1. Basic information

1.2 Title: Capacity building for prevention of marine pollution caused by shipsourced wastes

- 1.3 ELARG Statistical code: 27
- 1.4. Sector: Environmentand Climate Change
- 1.5 Location: Turkey

Implementing arrangements:

1.6 Implementing Agency:

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.

Mr. Muhsin ALTUN (PAO-CFCU Director) Central Finance and Contracts Unit Tel: +90 312 295 49 00 Fax: +90 312 286 70 72 E-mail: pao@cfcu.gov.tr Address: Eskişehir Yolu 4.km. 2.Cad. (Halkbank Kampüsü) No:63 C-Blok 06580 Söğütözü/Ankara Türkiye

1.7 Beneficiary (including details of SPO):

The Ministry of Environment and Urbanisation will be the Beneficiary and will be responsible for all procedural aspects of the project implementation in coordination with the Twinning Team.

Ministry of Environment and Urbanisation Official Contact Details:

<u>SPO Candidate</u>: Mr. Sedat KADIOĞLU Deputy Undersecretary of Ministry of Environment and Urbanisation Tel : +90 312 424 09 98 Fax : +90 312 418 16 90 e-mail: <u>sedat.kadioglu@csb.gov.tr</u>

Major Stakeholders:

- Ministry of Transport, Maritime Affairs and Communication
- Turkish Coastguard
- devoted Metropolitan Municipalities (Antalya, Mersin, Kocaeli and Istanbul)

1.8 Overall cost (VAT excluded)¹: 2500000 EUR

1.9 EU contribution: 2 250 000 EUR

1.10 Final date for contracting: 2 years after the date of signing the Financial Agreement

1.11 Final date for execution of contracts: 3 years after the last day of the contracting deadline

1.12 Final date for disbursements: 1 year after the end date for the execution of contracts

2. Overall Objective and Project Purpose

2.1 Overall Objective: Please ensure that OO, PP results and indicators in the main text of Project fiche are consistent with logframe (annex I)

To attain sustainable marine ecosystem with minimised ship waste pollution

2.2 Project purpose:

Enhanced capacity to prevent marine pollution caused by wastes generated during the normal activities of the ships in line with Directive 2000/59/EC of the European Parliament and of the Council on port reception facilities for ship generated waste and cargo residues, Directive 2009/123/EC of the European Parliament and of the Council of 21 October 2009 amending Directive 2005/35/EC on ship-source pollution and on the introduction of penalties for infringements.

2.3 Link with AP/NPAA / EP/ SAA/ Progress Report

In the 2010 Progress Report;

Under the chapter 27: Environment; it is stated that Good progress can be reported in the field of **waste management**. Turkey adopted its national waste management plan for 2009–2013. Legislation on the control of hazardous waste, on receipt of waste from ships and on control of waste has been amended in line with the *acquis*.

Turkey has made good progress on waste management whereas limited progress can be reported on horizontal legislation, air and water quality, industrial pollution, chemicals and administrative capacity.

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)

Turkey made progress on administrative capacity by putting in place mechanisms to coordinate the administrative bodies at different levels in this field. Investments in the field of the environment need to be increased.

AP 2008 Priorities:

Short-Term Priorities
continue alignment with, and implementation in, the maritime sector paying special attention to the effective implementation of pollution prevention. (transport)
adopt the National Waste Management Plan. (environment)
Medium –Term Priorities:
continue the legislative and administrative alignment to the transport acquis. (transport)
continue to transpose and implement the acquis related to the framework legislation, international environmental conventions (Dumping Protocols of Barcelona and Bucharest Conventions) and legislation on nature protection, water quality, chemicals, industrial pollution and risk management and waste management. (environment)

2008 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.

National Programme for the Adoption of the Acquis Communautaire (NPAA 2008) has been approved. The part of strenghtening of administrative building under Table 14.2.2. covers the activities on efficient implementation of the Reception of Wastes from Ships and Waste Control Regulation which was put into force in order to ensure harmonisation with Directive 2000/59/EC of the European Parliament and of the Council on port reception facilities for ship generated waste and cargo residues.

2.4 Link with MIPD

The project covers working areas of lots of different sectors. 2011-2013 MIPD document states that:

Under the environment title:

It is expressed that; types of indicators to measure developments towards these objectives include, inter alia:

Improved water quality, in particular through advances in the transposition and implementation of the Water Framework Directive and <u>including an integrated approach to the marine environment</u>

Effective waste management systems

Introduction of waste collection systems meeting EU requirements

Under the Transport title:

It is stated that; types of indicators to measure developments towards these objectives include, inter alia:

Provided support to transport safety and <u>environmental sustainability</u> by focusing on road charging, reduction of greenhouse emissions from transport, use of transport information systems, utilisation of intermodal transport and transport of dangerous and hazardous goods,

on safety management systems, network planning and optimisation, reduction of greenhouse gas emissions, passenger rights, airports and aviation safety, an integrated approach and <u>measures to ensure cleaner sea and coastal areas</u>, emergency response and accident prevention and investigation.

Efficiency, sustainability, creation of new jobs and facilitation of external and internal trade through improved transport infrastructure;

2.5 Link with National Development Plan (where applicable)

Turkey has completed the Preliminary National Development Plan (PNDP), which was prepared by the Ministry of Development. It includes development axis. Four development axis forming the basis of the PNDP Strategy are derived from the medium-term objectives and priorities of Turkey. One of the development axis 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.

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 sector strategies and national/ sectoral investment plans (where applicable)

In UÇES it is stated that; in order to reduce sea pollution and its environment and to provide marine safety, some studies are conducted within the coordination of MoEU with contribution of concerning organizations and institutions under the frame of international conventions and European Union Directives. Within this context, the studies with regard to the marine and marine environment is being conducted in compliance with the "Thematic Strategy on the Protection and conservation of the Marine Environment" that has been prepared by the European Commission.

In the Ninth Development Plan; it is stated that Production of non-domestic wastes will be reduced and collection, transportation, recycling and disposal systems that are suitable for the type of the waste and conditions of the country will be established.

Description of project

3.1 Background and justification:

During navigation, ships generate wastes that pollute sea in case discharged to the marine environment. This pollution can be prevented by taking these wastes to waste reception facilities (WRF) built in ports in compliance with MARPOL 73/78 Annex I, II, IV, and V, 2000/59/EC Directive and Ballast Water Management Convention.

Location and capacity determination of the WRFs are very important for an effective waste reception and waste management.

Waste reception from ships at ports is a complicated and complex system. This system consists of subjects such as; waste notification and reporting, charging fees (cost recovery),

inspection and controls, waste management plans, documentation, subject to the international and national regulations. Therefore port reception facilities in modern and competitive ports today must be planned in a way that the services rendered will cause no undue delays, will be cost effective and will provide economic incentives for the ships to deliver its waste at the reception facilities on equal conditions.

The works on establishment of national system for waste reception from ships in the Turkish ports and sea areas has been started after Turkey was State party to MARPOL Convention. By-Law of Waste Reception From Ships and Control of Wastes has entered into force in 2005. Many coastal facilities have established waste reception facilities under the requirements of by-law. These facilities started their operations after taking permission from Ministry of Environment and Urbanisation.

The above mentioned complexity of the ship waste management system leads to problem of illegal discharges from ships. Detection and control of the illegal discharges from ships and penalties to the polluter are other important concerns.

In order to be in compliance with related international agreements and EU Directives, a number of activities must be initiated e.g.

> The analysis of appropriateness and adequacy of existing national legislation.

 \succ A detailed Traffic and Waste Analysis must be prepared on a national as well as port basis before any design capacities can be determined.

> Identify and involve relevant stakeholders in the ship waste handling process.

 \succ Review of all procedures in the ship waste handling system. This includes waste flows, financial flow and administrative procedures.

Evaluation of existing facilities.

> Design capacities for a restructured ship waste handling system including treatment technologies and cost estimates. National, shipyards, marinas and port basis.

> Evaluate existing cost recovery systems in Europe and decide on cost recovery principle (direct/indirect).

> Prepare economic scenarios on the economy of ship waste handling for ports involved and estimate sizes of waste fee's for ships calling the ports and marinas.

> The gap analysis and improvement of the existing port/national online information system for registration of elements in ship waste handling.

> Determination of centers of Turkish regions for port waste reception facilities and preparation of Regional Waste Management plans for the ports in the regions concerned.

➤ Increase capacity within the Ministry of Environment and Urbanisation and relevant stakeholders in order to secure implementation and to administer the new system. Training of relevant personnel in the Administration as well as in ports.

 \succ Execution of a pilot project for implementation of a waste management plan of a selected region for the purposes of effective prevention ship generated pollution for Izmit Bay.

> Determination of new and existing technologies of disposal of the wastes collected in the port waste reception facilities in EU countries and evaluation of their applicability in Turkey.

> Building a software, considering the type of ship, the traffic within the port, etc..., to be used to design and check the adequacy of a waste reception facility,

 \succ The analysis of appropriateness and adequacy of existing national legislation concerning illegal discharges of the wastes generated during the normal activities of the

ships which are defined in Marpol Annex-1 (bilge water, wasted oil, sludge, slop, dirty ballast, etc.) (applications in the world, technologies, inspection team, training, sampling methods, penalties etc.) discharges in accordance with Directive 2009/123/EC.

 \succ Comparison of the current situation in Turkey with EU countries for illegal discharges.

> Evaluaion of the need for equipments and infrastructural development for prohibition of the illegal discharges for the relevant authorities.

- Management of ships' ballast sediments.
- > Disposal of ballast sediments via reception facilities.
- > Determination of possible precautionary alternatives for minimizing uptake of sediments via ballast waters.
- > Analysis (inc. microbiological, chemical, etc.) of the sediments.
- > Determination of the sampling methods for ballast sediments.
- Cooperation with port state control

This project has been prepared for the purposes of solving the weakness and deficiencies like absence of adequate planning system and sectoral strategies, absence of methodology for data collection and use of this data in a correct manner, weakness in demands analysis etc. as indicated above and alignment with EU acquis. This means the provisions of IMO Conventions are implemented effectively.

By-Law of Waste Reception From Ships and Control of Wastes has entered into force in 2005. This legislation can be assessed taking into account EU acquis international conventions and experiences of the other countries for a more effective administrative system.

Some challenges for ensuring adequate waste reception facilities in ports are available. The implementation of waste reception from ships should be reviewed.

National legislation on illegal discharges are; Environmental Law, Bylaw Related to Determination of the Violation and Penalizing and Collecting of Administrative Fines Inflicted per the Environment Law and Circular regarding Delegation of Authority.

There are some challenges for illegal discharges from ships to sea within the context of wastes defined in Marpol 73/78 Annex I, II, IV and V such as different applications in different countries. Disharmonies and challenges between the application and between legislative procedures continue. Also there is complexity in the technologies for the determination of illegal discharges and prove these illegal discharges to the courts.

When it comes to the management of balast waters of the ships, there is no legislative structure for the management of sediments originated from ballast water. Determination of available ways for disposal of ballast sediments via reception facilities is a big gap in Turkey.

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

EU environment policy aims to promote sustainable development and protect the environment for present and future generations. It is based on preventive action, the polluter pays principle, fighting environmental damage at source, shared responsibility and the integration of environmental protection into other EU policies.

This Project;

• will be a good instrument for the preparation of plans and programs for the National Policy;

• will make the institutional and administrative systems more effective;

• will enable better marine environmental management, and to protect marine environment

• will provide the regular implementation of the MARPOL 73/78, BWMC and Directives 2000/59/EC, 2009/123/EC in Turkey.

The institutional structure, legislative analysis and monitoring strategies will be reviewed, so that will lead to strengthen the capacity of the Ministry of Environment and Urbanisation.

The following factors will support the sustainability of the results of the project:

The project will contribute to the strengthening of existing technical and administrative capacity for the implementation of 2000/59/EC, 2009/123/EC in Turkey. In addition, the project in question will assist in raising the awareness of interest groups (local authorities, industrialists, farmers, tourism sector, general public etc.) at the selected pilot project in the project on the EU 2000/59/EC, 2009/123/EC and the requirements thereof.

Furthermore, trained staff and documents produced by project will help continuation of the studies both in regional directorates and selected pilot project area.

This project will contribute to transposition and implementation of directives on ship sourced waste disposal by training the staff that are working at the same time on those directives. The Component will provide a fresh impetus for the implementation of the environmental *acquis* in Turkey. Sustainability will be in the form of improved capacity, including the infrastructure, of the Turkish Government for implementation of the environmental *acquis*.

When it comes to the cross border impact of the project, since this project deals with collection and ballast water management and other ship sourced wastes, it leads to enhancement of marine water quality. An efficient collection of ship wastes and prevention of ships' illegal discharges maintains good environmental status, since there will be less wastes being discharged to the marine area. As known, the territorial sea area of Turkey is very close to the territorial sea area of some other countries, among which also EU countries exist. Since marine environment is dynamic, prevention of marine pollution in one area affects the water quality of the other areas. This project will help improving the marine water quality of Turkey and as a consequence also neighbouring EU countries will benefit. Moreover the proposed project will provide the regular implementation of Directives 2000/59/EC and 2009/123/EC within the context of Turkey's EU alignment process and adopted annexes of MARPOL 73/78 (Annex I, II, V) as a future international obligation.

3.3 Results and measurable indicators:

RESULT	INDICATOR
	Review of the existing legislation finalised and
• Relevant national legislation will be updated in order to comply	the revised legislation are put into force one year after 4 th quarter of 2014
alignment with related	1

conventions, EU acquis, including	The gaps between existing reception facilities and adequate reception facilities in ports are
Updating the existing legislative and identification procedures for illegal	determined.
discharges (applications in the world, technologies, inspection team, training, sampling methods, penalties etc.).	A report is published at the end of the Q8, regarding:
• System in place to prevent potential effects of ships' ballast sediments and disposal of these	• the necessities of the existing WRF's (for <i>bilge</i> , <i>sludge</i> , <i>slop</i> , <i>balast sediment</i> , <i>etc.</i>) is published
sediments via reception facilities.	• the best cost recovery system for Turkey is selected
• Additional measures are designed and in place to minimise ship sourced waste	• recommended treatment technologies for ship wastes.
• Awareness of local and central authorities increased and a	Increase in the number of vessels controlled by 10% at the end of Q6.
comprehensive training programme implemented to increase the inspection capacity	Delivered waste quantity increased by %10 one year after the end of the project.
• Waste reception and management infrastructure developed.	Waste management plans for Izmit and Iskenderun Bays are published at the end of the Q8.

3.4 Activities:

1 Analysis of adequacy and appropriateness of relevant national legislation and determination of gaps.

1.1 In the framework of Directive 2000/59/EC of the European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues and relevant rules of IMO Conventions;

- (1) Review of relevant rules of Environment Law No: 2872
- (2) Review of by-law of waste reception from ships and control of wastes
- (3) Review of other relevant secondary legislation

1.2 Preparation of necessary drafts under the light of previous activity.

1.3 Preparation of necessary implementation guidelines

1.4 Determination of feasible sub-centers for effective ship waste management according to maritime traffic.

1.5 Execution of pilot works on preparation and implementation of port waste management plans that will be on regional level

2 Determination of adequate waste reception facilities in ports according to analysis of maritime traffic statistics and determination of gaps.

2.1 Estimation of waste amount according to maritime traffic statistic, preferably by use of available movements data and modelling software.

2.2 Determination of waste reception capacities – design platform -which can receive wastes,

2.3 Determination of gaps between existing and necessary capacities and availability of the current facilities.

2.4 Determination of alternative solutions if any.

2.5 An action plan with a 2023 horizon is adopted jointly by all related authorities

3 Determination of all procedures in the waste handling system.

3.1 3.1 Waste flow procedures (collection, treatment and final disposal)

3.2 Administrative flow. Determination of waste notification procedures and implementation of system (paper and/or IT)

3.3 Financial flow. Invoicing and waste fee payment procedures.

All procedures will be discussed thoroughly and agreed with the Ministry of Environment and Urbanisation and other relevant stakeholders.

4. Recommendation on treatment technologies for wastes within the context of related conventions and EU acquis.

Determination of discharge criteria (ship-sourced wastes) in the light of EU experiences and also suitable for Turkish coastline.

Review of various treatment technologies. Recommendation of most cost effective technology. A study visit to an EU country.

5. Evaluate existing cost recovery systems in Europe and decide on cost recovery principle (direct/indirect) for Turkish ports. Prepare economic scenarios on the economy of ship waste handling for ports involved and estimate sizes of waste fee's for ships calling the ports.

5.1 Review of existing cost recovery systems for other modern European ports.

5.2 Preparation economic scenarios to demonstrate most cost effective solution.

5.3 Estimation of waste fee's for ships calling Turkish ports (distribution of cost in a fair and competitive way)

Proposed scenario will be discussed thoroughly and agreed with the Ministry of Environment and Urbanisation and other relevant stakeholders.

6. Evaluation and remediation of national online information system for waste reception from ships.

7. Building a software, considering the type of ship, the number of the ships calling the port per day, weight of the ships, the max. voyage time of the ships calling the port etc and max. size of waste tanks facilitated in the ships (for each type of ship) to be used to design the capacity and check the adequacy of the existing waste reception facilities.

8 . Prepare waste management plans for Izmit and Iskenderun Bays.

Execution of a pilot project for Izmit and Iskenderun Bays for the purposes of regional waste management plan according to the EU Directive 2000/59/EC, Marpol 73/78, other related international conventions and EU acquis which will be approved by the Maritime Administration. Waste management plans will be prepared with this project and the project results will be assessed by the Ministry after the project is finalized.

In this activity establishment and implementation waste management focusing on treatment and disposal of waste in selected region will be achieved.

International PWM guidelines shall be followed.

9. Train staff in Ministry, Maritime Administration and on port level

For efficient implementation qualified and trained staff must be available both in the Maritime Administration as well as in ports. Such training shall be provided based on a Training Need Assessment.

Arrangement of regional workshops.

10. Procedures for smaller ports (where huge investments cannot be undertaken) on how to be part of a national port reception facility system will be determined. A study visit to an EU country.

11. Adaptation of legislative procedures for illegal discharges overview and gap analysis of the existing legislative and identification procedures application Technologies, inspiring mechanisms to prevent illegal discharges and penalty systems in the other countries.

12. Existing technologies for the determination of illegal discharges (satellite, radar, observation etc.)

- 12.1 Bringing together the "maritime" CSN users and the "prosecutors" community
- 12.2 Allocation of responsibilities in national administrative enforcements.(fines, inspections etc.)
- 12.3 Identification of ideal enforcement chain work in practice.
- 12.4 Examine adequacy of the technical capacity such as equipments and technologies used.

A study visit to an EU country.

13. Evaluation of the existing situation regarding environmental inspections.

- 13.1 Establishment of environmental inspection teams within the PSC in Turkey.
- 13.2 Determination of proficiency, in terms of quantity and quality, of the inspection teams
- 13.3 Evaluation of requirements for environmental inspections (legislation, technology, education etc.)

14. Training related staff in the relevant institutions (Staff of the Ministry, Ministry of Transport, Maritime Affairs and Communication, Turkish Coastguard and devoted Municipal personnel trained for the detection of the illegal discharges.) Arrangement of a workshop.

15. Evaluation of sampling methods and legality of evidences for the courts

16. Management of ballast sediment

16.1 Available ballast sediment management systems adapted16.2 Overview of related international conventions, guidelines etc. formanagement of ballast sediments

17. Disposal of ballast sediments via reception facilities established in feasible shipyards, ports etc.

17.1 Feasible ballast sediments reception facilities for ports, shipyards etc., planned 17.2 Determination of sediment systems with port waste reception facilities (shipyards, ports etc.)

18. Determination of possible precautionary alternatives for minimizing uptake of sediments via ballast waters.

- 18.1 Overview of the ballast water exchange procedures
- 18.2 Determination of possible applicable disposal technologies for ballast sediments.
- Analysis (inc. microbiological, chemical, etc.) of the sediments
 19.1 Determination of sampling methodologies for environmental inspections
 19.2 Adaptation of related international conventions, guidelines etc for sampling of sediments.

20. Determination of possible precautionary alternatives for minimizing the negative impacts of Marine Detergents to the marine environment.

20.1 Determination of ingredients of the marine friendly detergents to be used for Turkish marine waters.

20.2 Preparation of a draft legislation for environmental-friendly use of marine detergents.

3.5 Conditionality and sequencing:

Conditionality :N/A

Sequencing:

Indicative Sequencing of preparatory activities

	YEAR 1				YEAR 2			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
1 Analysis of adequacy and appropriateness of relevant national legislation and determination of gaps.	X	X						
2 Determination of adequate waste reception facilities in ports according to analysis of maritime traffic statistics and determination of gaps.		X	X	X				

3 Determination of all procedures in the waste handling system.		X	X					
4 Recommendation on treatment technologies for final waste disposal within the context of related conventions and EU acquis. Determination of discharge criterias. Review of various treatment technologies. Recommendation of most cost effective technology. A study visit to an EU country.		x			x	x	x	X
5 Evaluate existing cost recovery systems in Europe and decide on cost recovery principle (direct/indirect) for Turkish ports. Prepare economic scenarios on the economy of ship waste handling for ports involved and estimate sizes of waste fee's for ships calling the ports.					X	X		
6 Evaluation and remediation of national online information system for waste reception from ships.		X	X	X				
7 Building a software				X	X			
8 Prepare waste management plan for Izmit and Iskenderun Bay.			Х	X	X	X	X	х
9 Train staff in Ministry, Maritime Administration and on port level Arrangement of regional workshops			Х		X	X	X	X
10 Procedures for smaller ports A study visit to an EU country.				x	X	X	X	
11 Adaptation of legislative procedures for illegal discharges overview and gap analysis of the existing legislative and identification procedures application		X	X					
12 Existing technologies for the determination of illegal dischargesA study visit to an EU country.	X	X						

13 Evaluation of the existing situation regarding environmental inspections		X	X					
14 Training related staff in the relevant institutions Arrangement of a workshop.				X		X		X
15 Evaluation of sampling methods and legality of evidences for the courts				X	X			
16 Management of ballast sediment	X	X	X					
17 Disposal of ballast sediments via reception facilities established in feasible shipyards, ports etc.			X	X	X			
18 Determination of possible precautionary alternatives for minimizing uptake of sediments via ballast waters.		X	X					
19 Analysis (inc. microbiological, chemical, etc.) of the sediments						X	X	х
20 Determination of possible precautionary alternatives for minimizing the negative impacts of Marine Detergents to the marine environment.	X	X	X	X				

3.6 Linked activities

1 Some limited activities were done within the context of "Project on Port Reception Facilities for Collecting Ship-Generated Garbage, Bilge Waters and Oily Wastes in the Mediterranean (MED.B7.410097.0415.8)" by UNEP (REMPEC)and administered by the International Maritime Organization (IMO), in 2004. The project contained some activities and addresses ten Mediterranean beneficiary countries (Algeria, Cyprus, Egypt, Israel, Lebanon, Malta, Morocco, Syria, Tunisia and Turkey), Contracting Parties to the 1976 Barcelona Convention for the Protection of the Mediterranean Sea against Pollution.

This project only evaluated present situation in 2004 for 7 pilot ports in Turkey and some limited suggestions were made as disposal alternatives of oily wastes collected from ships, in ten Mediterranean beneficiary countries.

2 A regional ship sources waste plan for Marmara Region had been drafted in MEMPIS Project.

As a result of the MEMPIS Project, the following results are achieved;

• Proposals for amendments to the existing regulation to be put into force in order to harmonize with the EU acquis, have been made.

- A port waste management plan form was prepared.
- A manual is suggested to be published and/or distributed to the relevant parties after the legal amendment in order to speed up compliance.
- The relevant personnel should be informed about general and latest provision regarding waste management plans in a seminar.
- Other legal amendments in order to strengthen the implementation of the waste management provisions have to be undertaken.

Many of these suggestions have been implied via legislation improvement. For example, Communique on fees to be taken from ships for ship wastes is put into force. Also, cargo residues are now taking place in the port waste management plans. Moreover a Circular, for training marine pollution inspectors, is put into force.

This proposed project aims to complete the process and fill the present gaps in ship waste management strategy in Turkey.

3.7 Lessons learned

The 2 projects mentioned above have highlighted a number of weaknesses such as;

- Weakness in collection of-data and the transformation of data into an inventory,
- Absence of adequate planning system and sectoral strategies,
- Weakness in demands analysis,

• Absence of methodology for data collection and use of this data in a correct manner,

Currently, it is clear that effective implementation of the projects above required;

- Reliable data collection system,
- Effective system and institutions for monitoring and reporting of emissions and environmental quality and inspection,
- Procedures and tools for raising environmental awareness of industry and public in order to secure understanding, cooperation and support of environmental measures,

• Institution procedures facilitating public participation and environmental management,

• Administrative and judicial resource relation to (actual and threatened),

• Violation and Environment Law accompanied by appropriate systems of adequate and dissuasive fines and penalties including provision for liability under criminal jurisdiction for serious violations,

• Training of staff and susceptible sector of society,

All the above remedial actions to avoid identified problems have been addressed in the project design and need to be addressed during the project implementation.

4. Indicative Budget (amounts in EUR)

					SOURCES OF FUNDING											
			TOTAL EXP.RE	TOTAL PUBLIC EXP.RE		IPA COMMUNITY CONTRIBUTION					NATIONAL PUBLIC CONTRIBUTION					Ξ ΓΙΟΝ
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)			
Contract 1	х		2 500 000	2 500 000	2.250 000	90	250.000	10	250.000				-			
τοτα	l IB		2 500 000	2 500 000	2.250 000	90	250.000	10	250.000	-	-	-	-			
TOTAL	. INV		-													
TOTAL PI	ROJEC	т	2 500 000	2 500 000	2 250 000	90	250.000	10	250.000	-	-	-	-			

NOTE: DO NOT MIX IB AND INV IN THE SAME ACTIVITY ROW. USE SEPARATE ROWS

Amounts net of VAT

(1) In the Activity row use "X" to identify whether IB or INV
(2) Expressed in % of the **Public** Expenditure (column (b))
(3) Expressed in % of the **Total** Expenditure (column (a))

The Turkish authorities commit themselves to provide national co-financing according to the above provisions. The NAO will verify that co-financing has been provided in line with the above provisions before submitting requests for funds and final declarations adjusting payment requests to the above ratio as necessary.

In the context of beneficiary staff participating in missions outside of Turkey paid for under a contract, the maximum amounts eligible for accommodation costs and daily allowances ("per diems") are the official rates provided for by EuropeAid for the destination country (see website for the latest rate). Provided the total cost of daily allowance and accommodation charged to the contract remains below these maximum rates, the applicable Turkish rules and regulations for per diems shall be applied when reimbursing these costs for public servants from the beneficiary institutions. Where a contract foresees the reimbursement of such expenses for Turkish public servants and other beneficiaries of IPA projects during missions inside of Turkey, the maximum costs reimbursed under the contract will be those provided for domestic missions under the applicable Turkish legislation provided that they are subject to the same ceiling for maximum rates. This provision cannot be construed and applied in contradiction with the IPA Framework Agreement and in particular the IPA Implementing Regulation.

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

Contracts	Start of Tendering	Signature of contract	Project Completion
TA Contract	3Q/2012	1q/2013	2q/2015

The tender dossier will be prepared by SEI

Duration of the project : 24 months

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

The promotion of equality between women and men and the application of a gender mainstreaming approach exists in all Community policies. In Turkey the picture is not pessimistic when compared to this policy route of the European Union. In Turkey there are legal exams for selecting personnel for public institutions. The ministries are employing the people by considering their exam grades not their genders. Also for monitoring purposes, the participants can be asked to fill out questionnaires and evaluation forms during the project period, and their genders can be asked on the forms for statistical studies. By this way, equal participation in the project by women and men will be assured and measured. As a conclusion, this project will comply with the European Commission's equal opportunity policy.

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 for project activities). 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 and paying attention to energy efficiency and reduction of emissions during the conduction of meetings, transportation and other project activities.

6.3 Minorities and vulnerable groups

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/Stakeholder involvement

All related ambitious NGOs and other institutions [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 and the chance to reflect on the draft project documents.

ANNEXES

- 1- Log frame in Standard Format
- 2- Amounts contracted and Disbursed per Quarter over the full duration of Programme
- 3- Description of Institutional Framework
- 4 Reference to laws, regulations and strategic documents:

Reference list of relevant laws and regulations

Reference to AP /NPAA / EP / SAA/ Progress report

Reference to MIPD

Reference to National Development Plan

Reference to sector strategies and national / sector investment plans

5- Details per EU funded contract (*) where applicable:

For TA contracts: outputs expected from the contractor and indicative budget breakdown

For twinning contracts: main components and activities foreseen, indicative budget breakdown, profile of the MS project leader, resident twinning advisor and key short term experts as well as name and position of the project leader of the BC

For grants schemes: components of the scheme, eligible target group and activities (in case of direct grants, justification for selection of grant beneficiary without call for proposal)

For supply contracts: reference to feasibility study as well as indicative list of items, cost estimate, intended beneficiary, indication on how detailed technical specifications will be prepared, provisions for maintenance + section to be filled in on investment criteria (**)

For works contracts: reference to feasibility study for the construction works, identification of the site, indicative list of works to be completed and cost estimate, indication on how technical specifications will be prepared, provisions for maintenance as well as a section on investment criteria (**); account of services to be carried out for the service part of the contract

(*) non standard aspects (in case of derogation to PRAG) also to be specified

(**) section on investment criteria (applicable to all supply and works contracts):

- Rate of return
- Co financing
- compliance with state aids provisions
 - Ownership of assets (current and after project completion)

ANNEX 1: Logical framework matrix in standard format

LOGFRAME PLANNING MATRIX FOR Project Fiche	Programme name and number	
Capacity building for prevention of marine pollution caused by ship- sourced wastes	Contracting period expires in 2 years after the signature of Financing Agreement	Disbursement period expires 1 year after the end date for the execution of contracts
	Total budget 2 500 000	IPA budget: 2 250 000

Overall objective	Objectively verifiable indicators	Sources of Verification
ecosystem with minimised ship	Marine water quality values increased above the min level identified in	-EC Regular Reports -State of Environment reports -Turkish national statistics - EEA Regular Reports

Project purpose		- Regular Regional Convention reports Results of Marine Water Pollution Monitoring Projects (European Environment Agency and MED-POL Reports) Sources of Verification	Assumptions
normal activities of the ships in line with Directive 2000/59/EC of the European Parliament and of the Council on port reception facilities for ship generated waste and cargo residues, Directive 2009/123/EC of the European Parliament and of the Council of 21	 Delivered waste quantity increased by %10 one year after the end of the project Number of penalties due to illegal discharges reduced by %10 one year after the end of the project All legislation and/or procedures, guidelines, manuals drafted under the project has been sent to relevant level of authority for adoption (for regulations/Minister, 	 -EC Regular Reports -Interim Evaluation Reports - Development Plan -Progress Reports -Inventory reports WRF's - Notifications from the institutions responsible for inspection at sea. 	 Collaboration and cooperation among the stakeholder institutions Willingness of staff at the stakeholders institutions to work in collaboration and coordination with each other and with project team

Results	Objectively verifiable indicators	Sources of Verification	Assumptions
• Relevant national legislation will be updated	Review of the existing legislation finalised and the revised	Inception Report approved by the Contracting Authority	Availability of stakeholders for meetings secure strict time schedule for project
in order to comply	legislation are put into force one	and Maritime Administration.	execution.
alignment with related	year after the end of the project		
conventions, EU acquis			Risks related to the involvement,
and necessary amendmend	A report is published at the end of	Legislation put into force	cooperation and participation of all the stakeholders, particularly those from the
will be drafted.	the Q8, regarding:		private sector.
		Waste Transfer Forms of	
• The gaps between	• the necessities of the existing	ships	
existing reception facilities	WRF's (for <i>bilge</i> , <i>sludge</i> , <i>slop</i> ,		
and adequate reception	<i>balast sediment, etc.)</i> is	Port traffic inventory	
facilities in ports will be	published one year	Project periodical reports	
determined.	- 41 - 1 +	approved by the Beneficiary, Steering Committee and	
• Undating the existing	• the best cost recovery system for Turkey	Contracting Authority	
• Updating the existing legislative and	Тиксу	Conducting Futilotity	
identification procedures	• recommended treatment	Reports of the Port State	
for illegal discharges	technologies for ship wastes.	Control	
(applications in the world,			
technologies, inspection		Notifications of dedicated	
team, training, sampling	Increase in the number of vessels	Institutions	
methods, penalties etc.).	controlled by 10% at the end of		
	Q6.	The exam for the trained staff	
• Determination of the		The exam for the trained staff	
ways for prevention of	Delivered waste quantity		

 potential effects of ships' ballast sediments and disposal of these sediments via reception facilities in compliance with Ballast Water Management Convention. Determination of possible precautionary alternatives for minimizing the negative impacts of Marine Detergents to the marine environment. The inspection capacity progressed. Waste reception and management infrastructure developed. 	increased by %10 one year after the end of the project. Waste management plans for Izmit and Iskenderun Bay is published at the end of Q8.		
Activities	Means	Costs	Assumptions
 Activity 1 (TA) Analysis of adequacy and appropriateness of relevant national legislation and determination of gaps. 1.1 In the framework of Dira 2000/59/EC of the European determination of the European determination. 	l	TA: 2500 000	 Maintenance of close collaboration and consensus between relevant ministries and institutions in Turkey Maintenance of close collaboration between

Parliament and of the Council of 27 November 2000 on port reception facilities for shipgenerated waste and cargo residues and relevant rules of IMO Conventions;

 (1) Review of relevant rules of Environment Law No: 2872
 (2) Review of by-law of waste reception from ships and control of wastes
 (3) Review of other relevant secondary legislation

1.2 Preparation of necessary drafts under the light of previous activity.

1.3 Preparation of necessary implementation guidelines

1.4 Determination of feasible sub-centers for effective ship waste management according to maritime traffic.

1.5 Execution of pilot works on preparation and implementation of port waste management plans that will be on regional level

Activity 2 (TA) Determination of adequate waste reception facilities in

TA experts and relevant ministries and institutions

• Support (technical and time) is made available at local levels

• That ministerial, provincial staff are released for training and that they are capable of developing new skills

• Sufficient stability of ministerial staff at all levels

• Making sure that all stakeholders are adequately involved,

ports according to analysis of maritime traffic statistics and determination of gaps.

2.1 Estimation of waste amount according to maritime traffic statistic, preferably by use of available movements data and modelling software.

2.2 Determination of waste reception capacities – design platform -which can receive wastes,

2.3 Determination of gaps between existing and necessary capacities and availability of the current facilities.

2.4 Determination of alternative solutions if any.

3 Activity 3 (TA)

Determination of all procedures in the waste handling system.

3.1 Waste flow procedures (collection, treatment and final disposal)

3.2 Administrative flow. Determination of waste notification procedures and implementation of system (paper and/or IT)

3.3 Financial flow. Invoicing and

waste fee payment procedures.

All procedures will be discussed thoroughly and agreed with the Ministry of Environment and Urbanisation and other relevant stakeholders.

4. Activity **4** (TA) Recommendation on treatment technologies for wastes within the context of related conventions and EU acquis.

Determination of discharge criteria (ship-sourced wastes) in the light of EU experiences and also suitable for Turkish coastline.

Review of various treatment technologies. Recommendation of most cost effective technology. A study visit to an EU country.

5. Activity **5** (TA) Evaluate existing cost recovery systems in Europe and decide on cost recovery principle (direct/indirect) for Turkish ports. Prepare economic scenarios on the economy of ship waste handling for ports involved and estimate sizes of waste fee's for ships calling the ports.

5.1 Review of existing cost recovery systems for other

modern European ports.

5.2 Preparation economic scenarios to demonstrate most cost effective solution.

5.3 Estimation of waste fee's for ships calling Turkish ports (distribution of cost in a fair and competitive way)

Proposed scenario will be discussed thoroughly and agreed with the Ministry of Environment and Urbanisation and other relevant stakeholders.

6. Activity 6 (TA) Evaluation and remediation of national online information system for waste reception from ships.

7. Activity 7 (TA) Building a software, considering the type of ship, the number of the ships calling the port per day, weight of the ships, the max. voyage time of the ships calling the port etc and max. size of waste tanks facilitated in the ships (for each type of ship) to be used to design the capacity and check the adequacy of the existing waste reception facilities.

8 . Activity **8** (TA) Prepare waste management plan for Izmit and Iskenderun Bay.

Execution of a pilot project for Izmit and Iskenderun Bays for the purposes of regional waste management plan according to the EU Directive 2000/59/EC, Marpol 73/78, other related international conventions and EU acquis which will be approved by the Maritime Administration.

In this activity establishment and implementation waste management focusing on treatment and disposal of waste in selected region will be achieved.

International PWM guidelines shall be followed.

9. Activity 9 (TA) Train staff in Ministry, Maritime Administration and on port level For efficient implementation qualified and trained staff must be available both in the Maritime Administration as well as in ports. Such training shall be provided based on a Training Need Assessment. Arrangement of regional workshops.

10. Activity **10** (TA)

Procedures for smaller ports (where huge investments cannot be undertaken) on how to be part of a national port reception facility system will be determined. A study visit to an EU country.

11. Activity 11 (TA) Adaptation of legislative procedures for illegal discharges overview and gap analysis of the existing legislative and identification procedures application Technologies, inspiring mechanisms to prevent illegal discharges and penalty systems in the other countries.

12. Activity **12** (TA) Existing technologies for the determination of illegal discharges (satellite, radar, observation etc.)

12.1 Bringing together the "maritime" CSN users and the "prosecutors" community 12.2 Allocation of responsibilities in national administrative enforcements.(fines, inspections etc.)

- 12.3 Identification of ideal enforcement chain work in practice.
- 12.4 Examine adequacy of the technical capacity such as equipments and technologies used.

A study visit to an EU country.

13. Activity 13 (TA) Evaluation of the existing situation regarding environmental inspections.

13.1

Establishment of environmental inspection teams within the PSC in Turkey.

- 13.2 Determination of proficiency, in terms of quantity and quality, of the inspection teams
- 13.3 Evaluation of requirements for

environmental inspections (legislation, technology, education etc.)

14. Activity 14 (TA) Training related staff in the relevant institutions (Staff of the Ministry, Ministry of Transport, Maritime Affairs and Communication, Turkish Coastguard and devoted Municipal personnel trained for the detection of the illegal discharges.) Arrangement of a workshop.

15. Activity 15 (TA) Evaluation of sampling methods and legality of evidences for the courts

16. Activity 16 (TA) Management of ballast sediment

16.1 Available ballast
sediment management
systems adapted
16.2 Overview of related
international
conventions, guidelines
etc. for management of
ballast sediments

17. Activity 17 (TA) Disposal of ballast sediments via reception

facilities established in feasible shipyards, ports etc.

17.1 Feasible ballast
sediments reception
facilities for ports, shipyards
etc., planned
17.2 Determination of
sediment systems with port
waste reception facilities
(shipyards, ports etc.)

18. Activity **18** (TA) Determination of possible precautionary alternatives for minimizing uptake of sediments via ballast waters.

- 18.1 Overview of the ballast water exchange procedures
- 18.2 Determination of possible applicable disposal technologies for ballast sediments.

19. Activity 19 (TA) Analysis (inc. microbiological, chemical, etc.) of the sediments

19.1 Determination of sampling methodologies for environmental inspections

19.2 Adaptation of related international conventions, guidelines etc for sampling of sediments.

20. Activity **20** (TA) Determination of possible precautionary alternatives for minimizing the negative impacts of Marine Detergents to the marine environment.

20.1 Determination of ingredients of the marine friendly detergents to be used for Turkish marine waters.

20.2 Preparation of a draft legislation for environmentalfriendly use of marine detergents.

ANNEX II: Amounts (in €) Contracted and disbursed by quarter for the project (IPA CONTRIBUTION ONLY)

Contracted	1q/2013	2q/2013	3q/2013	4q/2013	1q/2014	2q/2014	3/2014	4q/2014	Check
Service Contract	2,250,000	0	0	0	0	0	0	0	2,250,000
Cumulated	2,250,000	2,250,000	2,250,000	2,250,000	2,250,000	2,250,000	2,250,000	2,250,000	2,250,000
Disbursed									
Contract 1	675,000	0	450,000	0	450,000	0	450,000	225,000	2,250,000
Cumulated	675,000	675,000	1,125,000	1,125,000	1,575,000	1,575,000	2,025,000	2,250,000	2,250,000