,3.8) Technical Assistance Contract (3.1, 3.2, 	
 3.3. Determination of specifications and locations of required monitoring stations in line with WFD and daughter directives for selected 5 basins. (sampling locations and sampling frequencies, etc.) 3.4. Monitoring the parameters in Buyuk Menderes River Basin within the 	3.4,3.6)Supply Contract	

framework of WFD and daughter		
directives		
3.5. Assessment of monitoring results and		
determination of EQS and EQR in Buyuk		
Menderes River Basin.		
3.6. Report on technical specifications for		
future investment needs for monitoring		
laboratory and institutional infrastructure		
and establishment of real time operational		
river basin management information		
system(online monitoring)		
3.7. Preparation of detailed Integrated		
Monitoring Network plan and		
programme for the WFD (including		
estimations of costs for compliance)		
3.8. Preparation of guidelines and		
manuals to adapt the CIS guidance		
documents to specific Turkish situation		
for the implementation of the WFD		
monitoring requirements.		

Pre conditions