IMPROVED MARITIME EDUCATION & TRAINING IN TURKEY

1. Basic information

1.1 CRIS Number: TR2010/0314.01

1.2 Title: Improved Maritime Education & Training in

Turkey

1.3 ELARG Statistical

14 Transport

code:

1.4 Location: Turkey

Implementing arrangements:

1.5 Implementing Agency: Central Finance and Contracts Unit, Turkey

1.6 Beneficiary (including details of SPO): Undersecretariat for Maritime Affairs

Ministry of Education (co-beneficiary)

Higher Education Council(co-beneficiary)

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Financing:

1.7 Overall cost (VAT excluded)¹: 1.300.000 M €
 1.8 EU contribution: 1,235,000 M €

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 following the end date for

contracting

1.11 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:

The overall objectives of this project are to increase transport efficiency and safety for the general public and shipping sector, to decrease pollution for

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)

marine environment, to provide increased safety for seafarers and passengers and harmonize national legislation with the EU Acquis and international conventions for the maritime education and training institutions (MET).

2.2 Project purpose:

Improvement of the maritime safety in Turkey through the enhancement of training, education, and certification of seafarers by establishing a long term education strategy, legal alignment and training of trainers.

2.3 Link with AP/NPAA / EP/ SAA

Accession Partnership

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) stated that;

- Continue alignment with and implementation in the maritime sector paying special attention to the effective implementation of pollution prevention. Further strengthen maritime administration, including the improvement of the safety record of the Turkish fleet and the implementation of the maritime security acquis,
- Strengthen the capacity to implement EU acquis, including control measures, in line with EU standards.
- The general and important comments and recommendations of EU indicated in the previous accession partnership documents are;
- Alignment with EU acquis on maritime safety and effective implementation,
- Strengthening the capacity to implement EU acquis particularly on flag state implementation and improvement of the safety records of Turkish fleet.

The alignment and capacity building requirements indicated in the accession partnership document cover alignment with EU acquis and strengthening technical and implementing capacity on maritime training & education.

National Programme for the Adoption of the Acquis

The National Programme has entered into force in the year of 2008 for the purposes of alignment with EU acquis and strengthening the administrative and technical capacity in order to implement the aligned national legislation effectively. The Maritime training & education issues are located under the chapter of Transport Policy. The necessary legislative alignment and the projects which should be implemented are indicated in the National Program as follows:

Carrying out the following activities within the scope of preparing a maritime education master plan to meet the manning needs of Turkish and EU Merchant fleets and provide high-quality seamen:

- Building a seamen's database
- Determining the present and future seamen needs based on trends of the Turkish Merchant fleet
- Determining the present and future seamen needs of the EU merchant fleet based on the trend in EU to employ Turkish seamen
- Determining education on maritime requirements other than that of the merchant fleet
- Identification of the present capacities of existing maritime schools and their development needs in order to provide sustainable quality maritime training
- Identifying the problems and alternative solutions to Turkish maritime training
- Analysis the alignment of Turkish maritime training legislation and implementation with relevant international conventions, EU acquis, IMO and ILO rules and recommendations and preparing draft legislation for legal gaps and recommendation reports for implementation gaps.

2.4 Link with MIPD

The MIPD document (2007-2009) states that:

Transport

legislation aims at improving the functioning of market by promoting safe, efficient, environment sound and user friendly transport services. In this context the following parameters should be taken into consideration:

• *elaboration of a coherent strategy over medium to longer term;*

In this regarding, the project aims to develop a maritime education strategy for harminozation with the EU acquis and standards in the maritime field.

2.5 Link with National Development Plan (where applicable)

9th Five Year Development Plan relates seamen education & training to the context of increasing safety in maritime transportation and improvement of Flag, Port and Coastal State controls.

2.6 Link with sectoral policies, strategies and implementation plans

The Project is in line with Maritime Sector Strategy Document (MSSD) 2010-2013, which is prepared under the SEI Funded Technical Assistance Project N°: ALTUN/TMA/TR0702.28-01/FWC/004 for "Building a Project Portfolio for the Turkish Maritime Administration".

In the Maritime Sector Strategy, it is stated that "The administrative capacity of Undersecretariat for Maritime Affairs is sufficient for the effective implementation of legislation on training and certification of seafarers. However, some schools which train seafarers have some technical deficiencies and especially they don't have enough trainer from the respects of quality and quantity. This deficiency prevents to train more seafarers. Turkey with young population is very important candidate to meet seafarers requirement of AU fleet. Turkey has enough number maritime schools to educate and train. If inadequacy of trained in these schools could ensure, Turkey can train and educate more seafarers.

Improvement of the qualifications and number of seafarers through better training & education capacity of the maritime education & training institutions and better capacity of the maritime administration is another requirement of Turkey on education and training of seafarers according to some EU documents such as progress reports, accession partnership documents.

In order to rise qualification and number of seafarers and ensuring better training & education capacity, necessary requirements should be met.

3. Description of project

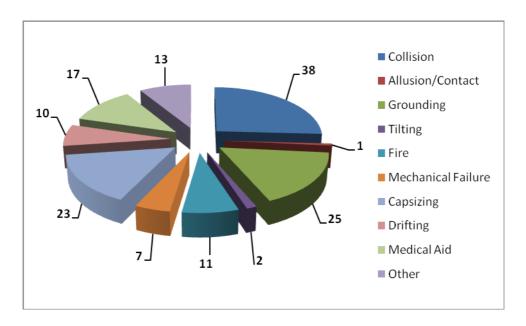
3.1 Background and justification:

Human Factor and Maritime Transportation

The human factor is a core element in maritime transportation sector. It affects maritime safety, security and marine environmental protection involving the entire spectrum of human activities performed by the ship crews, shore based management and regulatory bodies. Well trained seafarers means safe navigation, efficient operations, good maintenance of ships, and a reduction in the number of accidents and marine pollution. More than 80% of all accidents are caused by human error.

Turkey which has an international strait for navigation and high density maritime traffic suffers from maritime accidents and incidents. The human factor plays an important role in these accidents.

Statistical Data Regarding the Types of Marine Accidents/Incidents in 2009 According to the data of MSRCC

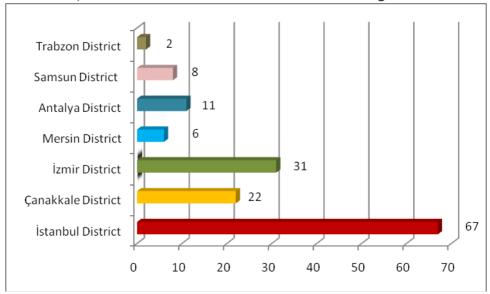


As it is seen in the table that is obtained from the data of the Main Search and Rescue Coordination Center (MSRCC) of Turkey, collision was the most common type of accident in 2009. Collision is a result of sheer human error. Amateur maneuvering and insufficient number of the pilot or navigational officers during the time of maneuvering or their insufficient level of training, is the root cause of any collision. Error or negligence by a shore personnel assisting in maneuvering activity can also be a reason for such mishap.

In addition, 25 of the marine incidents resulted from grounding. Similar to the case of collisions, human error has been the cause of most of the grounding accidents. Sheer maneuvering negligence and improper retaliations at the time of grounding has been the root cause of major accidents.

The remaining major causes for the marine accidents were capsizing that is also depending on the human error, medical aid and mechanical failure respectively by 23, 17 and 7 incidents.





The graphic above shows the distribution of the marine accidents/incidents according to the regions of Turkey. In total, 147 marine accidents and incidents occurred in Turkish waters in 2009. In these accidents, 18 people died, 4 people were injured and 176 people were rescued.

The severe reason leading to the marine accidents/incidents is the inadequate technical knowledge of the seafarers. Training decisions of the MET Institutions directly affect crew workload and their capabilities to perform safely and effectively. Therefore, it can be said that most effective means for decreasing human error is to increase human quality through safety education and training.

While human errors are all categorized under "inattention" or "mistakes" on the part of the operator, the problem is more complicated and lays under the deficiencies of the maritime education system.

Turkey is a major provider of seafarers. By the end of 2008, the total number of officers (deck and marine engineering) holding a Turkish certificate of competency was 33.618.²

However, education and training of such a high number of seafarers is hindered by the lack of qualified trainers, lack of administrative capacity to control the MET process & procedures and partial non-compliance to international standards in education and employment.

The maritime safety can be improved by conducting a detail revision of all MET System (all levels) in order to identify the problematic areas of the system. The training needs of the MET System with regard to personnel quality should be met accordingly.

Better implementation of MET process in a platform where the coordination among the implementing institutions and stakeholders is ensured.

Need analysis in terms of the teaching capacity and administrative capacity of the implementing agencies should be conducted to contribute to the completion of the deficiencies in the MET process.

Actors of the Maritime Training and Education In Turkey

Undersecretariat for Maritime Affairs (UMA)

Undersecretariat for Maritime Affairs (UMA) represents Turkey at IMO and holds the responsibility on education, training and certification of seafarers and setting up national policies and objectives concerning education, training and certification. Furthermore, UMA is the responsible institution regarding maritime affairs with the EU accession process. UMA is also responsible for the approval of training centers and training programmes.

There are exclusive departments engaged in Maritime Education&Training and Certification both in the UMA headquarters and the district directorates. Recently, these departments have been upgraded in terms of personnel and training to meet the EU requirements. Also, organizations like seafarer's examination center and independent evaluation boards have been established to meet the requirements of the STCW Convention and the acquis.

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² Official Statistics of the Undersecretariat for Maritime Affairs, February 2009

Higher Education Council (HEC)

The Higher Education Council (HEC) is also a major actor in the field of Maritime Training and Education. The Council of Higher Education is a fully autonomous supreme corporate public body responsible for the planning, coordination, governance and supervision of higher education within the provisions set forth in the Constitution (Articles 130 and 131) and the Higher Education Law (Law No. 2547). It has no political or governmental affiliation. At present, there are 139 universities in Turkey, 45 of which are foundation universities.

Higher Education Council (HEC) is responsible for the accreditation of faculties, university departments and higher education institutions, both public and private, and the approval of their framework educational programmes.

The Higher Education Council (HEC) is also responsible for the preparation of the curricula of postgraduate education programmes (Law No:2547, 04/11/1981). However, the curricula prepared concerning maritime education and training should be approved by UMA. Before the approval, UMA evaluates the compatibility of the curricula with the STCW Regulations and the Regulation for Seafarers (Regulation on Seafarers, Article 6).

Maritime Faculties and Maritime High Schools in Turkey

Maritime Faculties are İstanbul Technical University Maritime Faculty, İzmir University Maritime Faculty, Karadeniz Technical University (KTU) Maritime Faculty, Piri Reis Maritime University (foundation university, founded by Turkish Maritime Education Foundation). These faculties are integrated into the national higher education system.

Higher Schools of Maritime are Istanbul Higher School of Maritime, Yalova Higher School of Maritime, Çanakkale Vocational School, Karamürsel Higher School of Maritime. These higher schools are also integrated into the national higher education system.

Ministry of National Education (MoNE)

Ministry of National Education (MoNE) is the responsable authority for the accreditation and approval of vocational high schools of maritime and approval of their educational curricula.

These institutions have cooperation at all stages of education, training and certification process. In order to enhance this cooperation, the UMA and the HEC signed a Protocol³. The Protocol aims to set the continuous evaluation and monitoring procedures and principles for the Maritime education and training Institutions affiliated to HEC. Monitoring and Evaluation Committee (MEC) was established with the Protocol. The Committee consists of 5 members, three appointed by HEC and two appointed by UMA. The Committee meets monthly and prepares annual monitoring and evaluation report. Furthermore, the UMA signed a Protocol with the Ministry of Education regarding monitoring and evaluation of the vocational schools.

European Maritime Safety Agency (EMSA) 2009 Inspection Report

 $^{^3}$ Protocol on Continuous Evaluation and Monitoring the Maritime Education Institutions affiliated to YÖK according to the STCW Convention.

EMSA is the responsible EU Agency assessing compliance with the STCW principles in non-EU Countries. Later, EMSA became a supporting agency to the Commission by Regulation 724/2004/EC.

From 2007, EMSA has also been given the job of verifying the levels of implementation of Community legislation relating to the education, training and certification of seafarers inside the EU. For this purpose and its other purposes, EMSA regularly carries out inspections in non-member countries.

EMSA Report

In addition to the national monitoring and evaluation system, EMSA conducted an inspection on maritime education, training and certification system of Turkey between January 19-23, 2009. During the inspection EMSA inspectors have visited the following institutions and prepared a report based on the findings of the inspection.

- UMA,
- Directorate of the Istanbul Region,
- Seafarers Examination Centre,
- Maritime Faculty of Istanbul Technical University (ITU),
- Vocational High School Maritime affiliated to ITU,
- Karamürsel Vocational High School of Maritime
- Turkish Maritime Education Foundation (TUDEV)

.The Report indicates some deficiencies regarding the MET system of Turkey and the actions taken by the institutions to correct these deficiencies. The report states that most of the deficiencies regarding maritime training, certification and monitoring which were indicated in the former EMSA report (2007) were corrected by the UMA.

As regards to MET Institutions, detected deficiencies related to training can be categorized under 2 headlines;

- 1. The Management of the Quality Standards is not effective and efficient due to the lack of specific procedure for the use of simulators and courses review and approval
- 2. Training facilities, personnel and equipment are not adequate.
- 3. The content of some of the safety courses are not meeting the international standards
- 4. The training facilities are not efficiently used de to lack of knowledge on operating.

Scope of the Project

In order to correct the shortcomings mentioned in EMSA 2009 Report, Turkish MET System should be taken as a whole and a study should be carried out with active participation of the Higher Education Council, Ministry of National Education, Universities and the Maritime Administration. While correcting the deficiencies,

"Education", (which aims at academic aspect of MET) and the Training, (which aims at practical aspect of MET) should be considered separately and actions should be determined by taking their specific nature.

In order to build a sustainable, consistent and functional system, the current MET system should be examined by considering the findings of the EMSA Inspection Report. Since the EMSA Report is concentrated on only 5 MET Institutions, the examination shall cover the rest of Turkish MET Institutions. According to the findings of general assessment a **MET Strategy Document**, including an action plan and a timetable should be prepared.

The **MET Strategy Document** and action plan should address the Quality Standards and the capacity of the MET Institutions to implement and monitor those standards and the best solutions for correcting deficiencies.

Moreover, **training activities** for trainers working in the MET Institutions should be conducted in order to improve the technical training capacity of METs. Specific procedures for the usage of technical facilities (simulators etc.) and course materials should be reviewed and an effective training should be provided to the trainers responsible for delivering simulator trainings.

While preparing the MET Strategy Document, the Maritime Sector Strategy Document (MSSD)⁴, will be taken into consideration. Determination of maritime trainer requirements and measures to raise the quality and quantity of trainer and determination and implementation of measures to strengthen technical capacity of maritime training institutions are set as a strategy (Strategy 3.3) under the MSSD.

Although it is anticipated that the administrative capacity of Undersecretariat for Maritime Affairs is sufficient for the effective implementation of legislation on training and certification of seafarers, the EMSA Report underlined some minor deficiencies at the administration level. Therefore the current **national legislation** should be examined thoroughly and a gap analysis should be carried out in order to sort out better solutions for implementation of the national MET legislation. Regarding the Maritime Education, the legislation related to the academic curricula of the METs should be examined and updated according to the latest developments. The HEC and MET Institution should actively involve in studies related to the revision of Maritime Education curricula.

The international legislation and EU acquis on MET are sufficient enough to guide the administration and the stakeholders in the field of legal alignment. However, while building a system and setting up measures for effective implementation, the MET System of a Member State can be a good model for Turkish MET System. Therefore, a twinning project will be the best mean for achieving the above-mentioned goals.

During the preparation of the project proposal the stakeholders emphasized their intention to involve actively in the project. The Universities and other Institutions officially informed the UMA regarding their current personnel, technical and academic capacity through Higher Education Council. Letter of intention from Higher Education Council and Ministry of National Education has been received.

Rules Regulating Maritime Education and Training

⁴ Project prepared under the SEI,2009 Fund "Technical Assistance for Building a Project Portfolio fort he Turkish Maritime Administration"

International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978 (amended in 1995) is the main international convention regulating the Maritime Education and Training issues at international level. The Convention prescribes minimum standards relating to training, certification and watchkeeping for seafarers which countries are obliged to meet or exceed. Turkey is party to the Convention and transposed the requirements of the Convention into national law.

The main EU text regulating the training and certification of seafarers is Directive 2001/25/EC of the European Parliament and of the Council of 4 April 2001 on the minimum level of training of seafarers. The rules referred to in the directive are the rules of STCW Convention, as amended in 1995. Regulation on Seafarers (O.J. dated 31.07.2009, no 24832) and Regulation on the Principles of Inspection and Quality Standards for Maritime Training (O.J. dated 13.02.2006, no 26079) aim at harmonizing with Directive 2001/25/EC of the European Parliament and of the Council of 4 April 2001 on the minimum level of training of seafarers and establishing basic duties and responsibilities in this matter and alignment has been ensured. Turkey is a party to the STCW Convention, which is the main document which the EU directive is based on.

The requirements of the STCW Convention and the EU Acquies transposed into national MET legislation through prescribing the following legislation;

- Regulation for Seafarers, (No: 24832 Date: 31/07/2002, amended by law no. 25924 of 02/09/2005, 26670-11/10/2007, 2693-9/7/2008, 27096-30/12/2008, 27305-31/7/2009).
- By-Law on the Establishment of Principles for the Inspection of and Quality Standards for Maritime Education (No: 26079, Date: 13/02/2006)
- Regulation on Radio Operators Qualifications and Examination (No: 25482, Date: 04/06/2004, amended by act no. 25924 of 02/09/2005).

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

It is assessed that the possible results of the project will ensure below impacts:

- The overall maritime safety in Turkey will improve due to better-trained seafarers and lower possibility of human error,
- Decrease in the number of fatal and life threatening marine accidents in Turkey,
- The Turkish Maritime Administration will have better means of monitoring educational institutions and enforcing higher standards, therefore the project will improve the overall quality and reliability of seafarers,
- The Turkish MET System will have a long term strategy for improving maritime education in Turkey and a realistic action plan.
- Most results of the project are at the legal and organizational level, and this will provide sustainability without any particular effort,

Sustainability:

After the project has been completed, the training materials produced under the project shall be stored and open to further benefit of trainers by UMA. For this purpose, UMA shall publish the training materials on its web site. The training materials shall be updated yearly in the light of new developments with the contribution of MET institutions, HEC, MoNE, and UMA. The MET institutions shall enable new trainers to benefit from these materials and courses.

Also, the legal changes in the project mean that MET institutions shall improve their quality standards, and these standards will be actively monitored by UMA.

Adoption of legal changes by the Parliament will ensure the sustainability of legal changes in the project.

3.3 Results and measurable indicators:

Results	Indicators
• A long-term strategy in maritime education and training established ("Maritime Education Strategy to Meet EU Requirements" – MES) and Stakeholders of the Turkish MET has a roadmap covering a 5 years period.	Maritime Education Strategy document submitted to the European Commission Delegation to Turkey by the end of the fifth month of the Project.
The Turkish national legislation on MET is improved and MET curricula are updated in accordance with latest developments and needs. (both high school and undergraduate levels)	 Draft legal texts are submitted to the Parliament by the end of the project by UMA. The developed curricula are implemented in the academic year 2014-2015.
The quality of trainers is increased in to meet the requirements identified in the MES documents.	• All trainings identified in the MES are carried out by the end of the project, with at least 70 % of the attendants successfully completing each training and receiving certificates by UMA after an examination done in UMA Examination Center.

3.4 Activities:

<u>Activity 1 Assessment of the capacity of Turkey in the field of maritime education</u> and training

The first activity of the project is to carry out a through evaluation of the existing situation in Turkey regarding maritime education and training. The specific aim to this activity is to identify any deficiency regarding membership obligations, compatibility

with international rules, and general efficiency and organization of the education system. This evaluation shall include the following subjects;

- Personnel assigned to MET activities: educational background, work experience, language skills.
- Legal framework: National primary and secondary legislation, EU acquis, international conventions and regulations.
- Physical infrastructure: Examination centers, seafarers database, IT equipment.
- Organizational structure: respective tasks and duties of different public bodies, bureaucratic processes, examination and monitoring procedures, and certification procedures.

While the 2009 EMSA Report serves as an ideal beginning point for this analysis, the scope of this project calls for a more detailed approach. The Maritime Administration has recently completed some surveys on educational capacity, which can serve as inputs to this activity. Even so, this activity may require further visits to educational institutions.

The main responsibility for this activity belongs to the Twinning Partner and UMA. HEC and MoNE shall provide information on Turkish education system, their roles in that system and ensure coordination with educational bodies.

The findings of this activity may either be a part of the Inception Report for Twinning, or be a separate report, depending on the estimated time required to complete this activity.

Activity 2 Establishment of a strategy in the field of maritime education and training

For the second activity, the Maritime Administration and Twinning Partner shall develop a strategy for the elimination of problems identified under Activity 1. A long-term strategy (5 years) shall be drafted to provide full compliance to EU and international standards, and this will evidently require duration longer than the project itself. The strategy shall outline the following:

- The main deficiencies/gaps identified
- Proposal of a model system for Turkey regarding maritime education (considering legal, organization, market, etc factors)
- The main changes required to establish the new model and their priority order regarding these changes
- Establishment of responsible parties to carry out these changes
- A realistic timetable / roadmap

A draft "Maritime Education and Training Strategy for EU Membership" shall be prepared and submitted to HEC and MoNE for consultation. Then, the strategy document shall be submitted as a deliverable of the Twinning.

A total of 5 months is foreseen is the project calendar for Activities 1 & 2. The other activities of the project are built on this strategy report, so timely completion is essential. The best case scenario is completing Activity 1 and including the findings in the Inception report, and have the Strategy Document ready for the first Steering Committee meeting, so the progress in the project will be evident and the Steering Committee will be able to elaborate on the strategy.

Activity 3 Preparation of legal texts required by the strategy and model curricula at high school and undergraduate levels

This activity is based on the improvement of two aspects; legal alignment and development of a model curricula for education and training related to the seafarers.

The first aspect, legal alignment will be carried out by legal experts of the Twinning Team and the Maritime Administration. The aim is to draft legal texts in accordance with international rules and conventions (the most important being the STCW Convention) and also the EU acquis. UMA shall provide legal experts from its own departments on a full time basis, as many as required for timely completion. The draft legal texts shall be sent to HEC and MoNE for consultation, respectively.

Adoption of legal changes by the Parliament will ensure the sustainability of legal changes in the project. The legal changes in the project will improve the quality standards of MET Institutions and these standards will be actively monitored by UMA.

The model curricula will be prepared in consultation with the representatives of the MONE for the secondary education level, and the representatives of HEC for the vocational schools and universities. The academicians in the maritime related departments will be actively involved in the curricula development process. The developed curricula will be sent to the approval of the MONE and HEC and customized and implemented in the academic year 2014-2015.

The activity shall be carried out separately from Activities 4 and 5, and it is expected to last about 6 months.

Activity 4 Assessment of trainers' needs to meet the requirements of the maritime education strategy

The aim of this activity is to identify the trainers' needs in maritime <u>training</u> in Turkey, in educational institutions, public organizations involved in the maritime sector, and other institutional bodies. It should be noted that this activity does not cover the educational competencies of universities, but it is intended to close any gaps in practical application, such as:

- IMO Model Courses
- Course on Simulators (Bridge simulator, VTS Simulator, Tanker, LPG, LNG, GMDSS, ECDIS). The twinning team will plan the simulator training programme. The course may include scenario design and assessment.
- Courses on Safety at Sea
- STCW 1/6&1/8 Trainings
- Fire drills, etc.

Some significant training gaps (such as safey of passenger ships) have been identified in the 2009 EMSA Report. However, the exact list shall be prepared in consultation with public and private organizations.

The details of the courses (including location, profiles of participants, number of the participants, duration, and choice of methodology) will be decided jointly by the Administration and the Twinning partner. The UMA or a volunteer university can provide its the training facilities to conduct this activity.

Activity 5 Carrying out trainers' training programs as established by the Activity 4.

A training program will be conducted, in accordance with the details decided in Activity 4

Attendants shall include the existing trainers in public and private bodies, with reasonable knowledge of English. The attendants shall be tested and certified. The number of attendants shall be decided under Activity 4 according to the results of Activity 1 which aims at determination of the needs of the MET institutions. The attendents shall be enough to ensure sustainability within the MET institutions.

After the project has been completed, the training materials produced under the project shall be stored and open to further benefit of trainers by UMA. For this purpose, UMA shall publish the training materials on its web site. The training materials shall be updated yearly in the light of new developments with the contribution of MET institutions, HEC, MoNE, and UMA. The MET institutions shall enable new trainers to benefit from these materials and courses.

The course materials shall be stored and distributed in a way to respect the visibility guidelines of the EU.

Closing of the Project

This activity shall include the closing activities of the project, particularly the preparation of the Final Report and the Closing Meeting (with the participation of all stakeholders).

The duration of the final activity is one month, the final month of the project. Yet, the Resident Twinning Advisor is advised to begin drafting the Final Report beforehand, to leave sufficient time for consultation.

EU Visibility Rules shall be respected regarding the Closing Meeting.

3.5 Conditionality and sequencing

- Activities 1 and 2 should be the first activities in the project and Activity 2 should follow Activity 1.
- Activities 4 and 5 should be implemented sequentially.
- Activity 3 is an independent activity provided that it is executed AFTER Activity 2. Yet, Activity 3 may be implemented simultaneously with Activities 4 & 5 (thus the overall project duration can be decreased considerably, lowering the total cost of the project).

There are no external specific conditions regarding the commencement of any activity in the project. Yet, Activity 3 includes legal changes and this may take some time, considering that the legal texts prepared by the project are subject to review by the beneficiaries, and possibly will be voted by the Turkish Assembly. Thus, indicators of achievement for this activity are less ambitious.

3.6 Linked activities

As part of the Project No. TR0203.02 and Twinning Project No. TR02-TR-01 "Enhancement of Safety of Maritime Transport in Turkey" under 2002 Program, executed through twinning between the maritime administrations of Turkey (UMA) & Spain (DG Marina Merchante), Liquid Cargo Handling Simulators (LCHS) and Fire Fighting Training Equipment (FFTE) were purchased under the Supply sub-component and transferred to related maritime faculties providing maritime training in the country in 2005, as designed and scheduled in the Project Fiche developed by UMA in 2003.

İstanbul Technical University Maritime Faculty (İstanbul) and Dokuz Eylül University School of Maritime Business & Management (in İzmir) were given LCHSs including four main components oil, chemicals, LPG and LNG with 24 and 6 cubicles respectively while Karadeniz Technical University Marine Sciences Faculty (in Trabzon) was provided with FFTEs including Emergency Escape Breathing Device, Breathing Apparatus, Nomex Protective Clothings, Air Compressor, Portable Multigas Measuring Devices, Multi Purpose Nozzles, Portable Foam Applicator, Portable Foam Mixer / Proportioner, Immersion Suits, Fire Hose and VHF Marine Radios as well as several Safety Clothes.

All this equipment, having a total cost of approximately 500.000 Euros, were transferred to the universities officially through separate protocols signed by the Deans and the Undersecretary on behalf of the mentioned faculties and UMA, as stated in the Project Fiche.

The universities do not have the adequate trained personnel for the operation of these simulators.

3.7 Lessons learned

It is very important to have a full time, dedicated project team, with a competent SPO. The team members should have different backgrounds, to have a spectrum of knowledge and experience to complement each other. As we have concluded from the previous two projects, the RTA assistant, the language assistant and various translators hardly have the necessary knowledge for maritime and legal translation. In this case, some members of the project team should have the necessary language skills to assist these personnel.

The project implementation should be geographically distributed, with frequent domestic study visits and trainings, etc. It is very important to have simultaneous feedback regarding the project activities.

4. Indicative Budget (amounts in EUR)

						SOURCES OF FUNDING							
			TOTAL EXP.RE	TOTAL PUBLIC EXP.RE	IPA CONTRIBUT	ION	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)
Twinning	X	-	1300.000	1,300.000	1,235,000	95	65.000	5	65.000				_
TOTAL	L IB		1.300.000	1,300.000	1,235,000		65.000		65.000				
TOTAL	INV		0	0	0		0		0				
TOTAL PI	ROJE(СТ	1.300.000	1,300.000	1,235,000		65.000		65.000				

The project contains only one Twinning contract. Therefore, the above table represents both the contract based budget for the project and the activity-based budget for Twinning.

Also, since there is no supply component for this project, all the budget goes to Institution Building, and Investment is zero.

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

Contracts	Start of Tendering	Signature of contract	Project Completion
Twinning	2011 Q1	2012 Q1	2013 Q1

All projects should in principle be ready for tendering in the $1^{\rm ST}$ Quarter following the signature of the FA

The project activities by month are as follows:

	1	2	3	4	5	6	7	8	9	10	11	12
Activity 1												
Activity 2												
Activity 3												
Activity 4												
Activity 5												
Closing Meeting & Final Report												

6. Cross cutting issues (where applicable)

6.1 Equal Opportunity

Equal participation of women and men will be secured through appropriate information and publicity material, in the design of projects and access to the opportunities they offer. An appropriate men/women balance will be sought on all the managing bodies and activities of the programme and its projects.

6.2 Environment

This project will provide better protection of environment by improving human quality in the transport sector.

6.3 Minorities

According to the Turkish Constitutional System, the word minorities encompasses only groups of persons defined and recognized as such on the basis of multilateral or bilateral instruments to which Turkey is a party

ANNEXES

- 1-
- Log frame in Standard Format Amounts contracted and Disbursed per Quarter over the full duration of Programme 2-

ANNEX I: Logical framework matrix in standard format

Project Logframe	Project Name and Number	
	Contracting Period Expires	Disbursement Period Expires
Improved Maritime Education & Training in Turkey	2 years after the signature of the Financing Agreement	1 year after the end date for the execution of contracts
	Total Budget	IPA/Pre-accession budget
	1.300.000	1,235,000 € M

Overall Objective	Objectively Verifiable Indicators	Sources of Verification	
The overall objectives of this project are to increase transport efficiency and safety for the general public and shipping sector, to decrease pollution for marine environment, to provide increased safety for seafarers and passengers and harmonize national legislation with the EU Acquis and international conventions for the maritime education and training institutions (MET).	• 10 % Decrease in the number of fatal and life threatening marine accidents caused by human error (Turkish officers) in Turkey by 2015	 Reports by Marine Casualty Investigation Board of UMA Yearly accident statistics of Main Search and Rescue Coordination Center in Ankara 	
Project Purpose	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Improvement of maritime education	Human capacity in Turkish	Reports of UMA,	Normally, EMSA inspections are

system through establishing a long term education strategy, legal alignment, and training.	maritime education sector in terms of quality improved by 10%, as measured by seafarers' certification examinations carried out by UMA by the end of 2015. The basic maritime safety courses are fully compatible with the international standards, at the end of the project The course material related to the training are updated, Quality management systems of MET institutions are improved,	 Department of Seafarers. 2014 Report of European Maritime Safety Agency (EMSA) on Turkey Annual Progress Reports of EU 	conducted once in every five years. EMSA may decide to carry out the inspection at another year.
Results	Objectively Verifiable Indicators	Sources of Verification	Assumptions
A long-term strategy in maritime education and training established ("Maritime Education Strategy to Meet EU Requirements" – MES) and Stakeholders of the Turkish MET has a roadmap covering a 5 years period.	Maritime Education Strategy document submitted to the European Commission Delegation to Turkey by the end of the fifth month of the Project.	• Official letter to the ECD, Twinning 2 nd Quarterly Report	
The Turkish national legislation on MET is	Draft legal texts are submitted to the Parliament	The official websites of	Some parts of the acquis may be

improved and MET curricula are updated in accordance with latest developments and needs. (both high school and undergraduate levels)	 by the end of the project by UMA. The developed curricula are implemented in the academic year 2014-2015. 	 Turkish Parliament Publication of the curricula for academic year 2014-2015 by HEC and MoNE 	applicable only after membership.
The quality of trainers is increased in to meet the requirements identified in the MES documents.	All trainings identified in the MES are carried out by the end of the project, with at least 70 % of the attendants successfully completed each training and received certificates by UMA after an examination done in UMA Examination Center.	Twinning Quarterly Reports, Twinning Final Report	
Activities	Means		Assumptions
Assessment of Turkey's capacity in the field of maritime education and training.	Twinning Contract		
• Establishment of a strategy in the field of maritime education and training.			
Preparation of legal texts required by the strategy and model curricula at high school and undergraduate levels.			

Assessment of trainers' needs to meet the requirements of the maritime education strategy		
• Carrying out trainers' training programs as established by the previous activity.		
		Preconditions

ANNEX II: amounts (in €) Contracted and disbursed by quarter for the project (IPA contribution only)

		2013			
	Q1	Q2	Q3	Q4	Q1
Contracted					
Twinning	1,235,000				
Cumulated	1,235,000	1,235,000	1,235,000	1,235,000	1,235,000
Disbursed					
Twinning	494,000	165,000	165,000	165,000	246,000
Cumulated	494,000	659,000	824,000	989,000	1,235,000

Starting from the signature of the FA

Twinning contract is signed in the 2nd quarter, implementation starts on the 3rd quarter, and the duration is 12 months (=4 quarters)