

Project Fiche for Phare 2006

1. Basic Information

1.1 CRIS Number: 2006/018-164.02.02

1.2 Title: Provision of effective search and rescue (SAR) services in Bulgarian SAR region

1.3 **Sector:** Transport/ Maritime

1.4 **Location:** Bulgaria and the Bulgarian Marine Region of Responsibility for Search and Rescue

1.5 **Duration:** 12 months

2. Objectives

2.1 Overall Objective(s):

To improve the safety of life at sea in the Bulgarian territorial waters and the Bulgarian Search and Rescue (SAR) region.

2.2 Project purpose:

The project aims to improve the efficiency of the Maritime Search and Rescue operations by strengthening the operational capacity of the Bulgarian Maritime Administration (BMA). It should increase the effectiveness of the Vessel Traffic Management Information System.

2.3 Accession Partnership (AP) and NPAA priority

The 2003 Accession Partnership sets the following priorities in the area of maritime transport:

"Complete alignment with EU maritime legislation in safety and non-safety areas; improve maritime safety, in particular improve the performance of maritime safety administrative institutions, firstly as a Flag State, and then as a Port State, and guarantee their independence; strengthen the Bulgarian Maritime Administration; further align with EU maritime acquis in areas of safety."

2.4 Contribution to National Development Plan (and/or Structural Funds Development Plan/SDP)

N/A

2.5 Cross Border Impact

N/A

3. Description

3.1 Background and justification:

The project is related to 83/419/EEC: Council Recommendation on the ratification of the SAR Convention 1979.

It is also related to Directive 2002/59/EC on the provision of Vessel Traffic Management and Information Services. BMA has already established an operating Vessel Traffic Services system in order to meet the requirements of the *acquis communautaire* by 2007 (Directive 2002/59/EC – preamble (paragraphs 13, 15 and 16), article 1, article 3a subsection 5, article subsection 2, article 17 subsection 1 (a) and (b), article 19 subsection 1 paragraph 2, article 20, article 21.). There is an ongoing PHARE project BG 2003/004-937.04.01 “Vessel Traffic Management and Information System Phase 2” that should complete the second phase of the overall Vessel Traffic Information Management System and satisfy the EU requirements. The project will not cover duties that should be performed by the BMA by accession. This project aims at further development of the potential of the VTMS, above the basic EU requirements.

In maritime safety issues the EU *acquis* is based on the implementation of International conventions in the Member States, while on various subject the EU *acquis* is adding specific regulations to the existing international rules.

A Council recommendation of 25 July 1983 on the ratification of or accession to the 1979 international convention on maritime search and rescue (SAR) (83/419/eec).

The amendments in Chapter 2 of the International Convention on Maritime Search and Rescue, 1979 are applicable directly to the project. The Chapter describes how national SAR services should be arranged and national capabilities be developed.

The requirements for the Republic of Bulgaria to maintain an adequate and effective search and rescue organization and to establish national machinery for the overall coordination of search and rescue derive from the Bulgarian Governments acceptance of following International Agreements:

- Convention of the High Seas - 1958.
- Convention on Safety of Life at Sea (SOLAS) - 1974;
- Convention of Maritime Search and Rescue - 1979 (as amended)

Since the beginning of the accession negotiations between Bulgaria and the EU in 2000, the Bulgarian Maritime Administration began work on the harmonization of the national legislation concerning the maritime transport, as well as its practices, with the European *acquis*. A lot of work has been done until Bulgaria concluded its accession talks on 15 June 2004.

The European Commission has indicated many times throughout the negotiations on Chapter 9 “Transport Policy” the importance of the harmonization of the Bulgarian legislation with the *acquis* in the area of maritime safety and the availability of administrative structures capable of implementing it. Moreover, the constant improvement of maritime safety and the alignment of the maritime legislation on the *acquis communautaire* are key issues.

According to the overall assessment and conclusions in the 2004 Regular Report on Bulgaria’s progress towards accession (2004) on Chapter 9 “Transport policy”:

“In maritime transport, framework legislation is largely in place. The relevant administrative structures are in place, but need further strengthening...., further transposition and implementation of the *acquis* in the land transport, aviation and maritime sectors needs to be ensured. Particular attention needs to be paid to the strengthening of the maritime safety authorities and their independence and to improving the maritime safety record.”

and 2005 Monitoring Report:

Increased efforts are needed in the in the areas of, air transport and maritime transport. In order to meet the commitments and requirements arising from the accession negotiations in these areas, Bulgaria has to further improve safety standards.

According to the Law on the Maritime Spaces, Inland Waterways and Ports of the Republic of Bulgaria, adopted on 28 January 2000, BMA is obliged with the tasks to: “organize the activities of search and rescue, interact with the forces and means of the neighbor countries and jointly with the Ministry of Defense carry out the search and rescue.”

According its Statutory Regulation, the BMA executes functions for ensuring the safety of navigation in the maritime spaces and inland waterways of the Republic of Bulgaria and coordinates SAR operations of people, vessels and aircraft.

In the field of Search and Rescue operations there is National Search and Rescue plan since 2004, which sets the general framework of such operations, the operational procedures and the cooperation among the various stakeholders involved in the process. It is the only administrative act that regulates the provision of maritime SAR services in the Republic of Bulgaria. Ordinance 12 of the Ministry of Transport, Ministry of the Interior and the Ministry of Defense from 29th of December 2005 regulates the Search and Rescue system in case of aviation incidents. It is based on the recommendations of IAM SAR manual (annexed to the SAR Convention SAR-79). Although there are no fundamental problems in the provision of maritime Search and Rescue, it should be improved significantly to a higher level of efficiency.

During the field work of BMA and the regular inner assessment reports there were some deficiencies found and some issues that need to be assessed in detail and further optimized. These problems were also identified during a work visit on the ongoing Twinning Project BG2003/004-937.04.03 – “Introduction of Total Quality Management System in the Bulgarian Maritime Administration” (see Report from the work visit of STE Steve Hoaxley – SAR Communication Manager MCA UK - Twinning Project BG2003/004-937.04.03). Some of deficiencies derive from the implementation of the National SAR Plan. However some of the problems originate from deficiencies of the Plan itself. It is used also as manual on maritime Search and Rescue operations, but its scope is too limited. There is a mixture of strategic and operational goals and objectives of different management levels. These operational problems need to be examined closely in order to be rectified and prevented in the future. Same weaknesses were identified in the process of BMA cooperation with the Bulgarian Voluntary Search and Rescue Service – non governmental organization. There were also discussions on SAR provision during the National Conference on Transport Safety and Security November 2005 (Module: Safety and Security in the Waterborne Transport) - (non-profit organization).

Some of the SAR operational weaknesses are: delays in the organization of common SAR team (among the various stakeholders), unification of the available resources (human resources, lack of proper modern equipment, lack of systematic approach to the organization of such operations and insufficient information resources, etc. BMA also needs a comprehensive Maritime SAR training program in accordance with the best European practices. This project proposal includes the development of such program which will be used in the future institutional trainings and transfer of knowledge.

The performance of SAR operations could be improved significantly through the introduction of specialized software/communication system that will allow the coordination and flows of information between the HQ, Maritime Rescue Coordination

Center (MRCC), Port Control units, Coast Radio Station, Emergency Position Indicating Radiobeacons, Operation centers, SAR Mission Coordinator, On Scene Commander (OSC) officer etc. This is equipment, used in the planning and coordination of rescue activities. That system uses the field data of the accident and helps the preparation of operation plan and optimum usage of the available resources. It should be in direct linkage with the Vessel Traffic Services as involves constant surveillance of the incident region, mapping system with the nearest vessels etc. The provision of such system will as well improve the fulfillment of the procedures, laid down in Annex 17 of the National Plan for Search and Rescue, on the Interaction in the Usage of Communication Channels in Maritime Accidents. A pre-feasibility studies was made by experts from the “Maritime Information Services, SAR” Directorate of BMA under the advice of partner expert advisers from the UK Maritime Coastguard Agency (Twinning Project BG2003/004-937.04.03).

Other vital IT equipment for the implementation of SAR operations is a software system for searching of drift objects in the search-and-rescue region. That equipment is used for determination of the search regions and the search methods under the control of SAR Mission Information Officer (SMIO) in MRCC. The one that is used currently from the “Maritime Information Services, SAR” Directorate of BMA is relatively outdated and needs replacement with more precise software systems, which should be as well applicable for interaction with the VTS system.

Currently experts from the “Maritime Information Services, SAR” Directorate of BMA work on the elaboration of detailed Feasibility studies and Technical Specifications of that specialized equipment that will best feet the Administration in the organization and implementation of SAR missions. Both studies should be completed by August 2006 with the expert support from the UK Maritime Coastguard Agency.

The general situation regarding the performance of SAR operations in the Bulgarian SAR region is dynamically changing. That is due to the potential of the region for transit cargo transport, as well as the booming increase in the recreational activities along the coastline. There are some factors, still to be examined in details that have the potential to increase the number of accidents and the number of people at risk, and therefore the number of SAR accidents which will require to be managed by the BMA. It is generally agreed that:

- The volume of shipping in the Black Sea Region, in particular the transportation of hydrocarbon cargoes, is expected to increase significantly over the coming years;
- The Bulgarian coastline has a number of stretches that are important tourist areas;
- There is also a general increase in leisure traffic in the inshore zone of the Bulgarian Search and Rescue Region because of a growing tourist industry.

The improvement of the organization of maritime SAR operations and the short response time is also closely related to the coordination of operations for protection of the marine environment from danger cargo spills. In case of such incidents SAR units will inevitably have an important role to play during counter pollution operations;

According to these disturbing trends, BMA seeks to develop recommendations regarding the future structure of SAR provision in the Bulgarian SRR over the next ten years;

In general the current problems in the SAR organization in the Bulgarian Search and Rescue Region concern mainly the coordination between various SAR stakeholders, operative units, and the lack of vision for sustainable development.

The specific problems/needs could be grouped as follows:

1. institutional – BMA needs detailed report on the current provision of SAR, with recommendations on the relevance of the National Search and Rescue Plan, its implementation, the integration of VTS information in SAR operations, future trends and risks related to the provision of SAR services, as well as a general plan for development of the SAR services;
2. functional – BMA needs support for the procurement of some specialized communication and software equipment that will allow more effective coordination SAR operations, as well as development of vision for the field SAR operational planning.

This project aims to fill the institutional gaps and provide the application of modern Informational and Communication Technologies in SAR coordination system and the integration of Vessel Traffic Services (VTS) in the implementation of SAR operations. It will enhance the maritime safety and will set basis for SAR services, corresponding to the best practices of the European Maritime Administrations.

3.2 Sectoral rationale

N/A

3.2.1 Identification of projects

3.2.2 Sequencing

The project has three main results – two results under the twinning and one under the supply. Result 2 and result 1 are interrelated. Result 3 is supply of specialized equipment and does not have a direct sequencing link to any of the above mentioned results.

3.3 Results:

The implementation of the project will have the following results:

Result 1:

Detailed report approved by BMA, on the current SAR provision, the implementation of the National Search and Rescue Plan and its relevance to the EU legislation in the field and the good practices of the EU Member States;

Result 2:

Long term development plan for SAR provision in the Bulgarian SAR region, approved by BMA;

Result 3:

Supply of specialized software/ communication equipment – Search and Rescue Information Management System (SAR IMS) and software program for Maritime Search Planning (MSP)

Indicators of achievement:

- Regular report of the regional Directorates of the Bulgarian Maritime Administration;

- BMA accident reports;
- European Commission reports on the SAR organization of the Member states and the acceding states;
- Protocol of acceptance;
- Information from the BMA website and in the Official Bulletin of the BMA;
- Feedback from the non-governmental organizations (e.g. BULSAR – Bulgarian Voluntary Search and Rescue Service)

3.4 Activities (including Means)

Activities, leading to Result 1:

1. Preparation of a summarized statistical data regarding the nature, frequency, geographical location and categories of accidents in the Bulgarian SAR region, subject to rescue operations;

- 1) Detailed statistics for the nature, frequency, geographical location and categories of incidents in the Bulgarian SAR region, subject to rescue operations. That should be delivered by the BMA expert staff with the support from the successful partner organization (STE SAR);
- 2) Summary of the information/ primary analysis of the information.

Currently there is not such general data available and its provision is essential for the achieving of Result 1. It should lay down the basis for the detailed report on the current maritime SAR situation.

2. Revision of the implementation of the National Search and Rescue Plan and its relevance to the EU legislation in the field and the good practices of the EU Member States;

- 1) Legal analysis on the compliance of Bulgarian national SAR legislation with the European requirements, and elaboration of improvement in the legal framework for further improvement of Bulgarian SAR organization and its management.
- 2) Analysis of the BMA accident reports;
- 3) Field observations and interviews with the operational staff;
- 4) Discussion with the other stakeholders involved in the SAR organization, as well as the non-governmental sector representatives;

3. Preparation of detailed report, on the current SAR provision;

- 1) Preparation of detailed report on the current Maritime SAR organization and provision in accordance with the National Search and Rescue Plan.
- 2) Recommendations regarding quantity, technical characteristics and dislocation of SAR facilities (SAR ships, ground teams, volunteer teams, etc.)

These activities should be delivered through twinning by an experienced Maritime SAR expert from the successful partner organization (STE SAR) in close cooperation with the BMA expert staff. All draft reports should be approved by the BMA on submission;

Activities, leading to Result 2:

1. *Risk assessment for the current situation and the future development in the organization of SAR operations in the Bulgarian Search and Rescue Region;*

- 1) Preparation of a forecast for the trends and analysis of the risks, related to the future development of the merchant shipping and the increased transit of goods in the Bulgarian Maritime Spaces;
- 2) Preparation of a forecast for the trends and analysis of the risks, related to the future development of the tourist industry and the small leisure vessels over the national coastal area;
- 3) Draft assessment of the resources needed by BMA in order to face the forthcoming challenges for the provision of SAR services.

2. *Design of comprehensive Maritime SAR Training Program*

- 1) design a suite of appropriate SAR training courses which will raise the competence of SAR employees at all levels of the organization. This will involve STE SAR and STE Training (which can be one and the same) with Bulgarian specific input provided by a BMA SAR Manager. The courses in question are;
 - SAR Co-ordination (Strategic level SAR management)
 - SAR Mission Coordination (Tactical level SAR operations)
 - On Scene Coordinator (Operational level SAR operations)
 - GMDSS Coast Station Operators Certificate (Radio Communications)
 - Maritime Search Planning
- 2) design of these courses will have regard to recommendations in the prepared report, and Model Course material available for purchase from the IMO. Appropriate BMA Managers will take part in a study visit to an EU Country with similar training delivery programs already in place;
- 3) design a program for delivery of training to the appropriate BMA SAR Staff. This will be achieved by input from BMA SAR Managers and STE Training.
- 4) draft a strategy for future training for new staff, and continuation training for existing staff, which is sustainable within the resources of BMA. This will be prepared by BMA SAR Manager with consultancy support from STE SAR/Training.

3. *Preparation of long term development plan for the provision of Search and Rescue services.*

- 1) Summary of the information from the report on the current SAR provision, the statistical data regarding the nature, frequency, geographical location and categories of accidents, as well as the risk assessment;
- 2) Preparation of draft plan for sustainable development in the provision of SAR for 10 years;
- 3) Coordination of the draft development plan with the other stakeholders involved in SAR operations;
- 4) Preparation of final long term development plan for the improvement of SAR provision over the coming ten years.

This should be delivered through Twinning by an experienced Maritime SAR expert from the successful partner organization (STE SAR).

Activities, leading to Result 3:

1. Procurement of specialized software/ communication equipment – Search and Rescue Information Management System (SAR IMS);

This software for this coordination system should include on-line access to currently update:

- Data base for globally registered ships (IMO/Lloyds);
- Data base for all ships flying Bulgarian flag;
- Data base for ships owned or operated by Bulgarian citizens;
- Data base for small crafts owned by Bulgarian citizens;
- Data base for Bulgarian aircrafts.

This procurement should include provision for Staff training on the system, and IT fault support post installation

2. Procurement of specialized software program for Maritime Search Planning (MSP);

As a tangible software system it will also support the function of delivering effective search instructions to SAR units at sea. This program should replace the system, which is used currently for determination of the possible search-and-rescue region.

This procurement should include provision for Staff training on the system, and IT fault support post installation.

3.5 Linked Activities:

- Project PSO99/BG/3/6 – “Vessel Traffic Management and Efficiency in Bulgaria” (December 1999 – May 2000), co-financed by the Bulgarian and Dutch government. During the project Baseline Document and Feasibility Study was developed and assistance in defining the VTMISS development strategy was granted.
- PHARE Project BG 0012.01 – “Bulgarian Vessel Traffic Management and Information System” (finalized in October 2004)
- PHARE Project BG 2003/004-937.04.01 “Vessel Traffic Management and Information System (VTMISS) Phase 2” (ongoing)

The above 3 projects deal with the establishment of a Vessel Traffic Monitoring and Information System, compliant with the European and international requirements, with the aim to enhance safety of shipping and protection of the marine environment alongside the Bulgarian Black Sea Coast. The VTMISS provides the information necessary for the timely and efficient Search and Rescue operations to be executed.

- Twinning Project BG-01-TR01 – “Maritime Safety Institution Building” between the Bulgarian Maritime Administration and Directorate-General for Freight Transport of the Netherlands Ministry of Transport, Public Works and Water Management. During that two year project a lot of EU Directives and Regulations have been transposed into the national legislation. Additionally the relevant procedures for the implementation of the harmonized legislation have been developed and a large scale training program for BMA PSC and FSC inspectors has been executed.
- Twinning Project BG2003/004-937.04.03 – “Introduction of Total Quality Management System in the Bulgarian Maritime Administration”; between the BMA

and the Maritime Safety and Coastguard Agency of the United Kingdom; (ongoing). During the project the Quality Management System of BMA will be analysed and if necessary revised and up-dated in order to guarantee its compliance with the requirements of the acquis and the relevant international instruments.

- Phare project BG 2005/017-353.04.01 – “Strengthening of the Waterborne Tasks of the Bulgarian Maritime Administration” (ongoing). Seven specialized vessels should be procured and used in the area of Search and Rescue in 2006 within the scope of this project.

3.6 Lessons learned:

4. Institutional Framework

The Beneficiary institution is the Bulgarian Executive Agency Maritime Administration (BMA). The Bulgarian Maritime Administration will become the owner of the assets after the project completion. The equipment will be placed in the regional offices of the BMA in Varna, Burgas, and Sofia.

The Executive Director of the BMA will appoint the project team (PIU) that will be responsible for the technical implementation of the project activities. Senior Project Officer will be responsible for day-to-day coordination of the project activities.

The Contact person within the BMA is:

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Executive Director

Bulgarian Maritime Administration

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5. Detailed Budget

	Phare/Pre-Accession Instrument support	Co-financing			Total Cost
€M		National Public Funds (*)	Other Sources (**)	Total Co-financing of Project	
Year 2006 - Investment support jointly co funded	0.516	0.172	N/A	0.172	0.688
Investment support – sub-total	0.516	0.172	N/A	0.172	0.688
<i>% of total public funds</i>	<i>max 75 %</i>	<i>min 25 %</i>			

	Phare/Pre-Accession Instrument support	National Public Funds	Other Sources (**)	Total Co-financing of Project	Total Cost
Institution Building support	0.722		N/A		0.722
IB support	0.722		N/A		0.722

Total project 2006	1.238	0.172		0.172	1.410
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(*) contributions from National, Regional, Local, Municipal authorities, FIs loans to public entities, funds from public enterprises

(**) private funds, FIs loans to private entities

6. Implementation Arrangements

6.1 Implementing Agency

The Ministry of Finance (MoF), Central Financing and Contracting Unit (CFCU) will act as Implementing Agency. The CFCU will be responsible for tendering and contracting.

Ministry of Finance,
102 Rakovski Street, Sofia 1000
CFCU Director
Tel: +359 2 98592772
Fax: + 359 2 987 88 08
e-mail: cfcu@minfin.bg

The CFCU will be the Contracting Authority and in that capacity will conduct tenders, conclude contracts and authorize related payments.

6.2 Twinning

Under an envisaged Resident Twinning Advisor (RTA) will be appointed to act as a coordinator of this project. The RTA must be a senior civil servant with solid experience within a Maritime Administration of a Member State and vast practical knowledge of building, management and improving systems, related with acquis and SAR.

The RTA is foreseen for 12 months mission in Bulgaria. He/she shall be based in BMA premises in Sofia and Varna. Fluent English speaking and writing skills is a requirement.

The RTA must be a senior civil servant with solid experience within a Maritime Administration of a Member State with relevant university diploma in natural science/maritime matters. He/she should have extensive knowledge as well as personal experience on the best EU practices regarding SAR activities. It is recommended that the RTA holds the highest sea service capacity (Master FG).

The RTA should be experienced in team-leading issues, project coordination and project management. The RTA should have a work experience on the implementation of project/s in the maritime sector of for at least 5 years. He/she should possess the knowledge and experience in the relevant SAR technical devices.

6.3 Non-standard aspects

There are no “non-standard aspects” of the project. The “Practical Guide to Contract Procedures by the General Budget of the European Communities in the Context of External Relations” will be strictly followed and this project will be implemented in compliance with its provisions.

6.4 Contracts

Two contracts:

- (1) One contract (Institution building - twinning) for 0,722 M Euro
- (2) One contract (Investment support - supply) for 0,688 M Euro

7. Implementation Schedule

Investment support

- 7.1 Start of tendering/call for proposals – April 2007
- 7.2 Start of project activity – December 2007
- 7.3 Project completion – July 2008

Institutional building

- 7.4 Start of tendering/call for proposals – November 2006
- 7.5 Start of project activity – January 2007
- 7.6 Project completion – December 2008

8. Equal Opportunity

The relevant standards of the EU as well as the Bulgarian laws and regulations concerning the equal opportunities for women and men will strictly be followed.

9. Environment

The project does not have negative impact on the environment. Its investment part is for communication/coordination equipment and software. It will improve SAR operations and will enable avoiding and reducing the occurrence of incidents. This will actually contribute to improved environmental conditions in Bulgarian territorial waters.

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10. Rates of return

N/A

11. Investment criteria (applicable to all investments)

11.1 Catalytic effect

Without Phare assistance, the project could be delayed up to 3 years

11.2 Co-financing

The project will be co-financed by the National Budget by 25 % in its investment part.

11.3 Additionality

No other financing sources from the private sector or from IFIs were available for financing this project.”

11.4 Project readiness and size

Detailed needs assessment studies and justifications on some of the components have been prepared under previous PHARE projects in connection with SAR needs (see “Linked activities” and “Lessons learned” above).

A pre-feasibility studies was made by experts from the “Maritime Information Services, SAR” Directorate of BMA under the advice of partner expert advisers from the UK Maritime Coastguard Agency (Twinning Project BG2003/004-937.04.03).

Currently experts from the “Maritime Information Services, SAR” Directorate of BMA work on the elaboration of detailed Feasibility study and Technical Specifications of the specialized equipment that will best meet the Administration in the organization and implementation of SAR missions. Both studies should be completed by August 2006 with the expert support from the UK Maritime Coastguard Agency.

11.5 Sustainability

The project complies with EU norms and standards and is in line with the *acquis* of the Transport sector concerned. It should not have adverse effects on the environment.

As a result of the Project there will be a more qualified BMA staff concerning SAR operations. BMA take the responsibility to ensure the sustainability of the Project’s results.

11.6 Compliance with state aids provisions

The project is in accordance with Article 92(3)(a) of the Treaty of Rome. All actions financed by Phare will be carried out in line with the rules and procedures of Phare, ISPA and SAPARD Practical Guide and comply with the state aid agreements.

The final beneficiary (Bulgarian Maritime Administration) is a public body carrying out public services. The equipment to be procured is aiming at strengthening these public services.

12. Conditionality and sequencing

Projects implemented through twinning require the full commitment and participation of the senior management of the beneficiary institution. In addition to providing the twinning partner with adequate staff and other resources (including translation and interpretation) to operate effectively, the senior management must be whole-heartedly involved in the development and implementation of the policies and institutional change required to deliver the project results.

The engagement of the allocation for Investment Support is conditional on the list of equipment to be provided is justified in terms of its relevance to the achievement of the objectives of this project, and is approved by the Steering Committee for this project and endorsed by the CFCU and the Delegation of the European Commission.

ANNEXES TO PROJECT FICHE

1. Logframe in standard format
2. Detailed implementation chart

3. Contracting and execution of contracts schedule, by quarter, for full duration of project (including execution of contracts period)
4. For all projects: reference list of feasibility/pre-feasibility studies,
5. Reference list of relevant laws and regulations

1. LOGFRAME

Logframe planning matrix for Project Fiche	Program name and number: Phare 2006	
Title: PROVISION OF EFFECTIVE SEARCH AND RESCUE (SAR) IN THE BULGARIAN SAR REGION	Contracting period expires: 30.11.2008	End of execution fo contracts period expires: 30.11.2009
	Total budget year: 1: MEUR 1.410	Phare budget year: 1: MEUR 1.238

Overall Objective	Objectively Verifiable Indicators	Sources of Verification	
To improve the safety of life at sea in the Bulgarian territorial waters and the Bulgarian Search and Rescue (SAR) region.	<ul style="list-style-type: none"> Reduction in accident rates and effects 	<ul style="list-style-type: none"> Statistical data for the activity of the BMA, published in the Official Bulletin of the BMA; 	
Project Purpose	Objectively Verifiable Indicators	Sources of Verification	Assumptions
The project aims to improve the efficiency of the Maritime Search and Rescue operations by strengthening the operational capacity of the Bulgarian Maritime Administration (BMA). It should increase the effectiveness of the Vessel Traffic Management Information System.	<ul style="list-style-type: none"> BMA performs SAR operations demonstrating effective coordination and implementation of relative EU legislation; Effective usage of VTMISS in SAR operations; 	<ul style="list-style-type: none"> Regular report of the regional Directorates of the Bulgarian Maritime Administration; BMA accident reports; European Commission reports on the SAR organization of the Member states and the acceding states. 	<ul style="list-style-type: none"> Effective co-operation between all institutions; Adequate financing from the Bulgarian government.

Results	Objectively Verifiable Indicators	Sources of Verification	Assumptions
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<p>The implementation of the project will have the following results:</p> <p>Result 1: Detailed report, approved by BMA, on the current SAR provision, the implementation of the National Search and Rescue Plan and its relevance to the EU legislation in the field and the good practices of the EU Member States;</p> <p>Result 2: Long term development plan for SAR provision in the Bulgarian SAR region;</p> <p>Result 3: Supply of specialized software/communication equipment – Search and Rescue Information Management System (SAR IMS) and software program for Maritime Search Planning (MSP)</p>	<ul style="list-style-type: none"> • Detailed report, approved by BMA, on the current SAR provision, the implementation of the National Search and Rescue Plan and its relevance to the EU legislation in the field and the good practices of the EU Member States; • Long term development plan for the provision of Search and Rescue services. • Developed and approved Maritime SAR training program; • Equipment procured according to the technical specifications, delivered, operational and integrated with VTMISS by December 2007; 	<ul style="list-style-type: none"> • Protocol of acceptance; • Information from the BMA website and in the Official Bulletin of the BMA; • Feedback from the non-governmental organizations (e.g. BULSAR – Bulgarian Voluntary Search and Rescue Service) 	<ul style="list-style-type: none"> • Sufficient interest from EU Member state relative administrations; • Continual government support and management efforts for the improvement in the sector;
Activities	Means		Assumptions

<p><u>Activities, leading to Result 1:</u></p> <ol style="list-style-type: none"> 1. Preparation of a summarized statistical data regarding the nature, frequency, geographical location and categories of accidents in the Bulgarian SAR region, subject to rescue operations; 2. Revision of the implementation of the National Search and Rescue Plan and its relevance to the EU legislation in the field and the good practices of the EU Member States; 3. Preparation of detailed report, on the current SAR provision; <p><u>Activities, leading to Result 2:</u></p> <ol style="list-style-type: none"> 1. Risk assessment for the current situation and the future development in the organization of SAR operations in the Bulgarian Search and Rescue Region; 2. Design of comprehensive Maritime SAR Training Program; 3. Preparation of long term development plan for the provision of Search and Rescue services. <p><u>Activities, leading to Result 3:</u></p> <ol style="list-style-type: none"> 1. Procurement of specialized software/communication equipment – Search and Rescue Information Management System (SAR IMS); 2. Procurement of specialized software program for Maritime Search Planning (MSP); 	<p>1 contract for Twinning 1 contract for Supply</p>		<ul style="list-style-type: none"> • Effective co-ordination between the parties involved in the implementation of the planned activities;
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Preconditions

- Continuation of the sustainable development of VTMISS through Phare project 2003/004-937.04.01;
- Feasibility study and Technical specifications for the equipment to be procured available at the beginning of the project;

2. Detailed implementation chart

ANNEX II Detailed Implementation Chart

Project: Provision of effective Search and Rescue (SAR) services in Bulgarian SAR region																										
Components	2006		2007												2008											
	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Supply						T	T	T	T	T	T	T	C I	I	I	I	I	I	I	I	I					
Twinning	D/T	T	C/I	I	I	I	I	I	I	I	I	I	I	I												

3. Contracting and execution of contracts schedule, by quarter, for full duration of project (including execution of contracts period)

Project: : Provision of effective Search and Rescue (SAR) services in Bulgarian SAR region – investment component					
Components	Cumulative contracting schedule by quarter in MEUR (planned)				
	2007		I	2008	
	Q3	Q4	Q1	Q2	Total Allocation
Supply (Phare)		0.516	0.516	0.516	0.516
Total Phare contracting		0.516	0.516	0.516	0.516
Supply – national co-financing		0.172	0.172	0.172	0.172
Total National Co-financing		0.172	0.172	0.172	0.172
TOTAL CONTRACTING		0.688	0.688	0.688	0.688
Components	Cumulative execution of contracts schedule by quarter in MEUR (planned)				
	2007		I	2008	
	Q3	Q4	Q1	Q2	Total Allocation
Supply (Phare)	0.3096	0.4644	0.516	0.516	0.516
Total Phare execution of contracts:	0.3096	0.4644	0.516	0.516	0.516
Supply – national co-financing	0.0702	0.1053	0.172	0.172	0.172
Total National Co-financing	0.0702	0.1053	0.172	0.172	0.172
TOTAL EXECUTION OF CONTRACTS	0.3798	0.6174	0.688	0.688	0.688

Project: : Provision of effective Search and Rescue (SAR) services in Bulgarian SAR region – IB component

Components	Cumulative contracting schedule by quarter in MEUR (planned)				
	2007				Total Allocation
	Q1	Q2	Q3	Q4	
Twinning (Phare)	0.722	0.722			0.722
Total Phare contracting	0.722	0.722			0.722
Twinning (NF)					
Total National Co-financing					
TOTAL CONTRACTING	0.722	0.722			0.722
Components	Cumulative execution of contracts schedule by quarter in MEUR (planned)				
	2007				Total Allocation
	Q1	Q2	Q3	Q4	
Twinning (Phare)	0.5776	0.722	0.722	0.722	0.722
Total Phare execution of contracts:	0.5776	0.722	0.722	0.722	0.722
Twinning (NF)					
Total National Co-financing					
TOTAL EXECUTION OF CONTRACTS	0.5776	0.722	0.722	0.722	0.722

4. Reference list of feasibility/pre-feasibility studies

- Report developed within the twinning project BG.IB/2001-TR01: “Assessment for the renewal of the fleet of the Maritime Administration”;
- Report from the work visit of STE Steve Hoaxley – SAR Communication Manager MCA UK - Twinning Project BG2003/004-937.04.03;
- Explanatory note on the statement on project-conception of the development of SAR services in the Bulgarian SAR region (September 2005);
- Pre-feasibility study developed by “Information Services for Shipping, Search and Rescue” Directorate of BMA.

Needs assessments for the procurement of equipment (prepared by “Information Services for Shipping, Search and Rescue” Directorate of BMA)

The investment support component of the project “Provision of effective Search and rescue (SAR) services in the Bulgarian SAR region” provides the procurement of specialized equipment for the needs of SAR coordination.

- 1. Procurement of specialized software/ communication equipment – Search and Rescue Information Management System (SAR IMS);***
- 2. Procurement of specialized software program for Maritime Search Planning (MSP);***

Currently experts from the “Maritime Information Services, SAR” Directorate of BMA work on the elaboration of detailed Feasibility studies and Technical Specifications of that specialized equipment that will best meet the Administration in the organization and implementation of SAR missions. Both studies should be completed by August 2006 with the expert support from the UK Maritime Coastguard Agency.

The project is a continuation of work delivered by the cooperation of BMA experts in close cooperation with representatives of MCA UK during the ongoing Twinning project BG2003/004-937.04.03 – “Introduction of Total Quality Management System in the Bulgarian Maritime Administration”.

The entire project links to the ongoing establishment of VTMS system (BG 2003/004-937.04.01 “Vessel Traffic Management and Information System (VTMS) Phase 2”.

The entire project links to the ongoing PHARE project (BG 2005/017-353.04.01 – “Strengthening of the Waterborne Tasks of the Bulgarian Maritime Administration”) for procurement of rescue boats

If this Twinning project does not go ahead – provision of efficient SAR Co-ordination, then the outcomes of those other projects above can never be fully realized.

BMA developed a draft specification for the required operational and management functions of an IMS to support SAR activities (hardware & software). This planning stage considers basic technical requirements, and how it can be integrated with other existing communication systems and software used within BMA.

The SAR IMS should join up Port Control; MRCC; CRS; Regional HQ Varna; BMA HQ Sofia. It is assumed that the system will have the following parameters:

- 2 live/dynamic workstations MRCC
- 2 live/dynamic workstations Varna Radio
- 2 live/dynamic workstations Port Control Varna
- 1 live/dynamic workstation Port Control Burgas
- 1 management access point at Regional HQ Varna
- 1 management access point at Sofia BMA HQ

The data flows and relations between Port Control and other participants in SAR operations should be established in the most effective manner. Integration between the IMS and VTMS is an essential requirement.

For example:

- MRCC will require information on traffic dispersion during a SAR incident;
- Port control may be a source of SAR assets;
- MRCC might require to impose a temporary exclusion zone around the scene of an accident, Port Control should be able to control that;
- MRCC might require SAR broadcast action on Port frequencies;
- HQ needs access to the system to download management reports on incidents etc for statistical analysis;
- MRCC to Coast Radio Station link is paramount to enable flows of information on EPIRBs, required broadcast action; etc.

At the moment VTMS uses a mapping system developed by Transas. The electronic charts cover the SAR area. The mapping system referred to is “Ordnance Survey” i.e. land maps as opposed to marine charts. These are used in Search and Rescue particularly in the leisure sector where incidents tend to occur close inshore and are often reported on by members of the public. The MRCC ought to have access to both maps and charts covering the coastal areas and the entire SRR. The land maps and marine charts are necessary for SAR operations, so BMA intends to use the a.m. system.

There is a wide area network existing in place between the various locations mentioned above. WAN exists between all locations mentioned above. WAN is based on a VTMS telecommunication system.

The software for this coordination system should include on-line access to currently update:

- Data base for globally registered ships (IMO/Lloyds);
- Data base for all ships flying Bulgarian flag;
- Data base for ships owned or operated by Bulgarian citizens;
- Data base for small crafts owned by Bulgarian citizens;
- Data base for Bulgarian aircrafts.

This procurement should include provision for Staff training on the system, and IT fault support post installation

English language is well accepted in current activities so there is no need to translate the system in Bulgarian language.

All hardware equipment will be purchased and supported locally.

The needed software should use modern mathematic model of estimation, including the capability of search of small drifting crafts, with the particular characteristics of the Bulgarian SAR region, interacting with SAR IMS.

For both systems initial operational training should be included in the procurement - Methodological support for putting the program into operation and training of the personnel to use it (18 people from the Maritime Rescue Coordination Center (MRCC), 6 On Scene Commanders etc.)

The complete technical specifications should be delivered by BMA IT Department in consultation with SAR, VTMS, Shipping Safety and GMDSS Operations Managers. It will require input and support from experienced IT and SAR experts (STE IT & STE SAR) through Twinning with the successful partner organization. There should be also a study visit to a suitable EU Administration to investigate a working system;

Draft estimates of the project budget:

Investment support component:

- Component SAR Information Management System – 0.655 MEuro
- Component Maritime Search Planning software/hardware 0.032 MEuro

Institution Building component 0.802 MEuro

Total: 1.489 MEuro

5. Reference list of relevant laws and regulations

MARITIME SAFETY ACQUIS:

1. Council Recommendation 83/419/EC of 25 July 1983 on the ratification of or accession to the 1979 International Convention on Maritime Search and Rescue (SAR)
2. Directive 2002/59/EC of the European Parliament and the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC (OJ L 208 of 5.8.2002, p. 10)

INTERNATIONAL CONVENTIONS

1. International Convention on Maritime Search and Rescue, 1979, as amended
2. United Nations Convention on the Law of the Sea, 1982
3. International Convention for the Prevention of Pollution from Ships, 1973, as amended
4. International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990

NATIONAL INSTRUMENTS

1. Law on the Maritime Spaces, Inland Waterways and Ports of The Republic of Bulgaria
2. National Search and Rescue Operations Plan for Bulgarian Black Sea SAR Region
3. Ordinance 12 of the Ministry of Transport, Ministry of the Interior and the Ministry of Defense from 29th of December 2005 on the Search and Rescue system arrangements in case of aviation incidents
4. Ordinance on the Vessel Traffic Information Reporting and Management Systems in the Bulgarian Maritime Spaces and the Bulgarian SAR Responsible Region.