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WORLD MARITIME UNIVERSITY

Malmö, Sweden

**EUROPEAN UNION MARITIME SAFETY
REGIME**

Impact of EU twinning projects in the enlargement process

By

MARIE ALM

Sweden

A dissertation submitted to the World Maritime University in partial
fulfilment of the requirements for the award of the degree of

**MASTER OF SCIENCE
IN
MARITIME AFFAIRS**

Maritime Safety and Environmental Administration

2007

Foreword

Records of detained vessels point out the level of maritime safety in a nation. To raise maritime safety and the environmental protection, measures are taken to improve flag state and port state responsibilities. Romania, Bulgaria and Turkey were candidate countries to join the European Union and a distinguishing characteristic was their high detention rate under the Paris Memorandum of Understanding when they signed their accession partnership agreements. New commitments and functions were required in the candidate countries to adopt, apply and enforce European Union community law on maritime safety. Maritime safety including all aspects of protection of the marine environment as a definition is used and defined using different content in different situations. In this research the definition maritime safety is discussed only related to flag state and port state areas of responsibilities.

With the purpose to reduce substandard shipping in the waters under the jurisdiction of the European Union, measures were taken. One of the measures was twinning on maritime safety. Twinning is a technical assistance instrument with accession driven objectives to prepare for the membership in the European Union.

This research is evaluating the impact of twinning projects to raise maritime safety focusing on priorities set to implement the European Union Maritime Safety Regime. An evaluation of the countries performance as flag state and port state before and after twinning is performed as well as evaluating its conformity of twinning methodology to raise maritime safety. Findings are presented to show results from the twinning projects carried out and their relevance to yield improved operational results. It focuses on which effects twinning had on substandard shipping, how they approached the problem areas and its relevance to raise maritime safety.

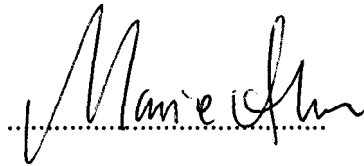
The main observation areas of the twinning impact for the projects commenced in Romania, Bulgaria and Turkey on maritime safety in the enlargement process are concluded. The emphasis is on how twinning works with institutional support and capacity building to strengthen a maritime administration to obtain well functioning capacities within the European Union Maritime Safety Regime.

Declaration

I certify that all the material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

(Signature):

A handwritten signature in black ink, appearing to read "Marie Åker", written over a horizontal dotted line.

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Abstract

Title of Dissertation: **European Union Maritime Safety Regime - Impact of EU twinning projects in the enlargement process**

Degree: **MSc**

The dissertation is a study of twinning as a technical assistance instrument to raise maritime safety in candidate countries to the European Union. Twinning projects carried out in Romania, Bulgaria and Turkey are evaluated with focus on activities commenced on flag state and port state control. A brief look is taken to provide background on twinning methodology, the European Union maritime safety regime and twinning on maritime safety. References are made to institution support and alignment with European Union community law (*acquis communautaire*) and assessment of maritime safety performance by statistics collected from the Paris Memorandum of Understanding.

With the purpose to evaluate the impact of twinning the prevailing situation compared with the situation after the twinning project as a flag and port state is investigated. The impact of twinning to raise maritime safety is evaluated in areas that are to be targeted by twinning to strengthen the countries performance as a flag and port state such as pre-accession priorities to align with *acquis communautaire*, results of performance by means of statistics and training and finally the twinning methodology to raise maritime safety. Findings to raise maritime safety by using twinning are summarized.

The concluding chapter evaluates the main observation areas of the impact of the twinning project to raise maritime safety in the enlargement process with emphasis on improvement areas of twinning and how the maritime administration is transformed to deal with a new context to perform their obligations.

KEYWORDS: Maritime Safety, Maritime Administration, European Union, *Acquis Communautaire*, Twinning, Technical Assistance, Institution support, Flag State Control and Port State Control.

Table of contents

FOREWORD	i
DECLARATION	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	iv
TABLE OF CONTENTS	v
LIST OF TABELS	vi
LIST OF ABBREVIATIONS	vii
<u>CHAPTER 1 - INTRODUCTION</u>	1
<u>CHAPTER 2 - BACKGROUND</u>	3
<u>2.1 An instrument for institution building – Twinning</u>	3
2.1.1 Technical assistance	5
2.1.2 PHARE	5
2.1.3 Acquis communautaire	6
<u>2.2 The twinning project cycle</u>	6
<u>2.3 Twinning methodology</u>	9
<u>2.4 Description of assessment on twinning</u>	10
<u>2.5 European maritime safety regime</u>	12
2.5.1 Twinning on maritime safety in Romania, Bulgaria and Turkey	16
2.5.2 Evaluating the impact of twinning on maritime safety	20
<u>CHAPTER 3 - ROMANIA</u>	23
<u>3.1 Prevailing situation before the twinning project</u>	23
3.1.1 Background	23
3.1.2 Romanian institutional capacities for maritime safety	24
3.1.3 Procedures	25
3.1.4 Human resources and competence of staff	26
<u>3.2 Results from the twinning project</u>	26
3.2.1 Romanian institutional capacities for maritime safety	28
3.2.2 Procedures	31
3.2.3 Human resources and competence of staff	31
3.2.4 Evaluating the impact on maritime safety from the twinning projects	31
RO99/IB-TR-01 and RO2001/IB/TR-02	32

<u>CHAPTER 4 - BULGARIA</u>	37
<u>4.1 Prevailing situation before the twinning project</u>	37
4.1.1 Background	37
4.1.2 Bulgarian institutional capacities for maritime safety	38
4.1.3 Procedures	39
4.1.4 Human resources and competence of staff	39
<u>4.2 Results from the twinning project</u>	40
4.2.1 Bulgarian institutional capacities for maritime safety	41
4.2.2 Procedures	43
4.2.3 Human resources and competence of staff	44
4.2.4 Evaluating the impact on maritime safety from the twinning project BG/IB/2001-TR-01	45
<u>CHAPTER 5 - TURKEY</u>	50
<u>5.1 Prevailing situation before the project</u>	50
5.1.1 Background	50
5.1.2 Turkish institutional capacities for maritime safety	51
5.1.3 Procedures	52
5.1.4 Human resources and competence of staff	52
<u>5.2 Results from the twinning project</u>	52
5.2.1 Turkish institutional capacities for maritime safety	53
5.2.2 Procedures	55
5.2.3 Human resources and competence of staff	56
5.2.4 Evaluating the impact on maritime safety from the twinning project TR02/TR-01	56
<u>CHAPTER 6 - FINDINGS</u>	61
<u>CHAPTER 7 - CONCLUSIONS AND FINAL DISCUSSION</u>	65
<u>REFERENCES</u>	68

Appendixes:

- 1) Summary of project fiches guaranteed results for the twinning projects carried out in Romania, Bulgaria and Turkey
- 2) Calculation of MS average rate for detained vessels under the Paris Memorandum of Understanding for European Member States

List of tables

Table 1 – EU member states average detention rate, (Sources: Paris Memorandum of Understanding)

Table 2 – Twinning project facts for Romania
(Sources: European Commission Standard twinning project fiches on Maritime Safety)

Table 3 – Detention rate for Romanian flagged vessels 1999-2005, Paris MOU,
(Sources: Paris Memorandum of Understanding)

Table 4 - Fleet controlled by Romanian shipowners according to country of domicile
(Sources: Institute of Shipping Economics and Logistics (ISL))

Table 5 – Twinning project facts for Bulgaria
(Sources: European Commission Standard twinning project fiches on Maritime Safety)

Table 6 - Detention rate for Bulgarian flagged vessels 1999-2005, Paris MOU,
(Sources: Paris Memorandum of Understanding)

Table 7 - Fleet controlled by Bulgarian shipowners according to country of domicile
(Sources: Institute of Shipping Economics and Logistics (ISL))

Table 8 – Twinning project facts for Turkey
(Sources: European Commission Standard twinning project fiches on Maritime Safety)

Table 9 - Detention rate for Turkish flagged vessels 1999-2005, Paris MOU,
(Sources: Paris Memorandum of Understanding)

Table 10 - Fleet controlled by Turkish shipowners according to country of domicile
(Sources: Institute of Shipping Economics and Logistics (ISL))

List of abbreviations	
BC	Beneficiary Country
CARDS	Community Assistance for Reconstruction, Development and Stabilisation for cooperation with the European Union
DG	Directorate General
DG TREN	Directorate General Transport and Energy
EAMA	Executive Agency for Maritime Administration in Bulgaria
EC	European Commission
EMSA	European Maritime Safety Agency
EU	European Union
EU acquis	Acquis Communautaire (EU community law)
FSC	Flag State Control
FSI	Flag State Implementation
IACS	International Association of Classification Societies
ICN	Inspectorate for Civil Navigation in Romania
IMO	International Maritime Organization
ISM	International Code for Safety Management
MEDA	Mediterranean Partnership- offers technical and financial support measures to accompany the reform of economic and social structures.
MS	Member State
NCP	National Contact Point in each member state for twinning
PAA	Pre-Accession Advisor
Paris MOU	Paris Memorandum of Understanding
PHARE	The PHARE programme is a pre-accession instrument financed by the European Union to assist the applicant countries of the central and Eastern Europe in the preparations for joining the European Union.
PSC	Port State Control
RNA	Romanian Naval Authority
RNR	Romanian Register of Ships
RTA	Residential Twinning Advisor
TACIS	The TACIS programme offers technical and financial support for the European Unions's relations with Eastern Europe & Central Asia
UMA	Undersecretariat of Maritime Affairs in Turkey

Chapter 1 - Introduction

Developing maritime safety and environmental protection is a priority within the European maritime safety regime. Unless the maritime administrations within EU (European Union) are willing and prepared to address this issue there will be no solutions found that will fundamentally or sustainably decrease substandard shipping trading European waters. Despite the existence of a well developed framework of international conventions and rules for safety at sea and for the protection of the marine environment the problem with substandard shipping remains for some of the countries within the geographical borders of Europe. Several of those countries have applied for joining EU. Shipping and the maritime sector has a strategic importance to the EU economy and has been constantly developing and intensified. The “Erika” accident in 1999 and the “Prestige” accident in 2002 gave the results that EU drastically encouraged its existing regime to adopt new rules and standards for maritime safety which are reflected in the EU community law (EU *acquis*). Focus from EU was to combat substandard shipping and a process started to review its legislation that would strengthen the MS’s (Member State) maritime administrations. This research is focused on maritime safety covering areas of responsibilities as a flag state and port state in the countries Romania, Bulgaria and Turkey. Common characteristics for these countries were an ensuing high detention rate of their national flagged vessels within the Paris MOU (Paris Memorandum of Understanding). Why were so many substandard vessels allowed by the authorities to continue trading? What was the core of the problem and how could it be solved?

Romania and Bulgaria signed the accession partnerships agreements with EU in 1998 and 1997 respectively. Turkey signed its accession partnership in 2001. Out of transposition follows needs to reorganize structures, functions and methods in existing organizational structures required by the accession partnership. As candidate countries to the EU it entitled them to different development programmes for

technical assistance provided by EU, among them twinning. Twinning has been used since 1998 as a means to speed up the candidate countries capacity to comply with

EU acquis. Twinning projects are built around jointly agreed priority areas in accordance with EU policy objectives. A certain level of ambition in project objectives is set by requirements to deliver guaranteed results. The concept of twinning is to be an instrument for institution building. The approach to carry out activities within a twinning project is built on know how and experience from an MS to a BC (Beneficiary Country) in order for it to develop structures, strategies, human resources and management culture needed to strengthen the BC's, regulatory and institutional capacities. When joining the EU the countries have to ratify EU community laws on maritime safety, which consist of several EC Directives based on international conventions for maritime safety and priorities set by the EU to increase maritime safety. EU acquis within the area emphasizes harmonized procedures for flag state and port state control. For the candidate countries it became a rapid process to improve their flag state and port state performances as they soon were to become members in the EU. Importance of legal alignment and strengthening of institution structures in the maritime sector with the purpose to improve the safety performance of the fleets of candidate countries are underlined by the EC (European Commission).

The process to align countries with the European maritime safety regime by twinning is the background for this research. The objective with this dissertation is to evaluate which impact the EU maritime safety regime has had on maritime safety using twinning as a technical assistance instrument in accession preparations to the EU. The areas of flag state and port state with relation to EU acquis will be assessed. The following categories will be evaluated;

[A] Twinning impact of priorities to align with the EU acquis

[B] Evaluation of BC's performance as a flag state and port state using twinning

[C] Impact of twinning methodology and the twinning instrument to raise the level of maritime safety

The EC:s major concern over maritime safety in the chosen countries was the high detention rate within Paris MOU and their status as candidate countries to the EU. This work includes analysis of statistics collected from Paris MOU and from the

Institute of Shipping, Economics and Logistics to further evaluate the impact. With the purpose to illustrate the prevailing situation before the twinning started and the results after twinning the period from when the statistics are collected is between 1997 and 2005. Firstly, a background of EU's programme for twinning is presented with areas that will be further discussed in this research. The background covers development of the twinning instrument on maritime safety and the European maritime safety regime. Each country is then described focusing on the situation before and after the project with an evaluation of the methodology presented. Finally, the findings will be presented with conclusions and a final discussion.

Chapter 2 - Background

2.1 An instrument for institution building – Twinning

The EC launched the twinning concept in 1998 as a means to set the accession of countries to the EU in motion and to assist in strengthening certain functions in EU neighboring countries. Twinning provides a framework for public institutions in the BC to cooperate with their counterparts who is an MS in the EU. The idea that the BC will cooperate with a member state “twin” (peer to peer) public institutions to strengthen that organisation’s institution capacity. Together they develop and carry out a targeted project aiming to support the transposition, enforcement and implementation of a specific part of the EU community law ‘acquis communautaire’ (EU acquis). Out of transposition follows needs to reorganize structures, functions and methods in existing organizational structures. The EC has committed over 1 billion Euros to twinning and has implemented more than 1 100 projects in over 25 countries since the start in 1998. DG (Directorate General) Enlargement is the responsible body within the EC for technical assistance for countries joining the EU in past enlargements, future prospects as well as in the accession process. An average duration of a twinning project is 18 months and the MS participation is fully financed by the EC. The concept of twinning is to be an instrument for institution building. Institution building for EU candidate countries aims to fulfill the requirements in accordance with the membership conditions established in the Copenhagen political criterion. This criterion requires that an MS have institutions that guarantee democratic governance and human rights and a functioning market economy. They ensure that a state accept the EU acquis and is entitled to join the EU. An accession partnership agreement is established between the EC and each candidate country. Accession partnerships are a pre-accession strategy instrument which determines the BC particular needs on which pre-accession assistance should be targeted in accordance with the EC’s opinion on its membership application. In twinning projects the institution building process involves transfer of know-how to develop skills needed to strengthen the BC’s regulatory and administrative capacity.

Twinning projects are built around jointly agreed supporting priority areas in accordance with EU policy objectives as below:

- Accession driven objectives such as the preparation of EU enlargement (PHARE)
- Transition driven to further strengthen the administrative capacity of the new MS (TRANSITION FACILITY)
- Association driven in the context of a wider Europe approach to deepen cooperation, as foreseen in other EU financed programmes (CARDS, MEDA and TACIS).

With reference to the EC manual for twinning the projects are based on some basic principles:

- As a rule, the beneficiary countries (BC) choose their Member State (MS) partners;
- Twinning projects must yield a concrete operational result in terms of the BC meeting a requirement in connection with the EU acquis or other EU policies open for co-operation;
- The Twinning partners (the public sector actors involved) commit themselves to achieving the result, and not only to the means to achieve it. At the end of the project a new or adapted system must function under the sole responsibility and means of the BC;
- Twinning is a joint project of a grant nature. It is not a one-way delivery of Technical Assistance from an MS to a BC. It is a joint project covering a process, in which each partner takes on responsibilities. The BC commits

itself to undertaking and funding reforms, the MS to accompanying the process for the duration of the project;

- To underpin the credibility of their commitment, the Twinning partners draft a detailed Twinning work plan, before starting work. It may be adapted in the course of its implementation, but it must fix clear benchmarks to allow for close monitoring of progress towards the final result;
- Twinning projects are implemented to achieve a mandatory result through the transfer of hands-on public sector experience and expertise. The final and sole ownership of this mandatory result lies with the BC. (European Commission, 2005)

2.1.1 Technical assistance

The concept of technical assistance means that the EU or another governmental institution finances a programme of cooperation in which their expertise is placed at disposal to a beneficiary organization implementing consulting services, or projects such as twinning or other type of cooperation. The goal with twinning as a technical assistance instrument is to help the BC in the development of modern and well functioning administrations with structures, human resources and management skills to implement the EU acquis.

2.1.2 PHARE

PHARE is an EU financed programme that provides technical assistance on pre-accession to enforce EU acquis. The twinning projects carried out in Romania and Bulgaria under the period 2004-2007 is under PHARE as well as Turkey with the remark that some financing difference arrangements for twinning projects differs. The priorities for accession are identified in the monitoring and regular reports prepared for the membership in the EU and are governed by a timetable when the

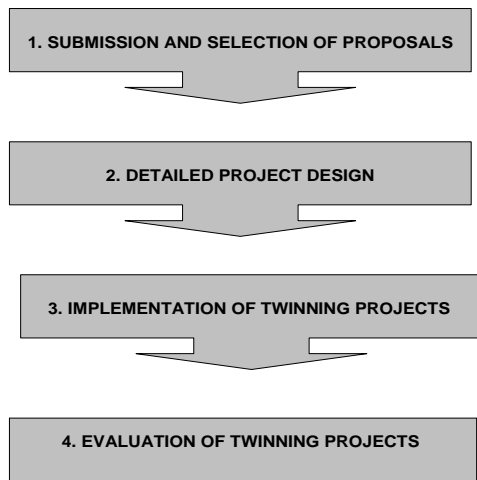
chapters in the acquis have been closed for the enlargement negotiations. The aim of twinning projects under PHARE is to deliver specific results on implementing areas of the EU acquis.

2.1.3 Acquis communautaire

The concept of EU community law '*acquis communautaire*', hereinafter referred to as EU acquis, is central to understand EU, the enlargement and constitutional process. The EU acquis includes all treaties, directives, judgments and regulations and the term is frequently used for the enlargement negotiation process. Candidate countries have to adopt EU acquis and implement it in its national legislation which requires an adequate level of administrative capacity with institutions to preserve democratic governance. In the enlargement negotiations the EU acquis have been divided into 31 chapters and all chapters have to be 'closed' before the country can become a member of the EU. Chapter nine constitutes the transport chapter "transport policy". The acquis in chapter nine is estimated to be about 10 % of the total EU acquis which puts lots of efforts from the BC to implement the new body of transport law. Implementing the EU acquis does not only require alignment of the national legislation, but also an adequate level of administrative capacity which makes the enforcement and implementation mechanisms of maritime safety acquis a challenge. EC is measuring the progress towards accession for each country in their regular reports towards accession. EC publishes a series of yearly regular reports on the candidate countries covering the years from pre-accession to accession.

2.2 The twinning project cycle

The main processes and stakeholders in twinning projects are described in four steps which constitute a project cycle:



1. Submission and selection of twinning proposals

The demand driven process that starts the project is when the BC identifies its needs to comply with EU acquis. This is the basis when the EC with the BC's assistance develops their assessment report for developing the project fiche on twinning which sets the priorities for the project. When a twinning project fiche on maritime safety is developed it is used as the terms of reference for the call for proposals which are being circulated via the NCP (National Contact Point) for twinning to MS's and their mandated bodies. Selection of the twinning partners is made by the BC after a thorough selection and evaluation procedure. The BC gets the ownership of the twinning project but it is financed by EU. An MS may implement a project alone or in a consortium with another MS. In the consortium one MS bears the total responsibility of the implementation as the lead partner and the other MS is the junior partner within the twinning project.

2. Detailed project design

When the MS twinning partners have been appointed, jointly by the BC and the MS, the drafting starts of the twinning contract with particular attention to the twinning work plan/covenant. The work plan/covenant is the detailed design of the project and is drafted in cooperation between the MS and BC. BC and MS bears joint responsibility within twinning to plan and implement the input (activities) and to

achieve the agreed guaranteed results. Emphasis is to plan the project in advance so monitoring and evaluation is regularly performed during the project lifetime. Keywords are; mandatory results, benchmarks, timeframes, duration and risk analysis for each component and activity in the twinning fiche. When the approval of the twinning contract and work plan/covenant is done the endorsement starts. Twinning fiches distributed after 2001 differed in its design compared to the earlier twinning fiches. Objectives, outputs and benchmarks became measurable in accordance with new instructions from the twinning manual. The twinning 'covenant' changed name to 'work plan' as well as the seconded MS civil servant changed name from Pre-Accession Advisor (PAA) to Resident Twinning Adviser (RTA).

3. Implementation of twinning projects

The MS project leader and the RTA/PAA have BC counterparts who are managing the project. The timing and deadlines of the project's deliverables should be in accordance with the work plan/covenant. Project reporting from the MS experts is required for each separate activity commenced in the BC. A project steering committee is appointed and is monitoring the project's work at each interim quarterly reporting and its following meetings. The twinning project involves a number of medium and/or short term experts from the MS public organization to implement the activities. The role of the EC is to set the legal, financial, and procedural framework for twinning projects. The role of the EC delegation is to endorse contracts and to be the contact point for the twinning partners who include regular contacts with RTA/PAA and evaluating the quarterly reports. There is an administrative office appointed to supervise the overall procedural, financial and contractual management of the twinning projects in the BC for all twinning projects. In PHARE BC's it is named Central Financing and Contracting Unit based in the Ministry of Finance within each BC. Line ministers in each BC are responsible for the detailed project design and the implementation of the project.

4. Evaluation of the twinning project

During the project's lifetime the interim quarterly reports play an essential role to give a general update of the project. Every interim quarterly report contains an overall evaluation of progress achieved and provides recommendations for the project's remaining lifetime. The final report focuses on the achievement of mandatory results. The final report contains a description of the situation in the relevant area of the BC administration before and after the project. A project steering committee (with members from EC delegation, administration office, BC project leader and MS project leader and RTA/PAA) is evaluating the interim quarterly and final reports and the approval is done by EC. Before the project is terminated the final report has to be approved by EC. If guaranteed results have not been achieved a detailed explanation must be given on the underlying reasons with an accompanying action plan to complete the project. EC commences interim or post evaluation of twinning projects performed by themselves or external auditors and the Court of Auditors.

2.3 Twinning methodology

A demand driven process from the BC identifies gaps that have to be filled in the process from a pre-accession to an accession state to comply with EU standards. In cooperation with jointly agreed EU policy objectives for the project a certain level of ambition in objectives is set. The work plan/covenant for the project aims to be realistic with clear goals and benchmarks that will ensure guaranteed results and sustainability. A specific characteristic for twinning is the concept of guaranteed results. Progress towards accession and meeting requirements of the EU acquis is specified in measurable inputs, outputs and outcome which will enhance concrete operational results. The speed to implement medium and short term priorities of the EU acquis within the project's lifetime makes the measurable inputs, outcomes and the level of guaranteed results of importance. Joint accountability for the project between the BC and MS to achieve guaranteed results is designed to stimulate a close cooperation by the project's management system. This partnership approach is

designed so that the MS contributions will not be seen as consultancy services and that the BC is actively contributing and adequately resourced in the additional work as the project requires. The approach to carry out the activities within a project is built on know how and experience from the MS to the BC. A permanent presence of the seconded MS civil servant (RTA/PAA) works as a catalyst of the project and has a key role to make sure that the guaranteed results are met.

Four main pillars on which the twinning methodology is built are:

1. Concept of guaranteed results, with a project management system, which should be based on a reasonable ambition of verifiable objectives and a basis for sustainability
2. Cooperation between administrations, building on know how and experience, with joint accountability for the project
3. BC chooses the appropriate MS to carry out the projects and maintains ownership of the project
4. Permanent presence of a seconded MS RTA/PAA

2.4 Description of assessment on twinning

Assessment reports have been carried out for evaluation of individual projects as well as assessment on the twinning instrument as such, which will be described further in this chapter. OECD Development Assistance Committee (DAC) has defined five criteria (the DAC Criteria) that serve as tools for evaluations performed for the twinning instrument under the supervision of DG Enlargement: relevance, efficiency, effectiveness, outputs and sustainability. The objectives with the assessment reports are to identify good practices, methods and examples that can further develop and improve the twinning instrument. The twinning instrument has evolved from its start and the EC has changed the project design for further improvements. One of the changes for twinning projects carried out after 2001 is that objectives, outputs and benchmarks in the work plan/covenant were made measurable. In accordance with evaluation reports carried out by the EC strengths and weaknesses are identified for the twinning instrument. Strengths and weaknesses of twinning are summarized as

follows based on the main identified items from assessment reports that will be further discussed in this research on twinning. (Cooper C, Johansen M, 2003)

Strengths	Weaknesses
Progress towards accession and meeting EU acquis requirements would have been much slower without twinning.	The twinning projects has resulted in that legislation has generally effectively harmonised but there has been a lack of impact due to weak capacity to apply and enforce new legislation.
Twinning has made a significant and valued contribution towards the development of administrative capacity to apply the EU acquis	Unless accompanied by widespread reforms, with focus on strategic direction and management in public administration the risk with twinning can be based on unstable foundations in BC structures without changing practices or behaviours.
The BC partnership cooperation with their peer MS administration that has unique experience and know how on how to implement the EU acquis safeguards a good project management, joint accountability and a good project design. The networking and contacts established between two organisations will continue even after the twinning project is finalized.	Problems to find roles in the joint accountability for the project when the BC ownership and commitment of the project have been found poor. The view that the MS has worked as consultants and not as partners has been common. Working relationships have been good at an operational task level, but not at a strategic level. Project management skills have not been sufficient, such as low quality of professional skills versus managerial skills of RTA/PAA and that more specialist expertise could have been deployed in the project.
The identification of specific areas of twinning has been a result of a well balanced dialogue between the EC and the BC	Twinning is a complex activity engaging a variety of inputs and resources. The set out results can only be achieved if all perform as required.
The concept of guaranteed results has secured progress in the process from pre-accession to accession.	If the guaranteed results have not been reasonable and understood the instrument has been difficult to work with. Recommendations have been given that twinning should take more steps to ensure the BC's administration can sustain the project's results.

Keywords are efficiency and effectiveness creating impact and sustainability with twinning. In this context efficiency measures are the quality of the implementation, i.e. how well activities have transformed inputs of resources into sustainable results. When assessing effectiveness it is used as a criterion for evaluating and measuring the goal achievement of projects and the delivery system. To assess effectiveness within this research the following dimensions elaborated by Ramboll Management will be used:

1. Effectiveness of project output: The degree to which the expected (planned) outputs actually have been achieved for completed projects.
2. Effectiveness of project results: The immediate results that can be detected on the basis of the planned and achieved outputs for completed projects.
3. Effectiveness of project impact: The longer term impacts, which are likely to be achieved on the basis of the immediate achieved results for the recently completed projects. (Ramboll management, 2005)

Evaluations of twinning as an instrument for institution building are consistent and identified similar strengths and weaknesses. Both political factors and committed project actors are necessary for successful twinning. Twinning is described as a unique instrument for targeted international cooperation in technical assistance. Unique in that sense for candidate countries to the EU is that they have to speed up their development to have institution capacities to meet the requirements in the EU acquis by accession. The goal that has to be achieved is clear and easy to communicate by the EU acquis. Problems often occur in systems, methods, management culture and structures in reaching the goal. Challenges how to further build on strengths and how to eliminate weaknesses of twinning is of importance to find additional opportunities for the twinning instrument in technical assistance projects, also in a context outside the EU areas of interest.

2.5 European maritime safety regime

EU's policy on maritime transport has evolved during the lifetime of the union and constitutes a basis for the regulatory framework for the maritime sector to improve competitiveness, safety and security of EU shipping. DG TREN (Directorate General Transport and Energy) is setting the maritime safety agenda which is further elaborated and implemented by the EMSA (European Maritime Safety Agency). EMSA is responsible for carrying out work to improve maritime safety effectiveness

and implementation both in a practical and technical way. MS have organized their maritime safety work in accordance with EU legislation based on International Maritime Organization (IMO) international conventions. Maritime safety as a definition is used and defined using different content in different situations, but will in this research only describe and discuss the areas related to flag state and port state areas of responsibilities. Improvement of quality of flags is a prioritized area by EU to ensure that all MS uphold international rules on ships sailing under their flag. Procedures, guidelines and reporting systems including implementation of international conventions should be uniformly functioning in all MS.

Usage of classification societies who are inspecting and certifying ships as recognized organizations should be in accordance with EU rules. The framework of their technical rules should be in compliance with those of the members of IACS (International Association of Classification Societies) and in accordance with EC Directive 94/57/EC on common rules and standards for ship inspection and survey organizations and for the relevant activities of maritime administrations. Each MS or the recognized organizations acting on its behalf must ensure, when issuing or renewing the relevant safety certificates, that the equipment on board EU ships for which it issues certificates is in accordance with this directive.

Flag states should ensure that vessels registered under their flag conform to international safety conventions, which to a large extent constitute the EU acquis. This conformity control is done through FSI (Flag State Implementation) whereby the flag state after national registration ensures that the vessel conforms to applicable national and international instruments. FSC (Flag State Control) assesses the level of safety and environmental protection of the vessel, its equipment and the way it is operated. As it has been found that not all countries comply properly with their responsibilities as a flag state, a further measure –PSC (Port State Control)- was introduced.

The international community as well as EU assesses the level of maritime safety in the various countries, and the candidate countries specifically, through the records of detained vessels according to the Paris MOU to which Romania, Bulgaria and Turkey will be a party at the date of accession. Statistics of detentions by PSC is consolidated at the Secretariat of the Paris MOU which places those countries with excessive detentions on a black list. The MS average detention rate within the Paris MOU is used by the EC as a standard of an ‘acceptable level’ of detention rate within the EU. The MS average detention rate has between 1999 and 2005 been below 4 % as shown in Table 1.

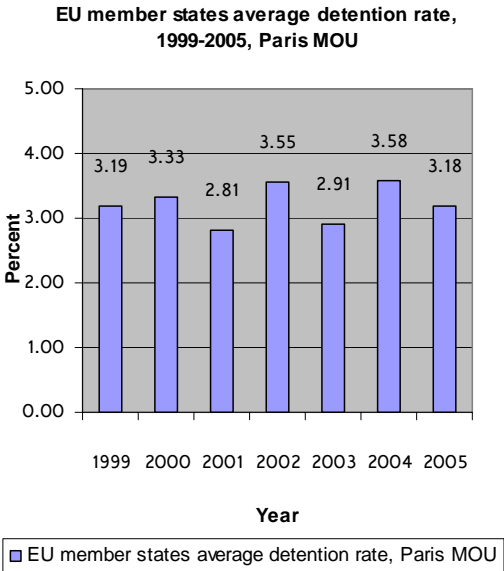


Table 1
(Sources: Paris Memorandum of Understanding)

Commitments and common criteria’s for the MS as a port state is stipulated in EC Directive 95/21/EC on Port State Control, which incorporated the Paris MOU regime, and is in compliance with international conventions and EU legislation on maritime safety. There is an obligation for MS of the EU that PSC are obliged to be conducted on 25 % of vessels calling at their ports. A framework to establish common criteria for PSC with focus on harmonized procedures for inspection and detention has been developed to improve and harmonize the quality and performance of inspections.

The purpose is to help drastically to reduce substandard shipping in the waters under the jurisdiction of Member States by:

- increasing compliance with international and relevant Community legislation on maritime safety, protection of the marine environment and living and working conditions on board ships of all flags,
- establishing common criteria for control of ships by the port State and harmonizing procedures on inspection and detention, taking proper account of the commitments made by the maritime authorities of the Member States under the Paris Memorandum of Understanding on Port State Control (MOU). (Council Directive 95/21/EC on Port State Control)

A consequent high detention rate for Romanian, Bulgarian and Turkish flagged ships was the main reason for the EC's concern over maritime safety in the addressed candidate countries. Weak and insufficient monitoring by an MS of ships flying their flags is a missing link in EU's combating on substandard shipping. This has been the background for the EC Directives on Erika I, II and Prestige and further emphasized in 2005 when EU declared 'zero tolerance' on substandard shipping introducing the Erika III package. These directives were seen to ensure that all MS fully would apply international rules on ships sailing under their flags. Improvements in enforcement mechanisms for flag and port state areas of responsibilities can be achieved if they are seen as parts of other functions/issues that influence maritime safety. Those include institution structure, systems and procedures, review of existing and planned national legislation on maritime safety, management culture, training programmes, examination, certification and more, which the twinning projects have targeted. Special characteristics for twinning on maritime safety are the emphasis on legal harmonisation and the strengthening of administrative structures to apply new procedures to improve the safety performance of the fleets of the BC. The

partnership with an MS twinning partner should result in an effective institution structure, able to adopt, apply and enforce the EU acquis on maritime safety.

2.5.1 Twinning on maritime safety in Romania, Bulgaria and Turkey

Relevant areas, often covering a whole spectrum of maritime safety components, for the BC administration have been identified by the EC. The following areas are a summary of areas in focus in the project fiches for twinning carried out in Romania, Bulgaria and Turkey on maritime safety.

- Review the national legislation, harmonization and implementation of EU acquis with relevant EC Directives.
- Implement effective processes and management for EU best practices.
- Procedures and reporting systems are to be used in a consistent way with manuals and other technical requirements.
- Develop efficient and effective organizational arrangements, management and control processes to strengthen the BC administrations structure.
- Provide training for inspectors in flag state and port state procedures and EU best practices.

Twinning on maritime safety is targeting beneficial state institutions dealing with maritime safety i.e. maritime administrations. As the national political agenda and legal framework is influencing the work of the maritime administration in the BC the responsible ministry dealing with maritime issues is always one of the beneficiaries in twinning. The other beneficiary is the maritime administration that will implement the EU acquis. Focus for twinning activities is on processes to strengthen institutions, reviewing existing legal framework and gain an organisational structure corresponding to a clear communicated goal, i.e. to fulfil all requirements in the EU acquis on maritime safety. If the twinning project results in limited achievements reaching guaranteed results the BC will have weakened position to close the negotiations with the EU on the transport chapter.

The relevance issue of the twinning projects results from a political point of view is obvious which by its design guarantees project joint accountability from the BC. The process to implement and enforce EU acquis in candidate countries is demand driven in accordance with the accession partnership agreements. The role of the twinning instruments is to strengthen and raise the institutions capacity to be able to handle the changes required by accession. Keywords in the institution building process for maritime safety on FSI, FSC and PSC is transfer of know how to develop procedures, conforming to the EU acquis, which are to be applied in a consistent way. Based on experience and methodology implementing EU acquis the MS have developed the best practices. By using an MS experience in twinning the transfer of know how is transferring the MS best practices on how to adjust to changes required by EU acquis on maritime safety. (in this document referred to as EU best practices)

Twinning on maritime safety focuses on institution support, but in some twinning projects procurement of equipment/ establishment of information systems are included. For the countries evaluated in this research only Turkey had a component to establish an information system within the Turkish maritime administration. Recommendations given by the twinning project often result in that the BC can apply for funds through other EU financial instruments than twinning to obtain adequate equipment to perform their duties as required by the EU acquis.

The high detention rate and listing on the Paris MOU black list for Romanian, Bulgarian and Turkish flagged vessels was the major concern by the EC for the countries to effectively implement the requirements under the different maritime conventions and the EU acquis in the field of maritime safety. Flag state and port state areas of responsibilities therefore needed to be considerably improved so these countries had a similar level as other MS's. EC prioritizes firstly the performance of the maritime administrations as a flag state and then as port state. In order to gain credibility in PSC the FSC must work satisfactory.

A strategy for progressively removing substandard shipping from the BC is by twinning focusing first on the BC's obligations as a flag state and then as a port state. It should be a sufficient number of trained inspectors to apply the EU acquis in all MS. The problem with the high detention rate is complex and the main question which has to be asked by the MS twinning partners to improve the situation is: Why so many Romanian, Bulgarian and Turkish substandard vessels allowed by the authorities to continue trading? What is the core of the problem and how can it be solved?

EU acquis within the area emphasizes harmonized procedures for flag state and port state inspections uniformly functioning in all MS. This should be in accordance with relevant EC Directives. The uniformly functioning of FSC and PSC in all MS contains procedures to observe, control, follow up and monitor in a 'critical' way, critical meaning that it should have the ability to detect deviations from what may be considered 'normal'. Procedures, reporting system and actual conduct of inspections are seen as similar whether they are conducted as FSC or as an expanded PSC, they do not change the scope of the inspection though the two types are conducted with different objectives.

The criteria and reasons for decisions that may lead to a detention or other measures should be appraised the same way, independent of who conducts the inspection. The maritime administrations should have enforcement mechanisms to detect and counteract to any threat to maritime safety. When the countries will become a full member within the Paris MOU, the Code of Good Practice for PSC officers should be applied. The purpose of the code is to have a harmonized system when conducting inspections in all MS with the same fundamental principles. Three main principles (integrity, professionalism and transparency) should be applied:

- I. Integrity is the state of moral soundness, honesty and freedom from corrupting influences or motives.

- II. Professionalism is applying accepted professional standards of conduct and technical knowledge. For PSCOs standards of behavior are established by the maritime authority and the general consent of the port States members.
- III. Transparency implies openness and accountability(Paris Memorandum of Understanding on Port State Control)

Documented guidelines for conducting inspections, issued by each national maritime administration are the method used to obtain EU best practices governed by EU acquis for the MS in accordance with the Paris MOU Code of Good Practice. If there are inconsistencies in the documented procedures and how the inspection or survey is actually carried out is one of the areas that have to be targeted by the twinning project to improve maritime safety. One of the components in twinning is training and the purpose is to transfer know how in procedures and EU best practices. Lecturers for the training activities come from the MS administration and one important part in twinning is that some training is carried out in an MS so the BC can become familiar with the operation of the EU system. The purpose of the training component is to ensure that the BC's maritime administration can sustain the project results by focusing some of the activities on training for trainers. Documented procedures, routine and how this is transformed into practice should be consistent. Trained inspectors, trainers and auditors will further strengthen consistency in procedures and guarantee to ensure future sustainability.

Without an organizational structure, that reflects an efficient and effective adoption of the EU acquis in compliance with national legislation, the implementation of well functioning FSI, FSC and PSC requirements can not be enforced. A maritime administration should have arrangements, management and a control structure consisting of various components that have been set up to observe and monitor maritime safety in accordance with EU best practices. Methods used in organisational diagnosis to develop effective organizational arrangements,

management and control procedures to strengthen a maritime administration's structure are based on observations. Observations constitute a basis for further evaluation, decision-making and action.

2.5.2 Evaluating the impact of twinning on maritime safety

For the purpose of evaluating the impact of twinning on maritime safety this research covers aspects related to the activities carried out by twinning and how it improved the BC's flag state and port state areas of responsibilities.

Three broad categories will be considered in this research to evaluate which impact the EU maritime safety regime has had using twinning as a technical assistance instrument in candidate countries to the EU.

[A] Twinning impact of priorities to align with the EU acquis

[B] Evaluation of BC's performance as a flag state and port state using twinning

[C] Impact of twinning methodology and the twinning instrument to raise the level of maritime safety

Within each category basic assessment means are elaborated. The following sections describe and outline how the assessment is carried out in this study.

[A] Twinning impact of priorities to align with the EU acquis

This evaluation will not go into depth on fulfillment of project guaranteed results or objectives but evaluating the projects impact of its priorities for improving maritime safety. Those priorities are elaborated by the EC to speed up the candidate country's progress to join the EU. A significant item is the ratification process of EU acquis and the twinning projects results in reviewing the national legislation to meet EU legislative priorities. Out of transposition follows needs to reorganize structures, functions and methods in existing organizational structures. When implementing those changes twinning should play a central role. The evaluation carried out in this study will focus on the twinning approach to institution support and capacity building.

Effectiveness of twinning impact in this evaluation category is measuring long term and sustainable impacts which have been achieved by fulfilling guaranteed results and objectives within the completed project. The following factors will be taken into consideration; How does twinning contribute to yield improved operational results in improving maritime safety by institutional support and capacity development? Were the right things done in the right way?

[B] Evaluation of BC's performance as a flag state and port state using twinning

EU was during the period 1999-2005 regularly and considerably reinforcing its legislative framework to combat substandard shipping and give Europe better protection against the risks of accidents. As a member of EU each MS should have a fleet that is considered to be safe and in accordance with the EU maritime safety regime. High detention rates for MS are causing lack in credibility within the EU maritime safety regime. Political pressure for the candidate countries to improve their fleet's safety is therefore high up on the agenda in the process to become an MS in the EU. Twinning fiches evaluated in this research reflects that twinning commenced several inputs to decrease the candidate countries high detention rates.

Means to assess maritime safety in this research is through the records of detained vessels using statistics on Romanian, Bulgarian and Turkish flagged vessels collected from the Paris MOU and the number of vessels registered under national flag collected from the Institute of Shipping Economics and Logistics. To assess the impact of a twinning project's work to lower the countries high detention rate in accordance with Paris MOU the following factors will be taken into considerations; Did the countries performance as a flag state and port state became better than they were before the twinning project? Which effects did the EU maritime safety regime have on substandard shipping?

[C] Impact of twinning methodology and the twinning instrument to raise the level of maritime safety

Twinning is an instrument for technical assistance and its focus is development in all relevant parts of the institution to reach results. By using experience and knowledge from an MS a systematic method for evaluating and comparing processes of one maritime administration to another is initialized by twinning. A close cooperation with the BC and the involvement of the responsible ministry should be a guarantee for joint accountability of project results. Twinning methodology is organized in a way that constant progress can be measured and monitored by its quarterly reporting. Twinning involves transfer of know how in providing activities for training, training of trainers as well as arranging study visits to an MS. The sooner the BC becomes familiar with the operation of the EU system, the easier it will be for the twinning to yield concrete operational results linked to the EU acquis adoption. Training components within twinning add values and new perspectives such as increased knowledge, raised awareness, job behaviour effects and managerial changes that influence effectiveness.

Effectiveness in this evaluation category measures immediate results that can be detected on the basis of achieved outputs. As a means to assess impact of twinning methodology and the twinning instrument for the chosen projects the following factors will be taken into consideration; Which immediate outputs can be seen as a result of twinning? Which relevance has twinning got to raise maritime safety?

Chapter 3 - Romania

3.1 Prevailing situation before the twinning project

Twinning project facts				
Project no	Project name	Implemented	Member state institution	Candidate country institution
RO99/IB-TR-01	Maritime Safety	2000-2002	Swedish Maritime Administration, Sweden (lead partner) Spanish Ministry of Industry, Spain (junior partner)	1) Ministry of Public Works, Transport and Housing 2) Inspectorate for Civil Navigation (ICN)
RO2001/IB/TR-02	Improvement of maritime and inland waterway safety and institution building in the field of maritime administration	2003-2005	Swedish Maritime Administration	1) Ministry of Transport 2) Romanian Naval Authority (RNA)

Table 2 – Twinning project facts for Romania

(Sources: European Commission Standard twinning project fiches on Maritime Safety)

3.1.1 Background

Romania's fleet comprised in the beginning of the 1990's of more than 200 vessels of which the majority were owned by the state. The Romanian fleet was characterized in the end of the 1990's of vessels of more than 20 years old. Romania was at the low end of the Paris MOU detention list with a detention rate of 29.6% in 1999. The situation of detentions could be described as caused by the collapse of the previous state structure in the early 1990's which did not have sufficient control and allowed less serious ship operators to operate vessels under the Romanian flag. The process of phasing out substandard vessels started in the late 1990's. The size of the Romania fleet was the reason why Romania was listed, up to the end of year 2000 as one of the 35 most important maritime countries and territories by UNCTAD.

Romania was listed at the black list of Paris MOU and moved to the grey list in 2006.

The accession partnership agreement for Romania was signed in 1998. All major EU acquis on maritime safety had already at the start of the twinning project in 2000 been transposed into the Romanian legislation. With regard to this, several governmental decisions and regulations were adopted, aiming at modernizing the

fleet as well as regulating the administration. Identified gaps in the national legislation to conform to EU acquis were to be addressed by twinning. Effects of the changes in the legislation would lead to strengthen the Romanian authorities in charge of maritime safety to strengthen their enforcement mechanisms to implement EU acquis and EU best practices. To gain sustainable results in strengthening the institution capacity the reasons behind the low maritime safety performance of the Romanian institutions had to be addressed. Recommendations on how to improve the situation had to be elaborated. This was the main problem that was addressed in the twinning project 'RO99/IB-TR-01' which was the first one commenced on maritime safety in Romania, followed by the project 'RO2001/IB/TR-02'.

3.1.2 Romanian institutional capacities for maritime safety

Institution support by twinning was decided to target the Romanian institutions working with maritime safety with focus to implement, enforce and strengthening administrative functions in the transposition of EU acquis. All institutions to be targeted were subordinated to the Ministry of Public Works, Transport and Housing. In Romania the following institutions were engaged in carrying out maritime safety activities when the first twinning project 'RO99/IB-TR-01' started in 2000;

1. **The Ministry of Public Works, Transport and Housing, Directorate for Regulation and Quality of Services in Seaports and Maritime Navigation**, was the body who issued the ISM (International Safety Management) Code certificate and authorized agreements with recognized organizations for audits under the ISM Code. They were responsible for drafting legal documents for the maritime sector and seaport operation and administration; preparation of sectoral strategies and policies for the maritime sector and seaports. The institution was financed via the state budget.
2. **Romanian Register of Ships (RNR)** was the authorized body by the Ministry to conduct statutory surveys and issue certificates relating to IMO instruments, with the exception of the ISM Code. RNR conducted the classification of vessels as an

independent Romanian classification society. The institution was financed by its own budget.

3. **Inspectorate for Civil Navigation (ICN)**, whose responsibilities are to issue regulations for the civil navigation, implement legislation in force and to monitor the legal framework. A sub organisation of ICN was the **Harbour Masters Office**, who carried out PSC inspections according to the IMO resolution on PSC. PSC was carried out on Romanian vessels, which was contrary to the EC Directives on PSC. The institution was partially financed via the state budget and the rest by its own budget.

By accession the organizational structure should respond to have mechanisms to observe and monitor maritime safety in a critical and independent way in accordance with EU acquis. The Romanian organization as it looked before the twinning project started up did not comply with EU standards in several areas. When many institutions share roles and responsibilities for FSI, FSC and PSC, transparency as well as other functions for control were unclear. Independence was not guaranteed by the institution's financing, particularly ICN, and conflict of interests could easily occur. No institution had a clear described monitoring or independent role to implement processes and procedures.

3.1.3 Procedures

Documented procedures, guidelines and basic reporting systems including implementation of international conventions, were in place in Romania for both FSC and PSC inspections when the first twinning project 'RO99/IB-TR-01' started.

Documented procedures existed to review reasons for determining unseaworthy vessels for detention or other measures before the decision was taken by the authorities. The high detention rate of Romanian flagged vessels in the Paris MOU indicated that the FSC documented procedures did not reflect how inspections were carried out in relation to how the inspectors reviewed the situation to take decisions. Due to inconsistencies in procedures one of the objectives to be targeted by twinning was to gain consistency. The Romanian institutions had established a framework of

technical rules in compliance with those of IACS, which are used by MS to conduct statutory surveys. RNR, which was the authorized institution to carry out statutory surveys, was not a member of IACS in 2000 when the first twinning project started. They were issuing certificates relating to the IMO conventions, with the exception of the ISM certificate. The role as an authorized institution to issue certificates in accordance with international conventions combined with their role as an independent classification society was not in compliance with EU acquis.

3.1.4 Human resources and competence of staff

An organizational structure with several different institutions being engaged in flag state and port state activities had an impact on salary levels that differed widely between the organizations carrying out similar activities. Integrity of the inspectors was a matter of concern when making the decision for a detention or determining an unseaworthy vessel. Competence of the staff was estimated as high and for example all inspectors at RNR had a background either as naval architects or as engineers. A majority of the staff had basic knowledge on EU best practices which they applied when carrying out surveys. Usage in English was wide spread in all institutions and all reporting in connection to the inspections was done in English.

3.2 Results from the twinning project

Means to assess maritime safety for the EC is through the records of detained vessels according to the Paris MOU. During the first twinning project 'RO99/IB-TR-01' the detentions of Romanian flagged vessels increased instead of decreased. The main reasons for the worsening situation were assessed by the EC as being caused by the Romanian institutions capacities going through a change of their flag state responsibilities and lack of enforcement tools based on the national legislation. A first result on a decreased detention rate was seen when the second twinning project 'RO2001/IB/TR-02' started in 2003 and was a result from the work carried out by its predecessor.

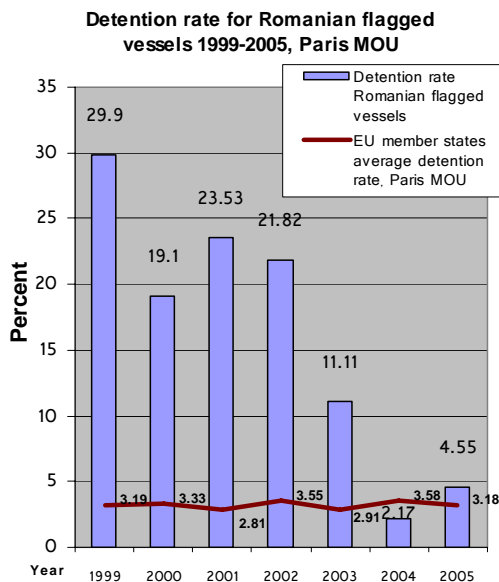


Table 3

(Sources: Paris Memorandum of Understanding)

As shown in Table 3 the gap between the detention rate for Romanian flagged vessels within the Paris MOU and the MS average detention rate did not meet until year 2004. The notable decrease in detention rate of Romanian flagged vessels between the years 2003 and 2005 made Romania accepted as a member with cooperative status in the Paris MOU by reasons that maritime safety had increased. As a result of the first twinning project ‘RO99/IB-TR-01’ the new organisational structure was established in 2002. RNA (Romanian Naval Authority) was created as an independent maritime administration after a merger of ICN and RNR. RNA was made responsible for its revenues which differed from the former financial arrangements. ICN was before the merger financed via the rigid and small state budget. The change of how the organization raised its fund set free financial resources.

Active measures were taken by the new established RNA to lower the Romanian detention rate within the Paris MOU. A campaign to improve FSC inspections targeting all Romanian flagged vessels with a tougher inspections regime was

initiated in 2003. By introducing new rules issued simultaneously with the campaign, Romanian vessels detained twice by PSC or FSC during a twelve month period were denied to continue sail under Romanian flag. Further, at a later stage in 2004, the Ministry issued regulations stating that vessels more than twenty years of age should be denied registry under the Romanian flag. Vessels older than twenty years should undertake an annual supplementary inspection in addition to the regular mandatory surveys, intermediate surveys and annual inspections. As a consequence of this, the fleet of Romanian national flag rapidly decreased due to that substandard vessels being sold out or scrapped. In Romania's case several substandard vessels were sold to owners under Syrian or Georgian flag. Following the tougher inspection regime it influenced both quality and quantity of FSC and PSC carried out by RNA. An increase of detentions of foreign flagged vessels calling Romanian ports was another result.

3.2.1 Romanian institutional capacities for maritime safety

The main objectives in relation to maritime safety issues as a flag state and port state were the following for the first twinning project 'RO99/IB-TR-01';

- Assist the Romanian Authorities in further harmonisation with the EC legislation regarding maritime safety, including implementation and enforcement;
- Strengthen the institutional capacity of the Inspectorate for Civil Navigation (INC) and the Romanian Register of Shipping (RNR);
- Assist the Romanian Authorities in the transposition into the national legislation and enforcement of the EU legislation regarding the Flag State Implementation and Port State Control. (CD - European Commission, EuropeAid/DG Enlargement)

The main objectives covering maritime safety for the second twinning project 'RO/001/IB/TR-02' were to implement recommendations issued by its predecessor. Progress was made by the initial twinning project in the field of legislative alignment but further alignment with EU acquis was still key issues for Romania to implement, particularly in the field of FSI/FSC. The twinning approach was to provide continuous support and assistance to strengthen administrative structures where gaps had been identified for a well functioning implementation of the legislation.

Establishment of well functioning organisational and administrative structures was critical to start the process to improve maritime safety, which was recommended by the twinning project 'RO99/IB-TR-01'. This meant that a proper and independent maritime administration should be established including a separate independent maritime safety inspectorate and to cease RNR's role as a classification society. The independent maritime administration RNA was set up in 2002 as a merger of ICN and RNR. This was a result of an agreed compliance schedule that was the background for the new Romanian national law on naval transport which enabled establishment of RNA and its responsibilities. Establishment of a single maritime administration dealing with both flag state and port state aspects of ship safety would meet priorities to align with EU acquis. Dual roles for the institutions dealing with maritime safety were in this context eliminated. A new organisation improved the handling and issuing of the ISM certificate, which now became RNA's responsibility. By doing so the problem of independence as well as links between the official and private sector was reduced which lead to that quality of the inspections gained accelerated progress to improve. RNA raised its own funds within the new organisational structure and had responsibility for its own budget which safeguarded the institution's independence. Reorganisation of the Romanian institutions dealing with maritime safety is a direct result from the recommendations given by the twinning project. This lead to RNA having to establish an organizational structure dealing with issues never dealt with before and this required new departments, functions, responsibilities, and methods. The institutions that have had both

authoritative and commercial duties were transformed to an independent maritime administration with defined priorities and responsibilities set out in a regulatory framework. An active involvement of the twinning project and contributions from the BC's gave direct impact on yielding improved operational results. The twinning partnership gave necessary input of familiarization with maritime safety operations within the EU system. Contributions of twinning to obtain long term results could be described as a catalyst for putting issues high up on the Romanian political agenda to change the existing national legal framework which was the major cause for the weak implementation.

To ensure future sustainability of the enforcement mechanisms focus of the next twinning project on maritime safety 'RO2001/IB/TR-02' was to further review the maritime safety legislation and prepare an action plan to implement those changes within RNA. The purpose was to strengthen the new established institution to gain a strengthened role and capacity to handle the requirements that followed by EU acquis. New EC Directives on Erika I, II and Prestige packages addressed the Romanian legislation with new changes to fulfill EU acquis, which were carried out within the twinning project 'RO2001/IB/TR-02'. Those EC Directives had to be implemented and influenced the organizational structure with changes. There was no clear national maritime policy when the initial twinning project 'RO99/IB-TR-01' was finalised. The lack of a policy to guide decision-making at lower levels would most likely constitute problems to the sustainability of efforts to improve maritime safety. In order to secure independent decision making and facilitate maintenance of an acceptable level of maritime safety, the maritime safety inspectorate within RNA was given full authority and accountability for decisions concerning safety of individual vessels. The MS twinning partner assisted in the drafting of this policy that was delivered after the twinning project 'RO2001/IB/TR-02' was finalized. Responsibility for completion of remaining steps in the process was then transferred to the responsible Romanian Ministry.

3.2.2 Procedures

It was shown by procedures used for inspections that they indicated a certain discrepancy between know how and how the inspections were actually carried out. An assessment was therefore conducted by the twinning project to find out what caused the inconsistencies. It was found that the technical rules were in compliance with IACS but the organisation carrying out surveys were not a member of IACS. Further the ISM certification was conducted more or less as a desk exercise with little connection to the actual technical status of the vessels. In a case of a detained vessel from a Romanian inspection the assessment revealed a clean audit report from the authorized classification society and there was a lack of verifying follow up procedures. Pressure from ship-owners to speed up the inspection process, as spare parts took a long time to obtain, was found to influence the inspections and decisions for detentions or other measures. In this context it could be summarized that the link between ship safety and independent inspections had showed shortages in the integrity of the inspectors and a low level of transparency. Further, there were weak procedures to control, follow up and monitor in a critical way. Experience from an MS carrying out activities related to assess procedures and its consistencies was important to target problem areas. It also created awareness, added new perspectives and raised the knowledge for the BC to perform their duties according to EU best practices.

3.2.3 Human resources and competence of staff

The number of staff dealing with flag state and port state inspections was estimated to be sufficient to deal with the maritime sector in Romania with an adequate competence level. Training carried out within the initial twinning project 'RO99/IB-TR-01' targeted areas, such as enhancing Romanian capacities for reporting procedures within the Paris MOU, increase the competence among trainers on PSC and train safety inspectors and auditors. The most important result was that the project gave a number of recommendations in relation to how the competence of staff could be maintained and improved in the new organisational structure. The

second twinning project 'RO2001/IB/TR-02' could in this context better target the areas where the inspectors needed additional knowledge provided by the MS by transfer of know how to improve the outcome of the duties performed by the Romanian inspectors. A result of all training components should be enhanced quality and improved methods for both FSC and PSC. For each training component it were identified how the trainees was to be selected and how many should be trained. In accordance with the Romanian institutional capacities the project 'RO2001/IB/TR-02' concentrated on training for FSI & FSC procedures and the ISM Code and how to issue certificates. As a guarantee for sustainability within the institution focus was set on training for trainers.

3.2.4 Evaluating the impact on maritime safety from the twinning projects RO99/IB-TR-01 and RO2001/IB/TR-02

The overall assessment performed by DG Enlargement and EuropeAid was summarized as excellent results for the project 'RO99/IB-TR-01'. The results from the twinning project are summarized as follows:

- Effective implementation of Port State Control and Flag State Implementation requirements including transposition of the relevant EU directives and regulations, secondary legislation and enforcement institution building;
- Compliance schedule for further adoption and implementation of the acquis communautaire in the field of maritime safety;
- Strengthened institutions (mostly Inspectorate for Civil Navigation and Romanian Register of Ships), including clarification of their respective role with regards to the implementation of the acquis, organisational structure and human resources;
- A number of trained safety inspectors and auditors;

- A number of trained trainers, to ensure future sustainability. (European Commission, EuropeAid/DG Enlargement -CD)

The project 'RO2001/IB/TR-02' was evaluated to have given the following results on its activities on FSC/FSI and PSC:

- Improved capacity of the Romanian Authorities to transpose and implement the acquis, particularly in the field of Flag State Control. (CD - European Commission, EuropeAid/DG Enlargement)

For the purpose of this research three broad categories have been elaborated to evaluate the impact of twinning on maritime safety (these categories are elaborated in detail in Chapter 2, section 2.5.2). With reference to the two twinning projects carried out in Romania the following conclusions have been identified for improving maritime safety in Romania by the twinning instrument.

[A] Twinning impact of priorities to align with the EU acquis

In Romania's case a number of activities lead to conclusions that were transformed into recommendations that changed the national Romanian legislation on maritime safety. Without reviewing the legislation, the Romanian institutions would not have been able to adjust and fulfil requirements within a new system based on EU acquis. MS contributions consisted of evaluating the situation in Romania where several problem areas were identified.

After the twinning project highlighted problems, it resulted in concrete measures how to develop new functions supported by legislation that would contribute erasing the core of the problem. Recommendations given by the project gave an impact due to the fact that they were accompanied by legal reforms in Romania. Focus on changing organisational structure and creating an independent maritime administration with clear responsibilities governed by the new legislation strengthened the Romanian enforcement mechanisms and yielded improved

operational results. The result that followed was an institution with a basis to conduct independent inspections. In this context impact of twinning was high and twinning transformed inputs that created sustainable outputs. Further capacity development and review of the legislation for EC Directives was addressed by the project 'RO2001/IB/TR-02'.

Continuous support and assistance from an MS gave results of raised institutional capacities for maritime safety. The twinning focus to raise RNA's capacities to have a well functioning organizational structure to handle new provisions that followed by implementation of EU acquis created new functions. Recommendations, but above all training, to raise the capacity to handle the new functions gave impact to yield operational results to improve maritime safety.

[B] Evaluation of BC's performance as a flag state and port state using twinning

As described the political pressure for the candidate countries to improve their fleet safety is high up on the agenda when negotiating on the transport chapter to become a member in the EU. When the first twinning project was initiated in 1999 the Romanian flagged vessels showed a detention rate of nearly 30% and were on the Paris MOU's black list. The detention rate came to a satisfactory MS average detention level in year 2004. The problem with the high detention rate of Romanian flagged vessels was complex and the activities within the twinning project 'RO99/IB-TR-01' can be described as focused on strategic direction for strengthening Romania as a flag state which was further developed within the project 'RO2001/IB/TR-02'.

Changes in new structures for FSI implemented by the twinning project combined with further national Romanian measures in 2003 and 2004 gave Romania an accepted detention rate to become a member of the Paris MOU. The decreased detention rate was assessed by the EC as the maritime safety was improved and was an important part when Romania closed the negotiations for the transport chapter with the EU. It should however be noted that the tougher inspection regime in

Romania had a high impact on the number of vessels registered under national flag. Compared with the number of vessels under Romanian national flag, which was 215 vessels in 1997, as Table 4 shows, it was only 18 vessels registered under national flag in 2006. Selling out the majority part of the substandard fleet, which was the result in Romania, was lowering the detention rate for Romanian flagged vessels under the Paris MOU but was not contributing to combat substandard shipping in both a global and European perspective.

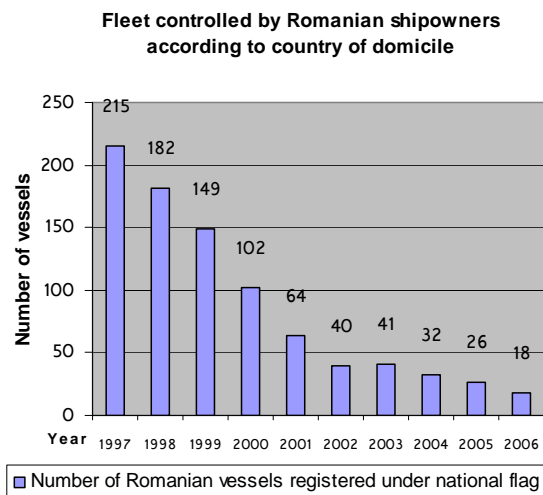


Table 4
(Sources: Institute of Shipping Economics and Logistics (ISL))

By reorganization and the establishment of RNA the PSC in Romania enhanced quality by gaining a more clear role, which increased transparency and development of tools achieving Paris MOU standards.

[C] Impact of twinning methodology and the twinning instrument to raise the level of maritime safety

Changes in legislation would have been fruitless if not a well functioning implementation was guaranteed. Control and monitoring processes went through transformation by twinning. Firstly, the area of procedures and its consistency were addressed by twinning. With the MS assistance the objective was to set up harmonised procedures for inspections and decision for detentions in accordance with established rules and conventions. Training and independence of the maritime

administrations constituted vital parts to obtain consistency in the procedures applied by Romanian inspectors. The links between ship safety and inspections were assessed and targeted. One approach to target the problem area was to raise familiarization with the system applied to carry out duties as an MS maritime administration. In this context twinning methodology transferred to the human resources new standards, perspectives and increased knowledge by using MS experts. An adequate number of trained inspectors and trainers would guarantee the impact of training and its sustainability. Based on the experience and knowledge of an MS that was already familiar with the EU operational system gave Romania a different input than if the training activities would have been carried out by national experts. The demand driven process to decrease the Romanian detention rate can be described as one of the factors that the recommendations given by twinning were followed by immediate actions from a political level which created an impact. A new established maritime administration, RNA, gave an incentive to change management culture and behaviours. Romania introduced a tougher inspection regime in 2003 and 2004 that set up new structures for the institution to adopt. Progress towards accession required commitment to meet the EU acquis which was clearly shown in Romania's case.

Chapter 4 - Bulgaria

4.1 Prevailing situation before the twinning project

Twinning project facts				
Project no	Project name	Implemented	Member state institution	Candidate country institution
BG/IB/2001-TR-01	Maritime Safety institution building	2002-2004	Ministry van Transport, Public Works and Water Management, Netherlands	1)Ministry of Transport and Communication 2)Executive Agency for Maritime Administration (EAMA)

Table 5 – Twinning project facts for Bulgaria

(Sources: European Commission Standard twinning project fiches on Maritime Safety)

4.1.1 Background

The Bulgarian fleet consisted of in the beginning of the 1990's of about 100 vessels and in this research, compared with Romania and Turkey, it was the country with the smallest fleet when the accession partnership agreement was signed with EU in 1997. The safety performance of vessels under the Bulgarian flag was a matter of concern for the EC and the detention rate in accordance with the Paris MOU about 17 % before the country signed the accession partnership agreement. Bulgarian registered vessels were on the Paris MOU black list or grey list between 1999 and 2005. Progress was reported, by the EC, already in 1999 in fair aligning the Bulgarian legislation on maritime safety, but showed no concrete results in raising the low safety performance of vessels registered under Bulgarian national flag. The Bulgarian Merchant Shipping Code constituted a basis for the Bulgarian maritime administration and its responsibilities and was adopted in 1999. For the purpose to further transpose a number of EU acquis in the field of maritime safety to Bulgarian legislation the Law on the Amendment of the Merchant Shipping Code was adopted in 2001. The new code with its amendments created new obligations that required new administrative structures, where Bulgaria was lacking experience.

The independence of the Bulgarian maritime administrations inspectorate, as the responsible institution for FSC and PSC, was not ensured because the majority of the

Bulgarian national flagged vessels belonged to a state owned company (Navybulgar). The Bulgarian maritime administration launched the following measures in 2000 to improve their capabilities as a flag state and port state;

- Development of a training program for PSC inspectors
- Initializing privatization procedures for the state owned company Navybulgar

Despite the Bulgarian commitment to improve maritime safety their independence as a flag state was considered by the EC to worsening as well as emphasizing the gap to comply with EU acquis. While the internal Bulgarian political process continued to privatize Navybulgar, the focus for twinning was to align the national legislation with EU acquis and improve the enforcement mechanisms for implementation. To improve the Bulgarian maritime safety record a continuous work for capacity building were to be carried out by twinning.

4.1.2 Bulgarian institutional capacities for maritime safety

The institutional support and capacity building by the twinning project was targeting the maritime administration, **Executive Agency for Maritime Administration (EAMA)**, when the twinning project ‘BG/IB 2001-TR-01’ started. EAMA was established in 1999 under the **Ministry of Transport and Communications**. Within EAMA regional offices were responsible for the flag state and port state activities. EAMA carried out inspections, surveys, approvals, and audits. The recognized organizations used for flag state related activities were mainly delegated classification societies as were members in IACS. Monitoring of classification societies was performed by EAMA by established procedures.

Lack of appropriate financial resources to carry out investigations of serious casualties was acknowledged by EAMA in their self assessment form on flag state performance submitted to IMO in 2001. Lack of funds was taken up by EC as a hinder for EAMA for proper execution of its obligations. Problems identified were among others that technical databases needed to be modernized to comply with EU standards. EAMA’s capacity to adopt and implement existing EU acquis and new EC

Directives had to be considered. The organizational structure was designed in accordance with the adopted Merchant Shipping Law that was in alignment with the EU acquis. Lack of experience of the Bulgarian institution to manage the implementation of EU acquis was considered by the EC to be strengthened in order to improve maritime safety in Bulgaria.

4.1.3 Procedures

Bulgaria had documented procedures, guidelines and an existing technical database in place for making entries regarding inspections when the twinning project 'BG/IB/2001-TR-01' was initiated. The state owned fleet by the shipping company Navybulgar controlled up to 90% of the fleet registered under Bulgarian flag. The flag state could in this context be seen as acting both as the controlling and controlled entity where the state acted as a controller on Bulgarian flagged ships. At the same time being the owner of the same ships was the state was who also was in the position of the controlled entity. Conflict of interests carrying out flag state responsibilities was clear and showed inconsistent results on how to use procedures within EAMA. Familiarization with EU best practices was low. Harmonized procedures to monitor maritime safety were not in accordance with EU acquis. Having an independent maritime inspectorate would raise the integrity, professionalism and transparency of their inspections as well as gaining consistency in procedures. Improving the performance of the Bulgarian procedures firstly as a flag state was a priority from the EC's side so Bulgaria could gain credibility and in carrying out PSC.

4.1.4 Human resources and competence of staff

The number of human resources dealing with FSC and PSC was seen to be sufficient to deal with the workload required by the maritime sector in Bulgaria. The competence level, knowledge and usage of English were evaluated by the EC as qualified. The inspectors were working in different regional offices under EAMA. The lack of knowledge and experience in carrying out inspections as required by the EU acquis and Paris MOU resulted in that twinning focused on training to raise the

familiarization with EU best practices. Several activities were to be focused on adding new perspectives within the existing management culture to obtain better structures. These were the major objectives for the twinning project to improve.

4.2 Results from the twinning project

Means to assess maritime safety is through the records of detained vessels according to the Paris MOU. Compared with Romania and Turkey, Bulgaria showed the lowest figures of their detention rate, with an average of about 10% between 1999 and 2005. The independence of Bulgaria as a flag state was not guaranteed by its existing structure and until the internal political processes were solved Bulgaria could not fully meet the EU acquis. In 2001, the year before the twinning project 'BG/IB/2001-TR-01' started, the detentions of Bulgarian flagged vessels increased to 15,7% bringing Bulgaria back to a level close to that of 1998, which was 19.7%.

Conclusions were made by EC in their regular reports that this sharp decrease in detention rates was an attribute of important efforts made by Bulgaria to improve the safety record, through the adoption and start of implementation of new policies and plans to strengthen their administrative structures and institution capacities. The following years the detention rate fell, but was still over the MS average detention rate according to the Paris MOU. Bulgaria was on the Paris MOU black list when the twinning project initiated and at the grey list when the project terminated. The detention rate for Bulgarian flagged vessels between 1999 and 2005 compared with the MS's average detention rate is shown in Table 6.

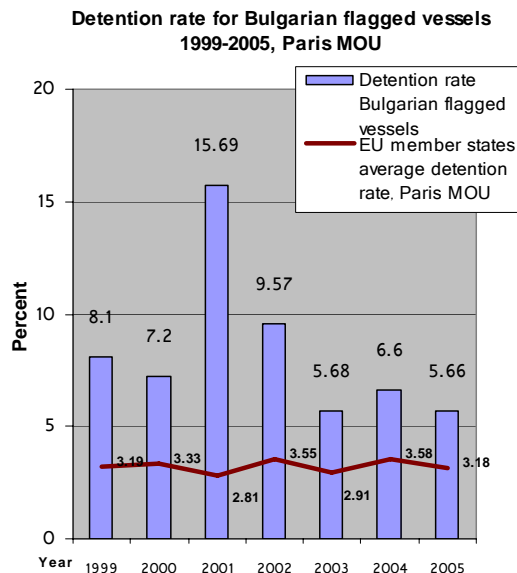


Table 6

(Sources: Paris Memorandum of Understanding)

Paris MOU records of the detention rate for Bulgarian flagged vessels entitled training programs for the Bulgarian flag state and port state inspectors, partially commenced within the twinning project ‘BG/IB/2001-TR-01’ but also commenced directly by EAMA. Capacity building within EAMA was a major tool for twinning to improve the Bulgarian maritime safety records. To gain results an action plan for maritime safety was adopted in 2003 by the Bulgarian Parliament and a plan for scrapping substandard vessels at Navybulgar, which would further improve the management and safety record of the national fleet.

4.2.1 Bulgarian institutional capacities for maritime safety

The main objective in relation to maritime safety issues were the following for the twinning project on maritime safety:

To strengthen the capacity of the Bulgarian Maritime Administration to achieve international standards of Flag State Implementation (FSI), Port State Control (PSC). (European Commission, EuropeAid/DG Enlargement - CD)

Dedication of Bulgaria was shown by significant efforts and commitment on a political level to improve their performance on maritime safety. When adopting the law on amendments of the Merchant Shipping Code, the Bulgarian Ministry of Transport followed up with concrete measures with an action plan, adopted in 2003, to improve maritime safety performance. A framework legislation for maritime safety in accordance with the EU acquis was largely in place when the twinning project 'BG/IB/2001-TR-01' started up its activities.

Privatization plans for Navybulgar which would guarantee the independence of the Bulgarian maritime safety inspectorate, were initiated on a political level in 2000 but were not in force when the twinning project ended in 2004. The internal political process to privatize the Bulgarian fleet was not in force by accession in 2007. Thus the Bulgarian dedication, internal political factors delayed the progress to fully comply with EU acquis. The situation with the state owned fleet and lack of funds for EAMA had to be solved to guarantee integrity, professionalism and transparency for inspections to be carried out in accordance with EU best practices. Lack of financial resources was during the twinning project lifetime a hinder for EAMA's proper execution of their duties as required by the EU acquis. This concerned also the PSC related responsibilities. For example there was no proper follow up on Bulgarian flagged vessels detained in foreign ports.

New EC Directives on Erika I, II and Prestige packages were introduced during the twinning project lifetime. The legal framework and organizational structures were in place in Bulgaria, but there was a lack of experience implementing the responsibilities that followed. The work of the twinning project was targeting the compliance of the Bulgarian legislation and its implementation with EU acquis. Possible gaps between EU acquis and the national legislation were to be identified. Twinning and the MS experience on implementing EU acquis acted as a catalyst to assess and target the reasons behind the low maritime safety performance. The approach of the twinning project' was reviewing the existing and planned Bulgarian

legislation concerning every aspect of maritime safety by identified gaps and feasible divergence from the EU acquis and issue recommendations to decrease those gaps. Twinning brought up identified shortages high up on the political agenda for changes that would influence the whole chain from legislation to implementation. In Bulgaria's case focus for several twinning activities was set on capacity development within the institution to gain experience to achieve EU best practices for carrying out flag state and port state related activities. One advantage of having an MS engaged in this context was to increase the familiarization of maritime operations within the EU system. Twinning guaranteed by their approach tools for EAMA to further strengthen their capacity, which would create accelerated progress to improve their maritime safety work.

4.2.2 Procedures

To identify missing links between ship safety and inspections the twinning project started its work with an analysis of the existing procedures and a review of the situation in accordance with the flag state performance self-assessment form as Bulgaria submitted to IMO in 2001. It was found that technical rules were in compliance with those of IACS, but the inspections showed inconsistencies between documented procedures and how they were actually carried out. Identified problems were EAMA's lack of an adequate platform and a different management culture to perform independent inspections. The state owned fleet and its late privatization before Bulgaria became a member in the EU 2007 was not guaranteeing independent inspections. Therefore EU took a decision in 2006 that flag state inspections were to be carried out only by classification societies until the question of EAMA's independence was guaranteed.

The twinning project focused on how to develop the management culture within the institution and to raise the inspector's familiarization on how operational duties were carried out within the EU system with the purpose for Bulgaria to achieve Paris MOU standards. Results of twinning were in this context creation of a basis for well functioning enforcement mechanisms that would have ability to detect and act upon

substandard vessels in accordance with EU best practices. The goal was to achieve accelerated progress in preparation for execution and to improve the professional know how by training on new requirements that followed by the accession to the EU. Apart from gaining experience from the MS, several activities targeted the BC to secure independent decision making to facilitate an acceptable level of maritime safety. To perform PSC, required by the EU acquis, Bulgaria had to back up their inspections with adequate equipment which was recommended by the twinning project. To gain an impact the implementation of EU best practices has to be followed by appropriate changes in the legislation. For Bulgaria the delayed privatization process of Navybulgar delayed the results from gaining experience on performing inspections in accordance with EU best practices.

4.2.3 Human resources and competence of staff

The number of staff dealing with inspections on FSC and PSC was estimated sufficient to deal with the needs of the maritime sector in Bulgaria. Training carried out within the twinning project mainly addressed increased knowledge of and familiarization with EU best practices. A key issue was to gain consistency in procedures required by the EU acquis. The link between ship safety and the inspectorate's independence to carry out their duties according to EU best practices was targeted by twinning by preparing the EAMA with an adequate platform based on increased knowledge that added new perspectives and awareness that would contribute to changes. Training in technical standards was emphasized but the main focus was set on how the practical implementation was carried out in accordance with Paris MOU and how Bulgaria could improve as both a flag state and port state. This would secure the integrity, professionalism and transparency of the Bulgarian inspections to be carried out in accordance with EU best practices. Selection of trainees and trainers were done by the MS with the goal to reach a sufficient number that could guarantee sustainability. Study visits in an MS were arranged within the twinning project to raise the familiarization with the EU operative system on maritime safety. Twinning results contributed to a change of behavior in job culture,

raised the professional knowledge and added new perspectives for EAMA's staff beyond the period of the twinning project.

4.2.4 Evaluating the impact on maritime safety from the twinning project BG/IB/2001-TR-01

The overall assessment performed by DG Enlargement and EuropeAid was rated as very successful for the project ‘‘BG/IB/2001-TR-01’’. The results of the twinning project are summarized on their CD as follows;

- The compliance of national legislation with European directives on Flag State, Port State and Coastal State controls:
- The identification of gaps between existing and planned Bulgarian legislation relating to Maritime Safety and the *acquis communautaire*, together with recommendations for modifications to legal texts and timing
- Revisions to existing management practices concerning Flag State Implementation, Port and Coastal State Control, delivering improvements to human resources management to achieve Paris MoU inspection standards;
- Fully trained Bulgarian inspectors of Flag State Implementation, and Port State Control procedures to standards defined by the Paris MoU and other internationally agreed Maritime Conventions, sustainable beyond the period of the project.
- The Bulgarian Maritime Administration will have the capacity to ‘‘manage the continued sustainability of the project. (European Commission, EuropeAid/DG Enlargement - CD)

With reference to the twinning project carried out in Bulgaria the following conclusions have been identified, using three broad categories, for improving

maritime safety in Bulgaria by the twinning instrument (these categories are elaborated in detail in Chapter 2, section 2.5.2).

[A] Twinning impact of priorities to align with the EU acquis

Activities as the twinning project carried out identified gaps between EU acquis and the national legislation and resulted in improved enforcement tools for maritime safety related activities. In this context twinning had an impact of gaining sustainable results as the national maritime safety responsibilities were followed by rights in the legislation. The process to meet priorities to align with EU acquis did not require changes in EAMA's organizational structure, but focused more on implementing well functioning administrative structures such as management culture and control and monitoring processes. Obstacles to achieve impact was the law regarding the privatization procedures for the state owned fleet that were delayed and not in force by Bulgaria's accession in 2007. This delay caused Bulgaria to still lack experience as an independent flag state by accession. Strengthened enforcement tools by twinning focusing on administrative structures, required by an MS, gave Bulgaria new methods and functions to handle changes that would follow by joining EU and the privatisation procedure of Navybulgar. Another obstacle to gain impact of priorities was lack of appropriate financial resources for EAMA. Poor finances slowed down the processes to gain capacity as required by EU acquis particularly for PSC and was not tackled by twinning in other ways than highlighting the problems, giving recommendations and provide training. In this context twinning on maritime safety yield concrete results in strengthened enforcement mechanisms but the impact would have been stronger if the internal political processes would have been able to respond quicker. The twinning result could be summarized as reaching accelerated progress achieving Paris MOU standards.

[B] Assessment of maritime safety through the records of detained vessels according to the Paris MOU by project completion

Compared to other candidate countries to the EU for the period 1999 to 2005 Bulgaria's detention rate according to the Paris MOU was not showing such big gaps

between their national flagged vessels and the MS average detention rate. When Bulgaria in 2001 showed a notable high detention rate, the complexity of the flag state performance in Bulgaria was already addressed by EU and BC measures. Measures to form an independent maritime safety inspectorate were high up on the political agenda. Solving the complexity of the problems was time-consuming and no final results were seen by Bulgaria's accession. The Bulgarian detention rate within the Paris MOU improved and their performance as a flag state improved achieving new standards and adequate training. The Bulgarian detention rate within Paris MOU showed similar detention rate percentage from 2003 as some of the already existing MS in the EU. The action plan for maritime safety in 2003 combined with the plan for scrapping substandard vessels of the state owned fleet Navybulgar resulted in improvements of Bulgaria's performance as a flag state. It could be presumed that the economic aspects of the remaining Bulgarian registered fleet constituted reasons for the delay of the privatization procedures. The state owned fleet controlled by Navybulgar controlled 90 % of the vessels registered under Bulgarian national flag. The action plan for maritime safety which was adopted in 2003 by the Bulgarian Parliament combined with the plan for scrapping substandard vessels at Navybulgar showed a decrease in the number of national registered vessels. Their approach would contribute to securing future competitiveness of Bulgarian shipping and improvement of the management and safety record of the national fleet. How the EU maritime safety regime influenced the number of vessels registered under national flag is shown in Table 7.

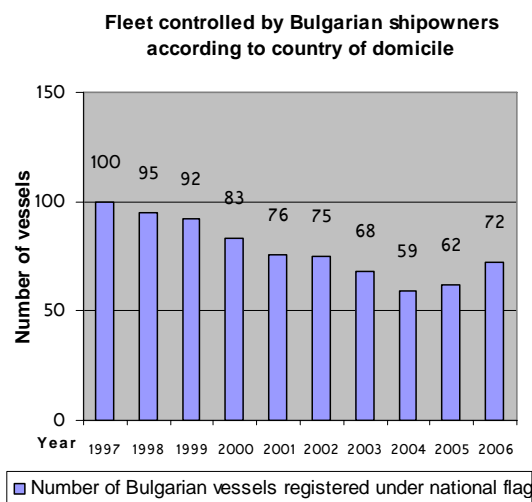


Table 7

(Sources: Institute of Shipping Economics and Logistics (ISL))

Bulgaria’s performance as a port state was improved by highlighting the problem areas as well as providing tools for relevant areas to raise the quality of the inspections. Recommendations given to strengthen Bulgaria as a port state were elaborated by the twinning project to gain long term and sustainable results. To highlight discrepancies in procedures used and by achieving Paris MOU standard the foundation was laid by twinning to have better control and monitoring processes to decrease substandard shipping.

[C] Impact of twinning methodology and the twinning instrument to raise the level of maritime safety

Fundamental issues to strengthen EAMA were in the legislative framework and its implementation with focus on capacity development. New processes and functions were required to reach the desired outcomes of the organizational structure and were targeted by twinning. With support and assistance from an MS, systematic methods for evaluating and comparing processes of one MS and EAMA (Executive Agency for Maritime Administration), added new perspectives such as increased knowledge and awareness on how an MS operates in the field of maritime safety. Input of twinning activities created sustainable results to achieve accelerated progress to

secure independent decision making that could facilitate maintenance of an acceptable level of maritime safety. Adequate training targeting selected target groups raised the awareness and added new perspectives to change behavior. The impact can in this context be summarized as that the twinning approach succeeded in building up a basis for well functioning mechanisms that would strengthen EAMA's control of substandard vessels as required by EU acquis. Twinning on maritime safety in Bulgaria contributed to accelerating progress to change organizational outcomes. Twinning on maritime safety in Bulgaria contributed to EAMA's capacity to manage a continuation of new functions required by EU acquis, included the function of their flag state responsibilities when the privatization procedure of Navybulgar was completed.

Chapter 5 - Turkey

5.1 Prevailing situation before the project

Twinning project facts				
Project no	Project name	Implemented	Member state institution	Candidate country institution
TR02/TR-0	Support to the enhancement of safety of maritime transport in Turkey	2003-2005	Remolques Maritimos S.A, Spain	1)Ministry of Transport 2)Undersecretariat of Maritime Affairs (UMA)

Table 8 – Twinning project facts for Turkey

(Sources: European Commission Standard twinning project fiches on Maritime Safety)

5.1.1 Background

The Turkish fleet had in the beginning of 1990 about 700 vessels registered under their flag and was listed as one of the 35 most important maritime countries and territories by UNCTAD. Turkey was showing a detention rate of 25.4% in 1999, when Turkey was officially recognized as a candidate country to the European Union. The average age of the Turkish fleet was regarded as high and nearly half of the fleet was 16 years or older. Turkey signed their accession partnership agreement in 2001. With status as a candidate country to EU, efforts were requested to ensure that Turkish flag was removed from the black list of the Paris MOU as well as lowering their detention rate to an acceptable EU level. It was noted by EC that both the quality and quantity of PSC must be improved before becoming a cooperative member within the Paris MOU. The national legislation compliance with international conventions was not entirely aligned and not followed by proper transposition for implementation. Functions and role of the maritime administration implementing and applying the legislation, needed to be improved. An area emphasized by the EC was the gap between the national legislation on recognition and monitoring of classification societies with the EU acquis.

Focusing on capacity building for the maritime administration would further raise capabilities to facilitate an acceptable level of maritime safety that conformed to EU acquis. Turkey started their national program for adoption of the EU acquis in 2001,

but progress was first reported by the EC in 2004. The identified problem with alignment of the Turkish legislation and the EU acquis was one of the pillars in focus for the twinning project ‘TR02/TR-0’. An improved Turkish national legislation for maritime safety required well functioning implementation to gain clear results that would improve Turkey’s performance as a flag and port state. Institution support and capacity building to have efficient enforcement mechanisms for implementing the legislation was therefore the other pillar in the twinning project.

5.1.2 Turkish institutional capacities for maritime safety

Institution support and capacity building by twinning was targeting the **Undersecretariat of Maritime Affairs (UMA)** when the twinning project ‘TR02/TR-0’ started. UMA was the administrative authority for maritime safety and ship registration in Turkey. UMA was organized under and reported directly to the **Prime Ministry**, responsible for determining and coordinating the national maritime policies. In 1999 ten classification societies (nine IACS members together with the Turkish Lloyd) was authorized by UMA to carry out inspection, survey and certification of ships. UMA was monitoring the work of the classification societies. The **Board of Surveyors** was responsible for administrative tasks and carried out inspections on bigger ships and the **Harbourmasters** offices were in charge of inspection of small ships. Only the Boards of Surveyors in the most trafficked ports (Istanbul and Izmir) were allowed to inspect ships over 500 GT. These were organized under UMA’s regional offices. UMA was financed via its own budget.

The organizational structure described can be summarized as having few actors involved but with a complicated structure. Lack of institutional capacity in terms of coordination and monitoring of different functions at UMA caused difficulties on implementing the requirements of the EU acquis. This problem was identified by EC and had to be addressed by twinning in order to improve maritime safety in Turkey. The controlling and monitoring role of UMA of flag state functions was another identified problem by the EC, particularly regarding classification societies.

5.1.3 Procedures

Documented procedures, including guidelines and basic reporting systems, were established in Turkey when the twinning project 'TR02/TR-0' started. A low familiarization and experience conducting PSC was found. Needs to improve and raise the low familiarization of procedures to meet EU acquis was considered by the EC to be one of the reasons for the high detention rates for Turkish flagged vessels. All classification societies that were used by UMA were members of IACS apart from the Turkish Lloyd, which was the only national organization authorized by UMA to carry out technical control services on Turkish registered vessels. The assessment carried out by EC showed that in some areas fundamental rules were missing for procedures or needed to be updated in line with EU acquis, especially in the field of PSC. Turkey needed to improve their professional know how on procedures to achieve Paris MOU standards.

5.1.4 Human resources and competence of staff

The number of registered vessels in the Turkish fleet as well as calls to Turkish ports required a high amount of human resources to meet the needs of the maritime sector that would guarantee ship safety. Lack of human resources to perform duties as required by EU acquis was a known fact when the twinning project initiated. UMA started in 2001 to recruit new staff when Turkey began its national program for the adoption of the EU acquis. The competence level knowledge and usage of English among the staff was high with educational background as naval architects or engineers. Training was considered as an important component to raise knowledge of the EU operational system.

5.2 Results from the twinning project

By assessing maritime safety by records of detained vessels the high detention percentage of Turkish flagged vessels was a concern for EU. This had to be improved before Turkey could make progress towards accession. According to statistics collected from Paris MOU, the detention rate for Turkish flagged was well

over the average for EU between 1999 and 2003. Turkey was on the Paris MOU's black list between 1999 and 2005, and at the end of this period as a country on the medium to high risk category. The gap between the Turkish and EU average level of detention rate started to decrease in 2004. This coincided with the year when the first twinning project on maritime safety had initiated its activities. As shown in Table 9 the detention level for Turkish flagged vessels did not meet with the MS average detention rate under the project lifetime.

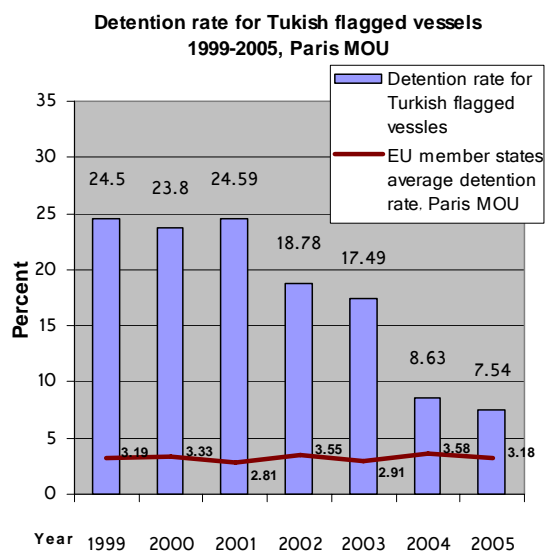


Table 9

(Sources: Paris Memorandum of Understanding)

The high detention rate for Turkish flagged vessels revealed needs for a large scale training program to achieve Paris MOU standards. The majority of this training was commenced directly by UMA but also within the twinning project.

5.2.1 Turkish institutional capacities for maritime safety

The main objectives in relation to maritime safety were the following for the twinning project on maritime safety:

- Improving the legal alignment of the Turkish legislation with the EU acquis
- in the field of maritime safety and sea pollution prevention and upgrading the

administrative capacity of the relevant administrations to better implement the legislation in the field of maritime safety and sea pollution prevention.

(CD - European Commission, EuropeAid/DG Enlargement)

The level of alignment related to implementation of various international conventions was not reflected in the Turkish legislation. Absence of a well functioning national legislation on maritime safety was the main reason behind the needs of twinning. The method used by twinning was in this context reviewing the Turkish legislation and its comparison with EU acquis, supporting in drafting of primary and secondary legislation, providing assistance in preparing for the ratification process of additional international conventions and creating a legal database system at UMA. Preparations for the national legislation to comply with EC Directives on Erika I, II and Prestige were included.

Twinning supported in drafting an action plan to speed up the legislative alignment with EU acquis on maritime safety and other measures aimed at strengthening administrative structures dealing with maritime safety. The internal political process was committed and the Maritime Transport Action Plan was adopted in 2003. Further, a law to strengthen UMA's monitoring of classification societies was adopted in 2003. As for strengthening the administrative structures, a concrete result from twinning was the establishment of a new department of shipping inspections at UMA's headquarters. The role of the new established department of shipping inspections was to coordinate and monitor the work of the regional offices and Board of Surveyors carrying out inspections. A new organizational structure and improved coordination strengthened UMA's administrative capacities and guaranteed sustainability of project results.

An information system based on databases, which would improve the enforcement mechanisms as a flag state and port state, was further implemented by twinning. Introduction of the new databases improved UMA's functions as a port and flag state

by following up Turkish flagged vessels and reasons for detention abroad as well as follow-up on foreign ships detained in Turkish ports. These measures increased information exchange between regional offices and headquarters and strengthened several functions within UMA.

5.2.2 Procedures

Procedures for carrying out inspections were documented and well known among the staff when twinning initiated its activities. The absence of some relevant international conventions combined with low familiarization on how to conduct inspection within Paris MOU was targeted by twinning. The high detention rates for Turkish flagged vessels indicated a discrepancy between know how and how the inspections were carried out. The main reason behind the low maritime safety performance in conducting inspections was assessed and adjusted in accordance with how the Turkish legislation would reflect the requirements for implementing EU acquis. Procedures and its consistency had to be improved to achieve Paris MOU standard. Initial training on legal and technical matters was commenced by the twinning project and this contributed to prepare the inspectors for carrying out inspections in accordance with EU acquis.

The twinning project further developed technical databases within UMA's headquarter to improve control functions that contributed in getting consistency in procedures. Usage of databases and additional requirements in the legislation that influenced inspections were targeted by adequate training performed within the twinning project. Especially this enhanced Turkey's performance as a port state that gained a new approach to conduct inspection by EU and Turkey developed methods for observing, follow up and monitoring on substandard vessels. Focus for the activities carried out by the twinning project was to develop EU best practices followed by a consistent implementation of the national legislation. In this context it could be summarized that the link between ship safety and procedures were strengthened by introducing systematic methods for conducting inspections. This was further supported by raising the familiarization of how maritime safety

operations are conducted in an MS, which added new knowledge and understanding of how the operational system worked in the EU.

5.2.3 Human resources and competence of staff

A recruitment process to get a sufficient number of inspectors for a necessary implementation capacity of EU acquis started in 2002 and increased the number of staff from 78 inspectors to 233 inspectors in 2006. To have a competent staff and to train all new employees several training activities was commenced. UMA went through changes with the increasing of staff such as creation of necessary organizational structures, developing qualification programmes of their human resources and obtaining necessary equipment for conducting inspections. The competence level of the staff should also be maintained after the termination of the twinning project. Twinning targeted this in providing activities which lead to improvement of qualifications, becoming familiar with EU's technical standards and best practices combined with training of trainers. Training within the twinning project was carried out in Turkey by MS experts. Activities in an MS were commenced to become more familiar with the EU operational system on maritime safety within the project. Focus was set on choosing relevant staff for training activities carried out to gain sustainable results.

5.2.4 Evaluating the impact on maritime safety from the twinning project TR02/TR-01

The overall assessment performed by DG Enlargement and EuropeAid was summarized as very successful and rated as highly satisfactory for the project ‘‘TR02/TR-0’’. The results of the twinning project are summarized as follows:

- Improved alignment of the Turkish legislation with the EU acquis and International Maritime Organization (IMO) Conventions
- New framework Law on maritime safety adopted and in compliance with the relevant EU acquis;

- Appropriate secondary legislation adopted/amended and in compliance with the relevant EU acquis.

Upgraded administrative structure and capacity

- Effective organisational structure for fulfilling Port State Control obligations established in major ports designated;
- Efficiency of Flag State Implementation activities conducted by the Boards of Surveys increased, mainly in the field of International Safety Management of ships (ISM), hazardous cargo, safe loading, stability control;
- Capacity of the Under-Secretariat for Maritime Affairs (UMA) to monitor the classification societies improved. (European Commission, EuropeAid/DG Enlargement- CD)

With reference to the twinning projects carried out in Turkey the following conclusions have been identified, using three broad categories, for improving maritime safety in Turkey by the twinning instrument (these categories are elaborated in detail in Chapter 2 and section 2.5.2).

[A] Twinning impact of priorities to align with the EU acquis

Twinning support and assistance for adjusting gaps and shortages between national legislation, international conventions and EU acquis was the main focus to create a strengthened maritime administration in Turkey. Without rights in the national legislation, enforcement mechanisms had no basis to be improved. Concrete results were seen in alignment of the Turkish legislation and in this context the impact of twinning priorities were high. The next step followed by twinning was to obtain administrative structures for well functioning implementation. In UMA's case it led to twinning contributing to transforming the organisational structure for improved coordination and monitoring processes both as a flag and port state. Restructuring of UMA by twinning showed results such as establishment of new units as well as

strengthening work carried out by already existing structures. Accountability to improve maritime safety from Turkey's side was shown by support from the internal political process and support. One example is the recruitment of several new flag state and port state inspectors who will strengthen UMA's institutional capacities. UMA's enforcement role was transformed and strengthened to facilitate maintenance of an acceptable level of maritime safety corresponding to EU acquis. Without UMA's appropriate financial resources the recruitment of new staff would not have been possible. Good progress was reported by EC on the Turkish legislative alignment in 2006 in the regular report. A number of new adopted laws, increase of staff and capacity development showed immediate effects to yield improved operational results in maritime safety. The connection between twinning and the BC's commitments in this chain of improvement factors is for twinning to work as a catalyst, support, advice and to assist in creating changes required by EU acquis. Political factors and committed project actors contributed side by side to twinning to ensure that the outputs of the project yielded many results for improving maritime safety.

[B] Evaluation of BC's performance as a flag state and port state using twinning

When the twinning project was initiated in 2003 the Turkish flagged vessels showed a detention rate of 17.49%, which was a reduction of nearly 7% compared with previous years. Turkey was during the whole period from 1999 to 2005 on the Paris MOU's black list. When the project ended in 2005 the Turkish detention rate was lowered to 7,54%, but the country still remained on the Paris MOU black list. By assessing maritime safety by means of the statistics from the Paris MOU, Turkey's performance as a flag state improved. An additional support was by changes that occurred in the national legislation and how it was implemented. Followed by adequate training on how to gain EU best practices according to reporting as required by Paris MOU it further improved Turkey's performance as a flag state. Compared with Romania and Bulgaria, Turkey had the biggest fleet of the countries compared. The different approach, compared with Romania, gave the shipping industry incentives to continue to have their vessels registered under Turkish national flag.

This approach was possible because that UMA had the financial resources to expand their roles to deal with the specifics of the maritime sector in Turkey. Table 10 shows that Turkey within the new EU maritime safety regime remained their national flagged fleet of more than 400 registered vessels.

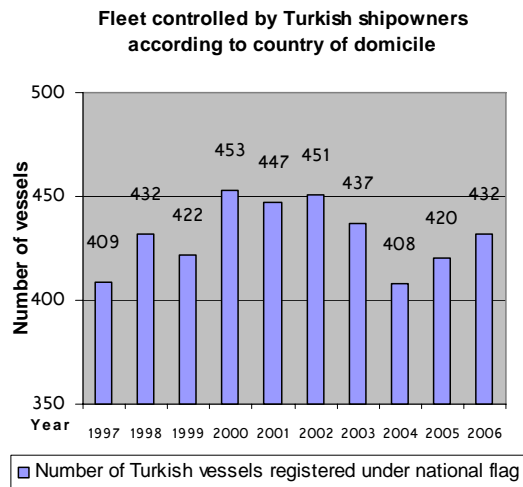


Table 10

(Sources: Institute of Shipping Economics and Logistics (ISL))

Introduction and training of new databases and documentation system also made progress for Turkey as a port state enhancing their control, follow up and monitoring procedures. For PSC it gave Turkey results such as increased quality and quantity of inspections. Effects of the EU maritime safety regime could be described as UMA gaining a strengthened role and capacity to handle the requirements by the maritime sector in Turkey, which would give safer shipping in both a European and global context.

[C] Impact of twinning methodology and the twinning instrument to raise the level of maritime safety

Joint accountability between the MS and the BC for project results and objectives were clearly visible by the commitment UMA showed by increasing and training a high number of new staff. Recruitment of a high number of new inspectors of UMA showed the institutions devotion to lower the detention rate for Turkish flagged

vessels as well as strengthening the quality and quantity of PSC in accordance with the Paris MOU regime. Strengthened organisational outcomes of UMA were a result both from twinning and from national commitments. Support and assistance from an MS with transfer of know how further made Turkey more familiarized with EU procedures used for FSI, FSC and PSC. The impact of training gained value effects that both increased the knowledge, awareness and added new perspectives. The twinning project approach to combine training on technical EU rules, strengthen UMA's monitoring roles towards the recognised organisations issuing certificates showed clear results within the time frame when the project was implemented.

Chapter 6 - Findings

[A] Twinning impact of priorities to align with the EU acquis

The justification and relevance aspects of twinning in Romania, Bulgaria and Turkey are identified in demonstrated priority needs to raise maritime safety and environmental protection in a demand driven process. Fulfilling priority needs has to be approached by gaining results of uniformly functions with EC development strategies reflected by adopting, applying and enforcing EU acquis on maritime safety. Before twinning, the existing national legislation might weaken enforcement and therefore the process to fill in identified gaps starts so the candidate country can comply with EU acquis. Needs for development of institution capacities in candidate countries to EU is urgent because of new obligations and functions that will become a reality by accession. A gradual integration of candidate countries into EU, where twinning plays a role to speed up the process, went smoothly with exceptions such as that the internal political process was more complex and time consuming than expected. To achieve impact by technical assistance instruments, such as twinning, in the development process timing of the institutions has to be right. When commitments on highest political level are established and when clear needs and goals for transformation have been identified the preconditions for meeting priorities and successful twinning are established.

Well functioning institutional capacities appear to possess abilities for maritime administrations to adapt requirements of international conventions and EU acquis. Adaptability includes operational functions. To fulfil the obligations the institutions must have strategies for their staff, systems, structure and management culture to support and respond to changes that are required. This demonstrates the importance of how the internal organizational structures are arranged and how different roles are understood between and within institutions. To yield enhanced operational results it is central to define how the organizational structures is arranged to deal with regulating laws and rules, the institutions independency, financial or budgetary

restrictions and available human resources. Twinning is working with institution support to build up a well functioning capacity for an institution. Capacity building remains a complex issue. Several activities are required to meet the needs of a maritime administration. By twinning these institutions are able to identify and implement required changes for organizational structures, roles and functions that correspond to EU acquis. Focusing on institutional support and capacity development with clear goals gives the result that effectiveness of twinning impact is assured.

[B] The level of maritime safety through the records of detained vessels according to the Paris MOU by the twinning project completion

It can be summarized that the performance of the countries as flag states and port states was strengthened by introducing new professional standards to conduct inspections. Evaluating the statistics shows a notable decrease in the detention rate within the Paris MOU for the countries in this research during the process as a candidate country. Improved flag state performance is a result from transfer of know how where twinning is one instrument used to gain systems based on the same fundamental principles. A foundation is laid to gain credibility in port state performance. Identified gaps between ship safety and inspections had been assessed and actions taken by both twinning partners that gave effects that influenced both quality and quantity of inspections in a constructive way.

Effectiveness of results showed immediate outcomes in assessing maritime safety by the records of detained vessels and increased quantity and quality of inspections. Assessing maritime safety in a nation by evaluating their performance in accordance with records of detained vessels identifies how they respond to national flag state responsibilities required by international conventions and EU acquis. In order to gain credibility in PSC, the FSC must work satisfactory. To combat substandard shipping within the EU maritime safety regime, the EC prioritizes firstly the nations performance as a flag state and then as port state. The described approach, which is used by twinning, results in an improved fleet registered under the nation's flag with

fewer detentions within Paris MOU. Means to assess maritime safety by lowering a nation's records in statistics of detained vessels does not take into consideration how the maritime sector in that nation is build up and developing. At the same time it does not count the number of vessels that are being scrapped or sold out to other nations that does not apply the same strict rules as applied within EU. Political pressure for the candidate countries to improve maritime safety by assessing their detention rate within Paris MOU is high up on the agenda in the process to become an MS in the EU. A nation can take any political measures by its national legislation to further improve the standard of their fleet and to speed up the process.

A borderline for when needs to comply with EU acquis interferes with needs to ensure competitiveness of shipping in the new MS is unclear. The maritime sector is critical to Europe's economy. Shipping is a significant source and environmental friendly means of transport. EU maritime safety regime can in this context be described as being counterproductive to develop the maritime sector within a new MS of the EU, which was a result in Romania. In Bulgaria and Turkey the results were different because the internal political process to ensure future competitiveness of shipping was emphasized. Those countries did not accelerate in progress as fast as expected by the EC in the accession process to comply with EU acquis on maritime safety. Effectiveness of outputs showed a mixed degree to which extents they contributed to combating substandard shipping.

[C] Impact of twinning methodology and the twinning instrument to raise the level of maritime safety

When signing the accession partnership agreement the candidate countries have identified needs to rationalize their public administrations. Efforts are made by the BC to facilitate the process and development to gain strengthened institution capacities.

Relevance of twinning is to speed up the process to meet identified needs that have been appropriately analyzed for the country to comply with EU standards. Involvement of ministries responsible in meeting twinning priorities guarantees joint accountability,

which has been shown in the projects evaluated in this research. Without the political commitment from a BC, twinning will not be successful. New functions mean new responsibilities that need to be backed up with rights in the national legislation. Commitment and consensus for a future direction require action plans supported on the highest political level where key objectives and strategies are documented to fulfil all the changes required by EU acquis. National action plans were elaborated in connection to the twinning project in all countries evaluated in this research, which guaranteed viability of project results as well as a future established direction for each nation to develop maritime safety.

Twinning project methodology includes developed arrangements for coordination, controlling, management and financing, which makes the methodology feasible. Effective methodology can be measured by immediate results that can be detected on the basis of achieved outputs. An output received from twinning methodology is by systematic methods used for transfer of know how to gain a uniformly functioning implementation of international conventions and EU acquis on maritime safety. It promotes cohesion and facilitates communication and cooperation between the twinning partners (MS and BC). Focus for twinning was set on procedures to observe, control, follow up and monitor maritime safety in a critical way. In this context the relevance of twinning to raise maritime safety is high. Another output is how to deal with a new context to perform their responsibilities as a maritime administration where twinning addresses management culture and functions. A beneficial effect of adding new perspectives to management culture and functions is changes in behaviour. The impact will expand in relation to the number of people who gain adequate exposure to new functions and roles which makes training activities relevant to deliver sustainable benefits to the target group.

Chapter 7 - Conclusions and final discussion

This dissertation has revealed the following main observed areas of the EU twinning project impact commenced in Romania, Bulgaria and Turkey on maritime safety in the enlargement process are. They are concluded as follows:

- Twinning had an impact on gaining sustainable and improved operational results as new maritime safety responsibilities were followed by defined priorities and rights in the legislation. By streamlining and harmonizing the legislation the gap between existing and new obligations is reduced. A well balanced dialogue between the EC, BC and the MS implementing the project and support from the BC's internal political process are preconditions for successful twinning with joint accountability.
- Reorganizing organizational structures, functions and methods to meet priorities to align with EU acquis gives an impact by addressing the core of identified problem areas. Dual roles for maritime administrations are removed and a platform for gaining mechanisms to observe and monitor maritime safety in a critical and independent way is obtained. Having an independent maritime administration raises integrity, professionalism and transparency of their obligations. By focusing on institutional support and capacity development, with clear communicated goals, the effectiveness of the twinning impact is assured.
- In developing action plans, assisted by twinning, the BC sets out a strategy to sustain their development work to meet EU priorities and to further develop their mechanisms to raise maritime safety.
- To achieve an impact by technical assistance instruments such as twinning in the development process timing of the institution has to be right. Commitments and support from a high political level must be established which can contribute to solving problems with for example non adequate financing for the maritime administration's obligations to raise maritime safety.

- Progress to gain a uniformly functioning of implementing international conventions is achieved by twinning in combination with the ongoing political pressure to close the negotiations on the transport chapter to join the EU.
- Trained inspectors, trainers and auditors strengthen both quality and quantity of FSC and PSC and are means for a strategic direction to strengthen the BC as a flag and port state. Results are creation of a platform for well functioning enforcement mechanisms that have abilities to detect and act upon substandard vessels in accordance with EU best practices.
- Improving maritime safety by assessing records of detained vessels could give better conditions for a BC if accompanied with considerations of how to ensure future competitiveness of shipping and a global maritime safety perspective to deal with sales and scrapping of the substandard fleet.
- Twinning, based on an MS experience and knowledge, gives valuable inputs to assess and target the reasons behind a low maritime safety performance. The MS peer administration has unique experience and know how to implement EU best practices. Using an MS gave the BC a different input than if the activities would have been carried out by national experts. Input of twinning contributed to the BC achieving progress to secure independent decision making, that could facilitate maintenance of an acceptable level of maritime safety.
- One factor that contributes to successful twinning is technical knowledge of the MS's experts in areas that are to be covered to raise maritime safety. Another vital factor for successful twinning is that the MS has profound experience in how the process works to perform activities within a project based system to deliver results. MS experience in EU requirements and the BC's knowledge on how to implement a twinning project in accordance with the twinning manual are other factors for success of twinning.
- By twinning support and assistance a chain of improvement areas is initiated. This has to be followed up by an efficient project management system, evaluation of progress achieved and commitment from all partners and stakeholders in twinning to gain impact.

To solve the problem why so many substandard vessels are allowed by authorities to continue trading has shown to have different aspects. These originate from ratification of international conventions and EU acquis but above all from how the implementation is organized and carried out. Impact of technical assistance on maritime safety, such as twinning, differs for each BC in relation to the nation's adaptability and existing conditions of the maritime sector. Effectiveness of project outputs, results and impact by using twinning will result in different degrees of progress to raise maritime safety and results from twinning are viable. The contribution of twinning is in its role as a catalyst. By the presence and support from an MS, development work to raise maritime safety is authorized all the way to the highest political level. Twinning methodology shows clear results raising maritime safety on different levels within a relative short timeframe. A detailed twinning work plan with fixed benchmarks plans the project in advance. This approach can lead to limited flexibility if the project runs into obstacles that may be hidden in the planning phase but emerges in the implementation phase.

Twinning is described as a unique instrument for targeted international cooperation in technical assistance. It is unique in a sense that the BC is a candidate country who is applying for membership in the EU. The BC has a demand to align its legislation and institutions to implement all requirements of EU acquis. A reason for twinning feasibility and impact as a pre-accession instrument is the high level of justification and relevance for the BC. Possibilities to find additional opportunities for twinning in other technical assistance projects raising maritime safety in a context other than as a pre-accession instrument to join the EU could be further developed.

References

- Archibald, R.D. (1987). Implementing business strategies through projects. In W.R. King & D.I. Cleveland (Eds.), *Strategic planning and management handbook* (pp.499-507). New York: Van Nostrand Reinhold
- Bennett, R. (1991). *Organisational behaviour*. London: Pitman
- Brandt, W. (2006). Does the EU constitute a “Maritime Superpower”? In P. Ehlers, & R. Lagoni (Eds.), *International maritime organisations and their contribution towards a sustainable marine development* (pp.259-284). Hamburg, Germany : LIT Verlag
- Coleman, R. (2006). *Maritime transport policy of the European Union*. *BIMCO Bulletin*, 101 (6), 52-60
- Commission of the European Communities. (2006). *Towards a future maritime policy for the Union: A European vision for the oceans and sea*. Luxemburg: Office for Official Publications of the European Communities
- Cooper, C. & Johansen, M. (2003). *An evaluation of completed twinning projects*. A report presented to the National Contact Points Meeting Brussels-30th 31st January 2003. Online: http://ec.europa.eu/enlargement/pdf/financial_assistance/phare/phare_ex_post_twinning_en.pdf (Accessed: 2007-08-01)
- Easterby-Smith, M. (1986). *Evaluation of management education, training, and development*. Brookfield, VT: Gower
- European Commission. (2004). *Aid Delivery Methods: Volume 1: Project Cycle Management Guidelines*. Brussels: EuropeAid Cooperation Office. Online: <http://www.phareinterimevaluation.org/documents/> (Accessed: 2007-08-01)
- European Commission. (2004). *Communication from the Commission to the Council and to the European Parliament: Strategy paper of the European Commission on progress in the enlargement process (SEC(2004) 1199, 1200)* (COM/2004/0657 final). Online: http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!CELEXnumdoc&lg=en&numdoc=504DC0657. (Accessed: 2007-06-28)
- European Commission. (1994, December 12). Council Directive 94/57/EC of 22 November 1994 on common rules and standards for ship inspection and survey organizations and for the relevant activities of maritime administrations. *Official Journal L 319*, pp. 20–27. Online : http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=31994L0057&model=guichett (Accessed: 2007-06-19)
- European Commission. (1995, July). Council Directive 95/21/EC of 19 June 1995 concerning the enforcement, in respect of shipping using Community ports and sailing in the waters under the jurisdiction of the Member States, of international standards for ship safety, pollution prevention and shipboard living and working conditions (Port State Control). *Official Journal L 157*, pp. 0001 – 0019. Online: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0021:EN:HTML> (Accessed: 2007-06-05)

European Commission. (1996, December 20). Council Directive 96/98/EC of 20 December 1996 on marine equipment. Online: http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&numdoc=31996L0098&model=guichett&lg=en (Accessed: 2007-06-16)

European Commission. (2005). *Institution building in the framework of European Union policies: A reference manual on 'twinning' projects*. Online: http://ec.europa.eu/enlargement/pdf/financial_assistance/institution_building/manual_2005_en.pdf (Accessed: 2007-06-16)

European Commission. (1998- 2005). *Regular report from the Commission on Bulgari's progress towards accession*. Online: http://ec.europa.eu/enlargement/archives/key_documents/reports_1998_en.htm (Accessed 2007-06-16)

European Commission. (1998-2005). *Regular report from the Commission on Romania's progress towards accession*. Online: http://ec.europa.eu/enlargement/archives/key_documents/reports_1998_en.htm (Accessed: 2006-06-07)

European Commission, (2006), *Regular report on Turkey's progress towards accession* (available online 2007-06-28 at http://ec.europa.eu/enlargement/pdf/key_documents/2006/nov/tr_sec_1390_en.pdf)

European Commission. (1998-2005). *Regular report on Turkey's progress towards accession*. Online: http://ec.europa.eu/enlargement/turkey/key_documents_en.htm (Accessed: 2007-06-28)

European Commission, *Strategy Paper of the European Commission on progress in the enlargement process*, Brussels (COM/2004/0657 final) (available online 2007-06-28 at http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!CELEXnumdoc&lg=en&numdoc=504DC0657)

European Commission, Directorate-General for Enlargement (2006). *European Commission Twinning Brochure*, Brussels (available online 2007-08-01 at http://ec.europa.eu/enlargement/pdf/twinning_brochure_2005_en.pdf)

European Commission, Directorate-General Enlargement. (2001), *Maritime safety institution building* (BG/IB/2001-TR-01). Online: http://ec.europa.eu/enlargement/fiche_projet/document/bg0101-07-maritime_safety_.pdf). (Accessed: 2007-04-09)

European Commission, Directorate-General for Energy and Transport, (2006), *Improving the competitiveness, safety and security of European shipping*, Brussels, (available online 2007-07-30 at http://ec.europa.eu/transport/maritime/doc/maritime_transport_policy_en.pdf)

European Commission, Directorate-General Enlargement (2004, March). *Interim Evaluation of Phare Support allocated in 1999-2002 and Implemented until November 2003 Thematic Evaluation Report*, Brussels. Online: <http://www.phareinterimevaluation.org/documents/> (Accessed: 2007-08-01)

European Commission, Directorate-General Enlargement (2004). *Second generation twinning: Preliminary findings interim evaluation of Phare Support allocated in 1999-2002 and implemented until November 2003*. Online <http://www.phareinterimevaluation.org/documents/> (Accessed: 2007-08-06)

European Commission, Directorate-General Enlargement, *Standard twinning project fiches on Maritime Safety:*

(1999), *RO99/IB-TR-01, Maritime Safety*

(2001), *RO2001/IB/TR-02, Improvement of maritime and inland waterways safety and Institution Building in the field of maritime administration*

European Commission, Directorate-General Enlargement. (2002). *Support to the enhancement of safety of maritime transport in Turkey* (TR02/TR-01). Online:

http://ec.europa.eu/enlargement/fiche_projet/document/2002-002-555-03.02%20Safety%20of%20Maritime%20transport.pdf (Accessed: 2007-04-09)

European Commission, EuropeAid Co-operation Office in Cooperation with DG Enlargement (). *Institutional Twinning Thesaurus, PHARE-CARDS-TRANSITION FACILITY-TACIS-MEDA*, CD-Version 3.

European Maritime Safety Agency (EMSA). (2004). *An Overview of the 25 European Maritime Administration* (project no C3.24.04) Online:

http://www.emsa.europa.eu/Docs/Technical_Reports/emsa_c32404.pdf (Accessed: 2007-06-16)

European Transport Workers' Federation (ETF). (2007). *Towards a future maritime policy for the Union: ETF response on the Green Paper of the European Commission*. Online

http://ec.europa.eu/maritimeaffairs/contributions_post/78etf.pdf (Accessed: 2007-07-20)

European Union (2001). Attachment D1.4: Self-assessment form of the Bulgarian Maritime Administration and letter of the Secretary General of IMO on the receipt thereof. Document presented at the Conference on Accession to the European Union Bulgaria, Brussels, 11 April 2001 (Conf-Bg 17/01, Add 7). Online:

http://www.mt.government.bg/upload/docs/1_02_CONF_BG_17_01_Add_7.doc. (Accessed: 2007-07-02)

European Union (2003, July 17). Special Report No 5/2003 concerning PHARE and ISPA funding of environmental projects in the candidate countries together with the Commission's replies. *Official Journal of the European Union: C 167, 46, 1-20*.

European Union (2003, July 17). Special report no. 6/2003 concerning twinning of the main instrument to support institutional building in candidate countries together with the Commission's replies: Pursuant to Article 284/4, Second paragraph of the EC Treaty. *Official Journal of the European Union: C 167, 46, 21-26*.

Evaluation Advisory Group (EVG). (2004). *Guide to good practices of evaluation capacity building*. Online: <http://www.phareinterimevaluation.org/documents/> (Accessed: 2007-08-01)

Güner-Özbek, M.D. (2006). Paris Memorandum of Understanding: An Example of International Co-operation and its perspectives. *International maritime organisations and their contribution towards a sustainable marine development* (pp. 105-135) Hamburg: LIT Verlag

Institute of Shipping Economics and Logistics (ISL). (1997-2006). *Shipping statistics yearbook*. Bremen: Author

International Maritime Organization (IMO), Library Services, External Relations Office (2007). *Information resources on European Union Legislation: Maritime safety and prevention of pollution from ships* (available online 2007-07-18 at http://www.imo.org/includes/blastDataOnly.asp/data_id%3D19216/EULegislation_17July2007_.pdf)

- International Maritime Organisation (IMO). (2004). *SOLAS: Consolidated edition 2004*. London: Author
- International Maritime Organization (IMO) *IMO resolutions:*
- International Maritime Organization (IMO). (1994a). A.739 (18): Guidelines for the authorization of Organization acting on behalf of the Administration. *Assembly resolutions and other decisions (resolutions 733-779): Eighteenth Session, 25 October - 5 November 1993, London*. London: Author
- IMO. (1994b). A. 746 (18): Survey guidelines under the harmonized system of survey and certification. *Assembly resolutions and other decisions (resolutions 733-779): Eighteenth Session, 25 October - 5 November 1993, London*. London: Author
- IMO (1996). A.789 (19): Specifications on the survey and certification functions of Recognized Organizations acting on behalf of the Administration. *Assembly resolutions and other decisions (resolutions 780-838): Nineteenth Session, 13-23 November 1995, London*. London: Author
- IMO. (1998). A.847 (20): Guidelines to assist states in the implementation of IMO instruments. *Assembly resolutions and other decisions (Resolutions 839-873): Twentieth Session, 17-27 November 1997, London*. London: Author
- IMO. (2000). A.883 (21): Global and uniform implementation of the harmonised system of survey and certification. *Assembly resolutions and other decisions (Resolutions 874-901): Twenty-first Session, 15-26 November 1999, London*. London: Author
- IMO. (2002). A.912 (22): Self-assessment of flag state performance. *Resolutions and other decisions of the 22nd Assembly (Resolutions 902-935), 19-30 November 2001, London*. London: Author
- IMO. (2004). A.948 (23): Revised survey guidelines under the harmonised system of survey and certification. *Resolutions and other decisions of the 23rd Assembly, 21 November - 2 December 2003, (resolutions 936-965), London*. London: Author
- Jung, E H, (2007). *Why Port State Control*. Place: Germanisher Lloyd
- Kasoulides, G. (1989). Paris Memorandum of Understanding: Six Years of Regional Enforcement, *Marine Pollution Bulletin*, 20 (6), 255-261.
- Kilic, G, (1988). *The development of the maritime administration in Turkey*. Unpublished master's thesis, World Maritime University, Malmö, Sweden.
- Lloyd's List, (June 2004), *Turkish Shipping*.
- Lloyd's List, (June 2003) *Turkish Shipping*
- Lloyd's List, (September 1995), *Black Sea Ports- Grasping a dynamic future*
- MacMillan, I. C & Jones, P. E (1987) Successful Strategy Execution via Competitive Organization Design. *Strategic Planning and Management Handbook* (pp.456-479) New York: Van Nostrand Reinhold
- Nair, R.V.B. (1997). *Port State Control: A standard procedure*. Unpublished master's thesis, World Maritime University, Malmö, Sweden

Pallis, A.A. (2002). *The Common EU maritime transport policy: Policy Europeanization in the 1990s*. Aldershot ; Burlington, VT: Ashgate Publishing.

Paris Memorandum of Understanding Secretariat. (1998-2005). *Annual report*. Online: <http://www.parismou.org> (Accessed: 2007-07-05)

Paris Memorandum of Understanding Secretariat (2001). *Paris MOU: Blue book, 2001*. Den Haag: Author

Paris Memorandum of Understanding Secretariat (2006). *Code of good practices for Port State Control Officers conducting inspections within the framework of the Paris Memorandum of Understanding on Port State Control*. Online: <http://www.parismou.org/ParisMOU/Code+of+Good+Practice/xp/menu.4279/default.aspx> (Accessed: 2007-06-19)

Ramboll Management (2005). *Baltic Sea Region INTERREG IIIB Neighbourhood Programme: Mid-term evaluation update: Final report*. Arhus, Denmark: Author. Online: http://www.spatial.baltic.net/programm/downloads/MTE_Final_Report_BSR_Update_291105.pdf (Accessed: 2007-07-05)

REMESA, Undersecretariat of Maritime Affairs. (2006). *Final report support on enhancement of Maritime Safety in Turkey, Twinning Project between Turkey & Spain TR02-TR-01*: Author

Seagal, S. & Horne, D. (1997). *Human Dynamics: A new framework for understanding people and realizing the potential in our organizations*. Cambridge: Pegasus Communications

Smith, J.R.G. (1998). *IACS and IMO: The essential relationship*. London: International Association of Classification Societies (IACS)

Swedish Maritime Administration. (2002). *Final report twinning on maritime safety (RO 99/IB-TR-01)*. Norrköping: Author

Swedish Maritime Administration. (2005). *Final report twinning: Improvement of maritime and inland waterways safety and institution building in the field of maritime administration. (RO2001/IB/TR-02)*. Norrköping: Author

Sung-Sub, H. (2007). *Port State Control-promoting maritime safety*, unpublished conference hand out, American Bureau of Shipping

United Nations Conference on Trade and development (UNCTAD) (1998-2006). *Review of maritime transport*. Geneva, Switzerland: United Nations.

University of Southampton. Institute of Maritime Law (Ed.) (2006). *The ratification of maritime conventions*, (Chapter 1:3: Safety and navigation) (Lloyds shipping law library). London: Lloyd's of London Press

Web Sites:

The EC web site gives further information on enlargement to the EU. <http://ec.europa.eu/enlargement/>

The EC's Directorate General for Energy and Transport (DG TREN) gives further information on the EU maritime safety regime. http://ec.europa.eu/transport/maritime/index_en.htm

The OECD Development Assistance Committee (DAC) web site gives more information on the DAC Criteria's. www.oecd.org/dac/

The Paris Memorandum of Understanding's web site gives further information on their port state control regime. <http://www.parismou.org/>

The PHARE web site gives further information on twinning and institutional support. http://ec.europa.eu/enlargement/financial_assistance/phare/index_en.htm

Appendix 1**Guaranteed results for twinning projects**

(Sources of information: European Commission, Standard Project Fiche)

Twinning project	Year of implementation	Twinning partners	Guaranteed results FSI & PSC in accordance with twinning fiches
RO99/IB-TR-01	2000-2002	Romanian Naval Authority (RNA) Swedish Maritime Administration (SMA), Lead partner Spanish Ministry of Industry, Junior Partner	<ol style="list-style-type: none">1. The effective implementation of PSC and FSI requirements including transposition of the relevant EU directives and regulations, secondary legislation and enforcement institution building2. A compliance schedule for further adoption and implementation of the EU acquis in the field of maritime safety3. Strengthened institutions including clarification of their respective role with regards to the implementation of the acquis, organisational structure and human resources4. A number of trained safety inspectors and auditors5. A number of trained trainers to ensure future sustainability
RO2001/IB/TR-02	2003-2005	Romanian Naval Authority (RNA) Swedish Maritime Administration (SMA)	<ol style="list-style-type: none">1. Review of the maritime safety legislation not addressed in RO 99/IB-TR-01 as well as other Directives that may enter into force before the date of commencement of the project, and preparation of an action plan to implement these provisions.2. Implementation of recommendations issued by the twinning RO 99/IB-TR-01 and elaboration of regular reports on their implementation.3. Enforcement of the acquis by RNA, specially on FSC, FSI and PSC as well as elaboration of regular reports on the same4. Assessment of the institutional impact on Romanian Institutions of the acquis in preparation, e.g. ERIKA Packages5. Preparation of a training programme in areas that have not been covered by training. Provide training in those areas that have been defined.
BG/IB/2001-TR-01	2002-2004	Bulgarian Maritime Administration (BMA) Ministry van Transport, Public Works and Water Management, Netherlands	<ol style="list-style-type: none">1. The compliance of national legislation with European directives on Flag State, Port State and Coastal State controls2. The identification of gaps between existing and planned Bulgarian legislation relating to Maritime Safety and the EU acquis together with recommendations for modifications to legal texts and timing3. Revisions to existing management practices concerning FSI and PSC delivering improvements to human resources management to achieve Paris MoU inspection standards

			<p>4. Fully trained Bulgarian inspectors FSI and PSC procedures to standards defined by the Paris MoU and other internationally agreed Maritime Conventions, sustainable beyond the period of the project</p> <p>5. The Bulgarian Maritime Administration will have the capacity to manage the continued sustainability of the project.</p>
TR02/TR-01	2003-2005	Under secretariat of Maritime Affairs (UMA) Remolques Maritimos S.A, Spain	<p><i>Improved alignment of the Turkish legislation with the EU acquis and IMO Conventions on maritime safety and sea pollution prevention</i></p> <p>1. A new framework Law on maritime safety is adopted and in compliance with the relevant EU acquis;</p> <p>2. Appropriate secondary legislation is adopted/amended and in compliance with the relevant EU acquis, on the subjects including:</p> <p>a) ships survey procedures;</p> <p>b) legal conditions related to recognition and monitoring of classification societies;</p> <p>c) safety requirements for fishing ships;</p> <p>d) safety requirements for passenger ships;</p> <p>e) testing and approval of marine equipment;</p> <p>f) Port State Control organisation</p> <p><i>Upgraded administrative structure and capacity</i></p> <p>3. Maritime Safety Investigation Board is created and functioning;</p> <p>4. Effective organizational structure for fulfilling Port State Control obligations is established in major ports designated;</p> <p>5. Efficiency of Flag State Implementation activities conducted by the Boards of Surveys is increased, mainly in the field of ISM, hazardous cargo, safe loading, stability control;</p> <p>6. Capacity of the UMA to monitor the classification societies is improved;</p>

Appendix 2

Sources: Paris Memorandum of Understanding, Annual report 1999-2005

Statistics collected according to tables on "Inspections, detentions and deficiencies"

Year	1999	2000	2001	2002	2003	2004	2005
Member state							
Austria	0	1.9	5.26	0	0	0	10
Belgium	0	0	0	10	10	2.56	0
Bulgaria							
Czech Republic							
Cyprus						5.71	2.84
Denmark	2	3.4	3.22	4.54	3.48	1.47	1.92
Estonia						1.45	0
Finland	2.4	0	1.25	3.49	1.2	1.1	0.53
France	0.9	3.2	2.44	5.21	0	1.28	0
Germany	2.6	3.1	3.35	1.1	2.02	1.7	1.95
Greece	5.8	5.6	4.89	4.91	4.59	5.24	3.09
Hungary						0	0
Ireland	1.4	2.9	0	0	1.92	8.57	2.9
Italy	7.9	7.2	5.35	3.68	4.2	1.89	1.91
Latvia						3.57	7.32
Lithuania						2.94	7.77
Luxemburg	2.3	1.8	3.28	1.45	1.52	0	1.59
Malta						7.09	4.75
Netherlands	2.9	4.3	2.43	3.78	2.18	2.62	2.02
Poland						5.56	4
Portugal	9	9.5	6.88	5.73	1.09	3.24	1.01
Romania							
Slovakia						24	19.74
Slovenia						0	0
Spain	4.9	5.7	1.79	5.06	7.62	1.9	1.15
Sweden	2.5	1.4	1.94	1.96	1.55	2.98	0.3
UK	3.2	0	0	2.3	2.28	1.01	1.45
Sum	47.8	50	42.08	53.21	43.65	85.88	76.24
EU MS average	3.19	3.33	2.81	3.55	2.91	3.58	3.18

= Not yet member in the EU