1. BASIC PROJECT INFORMATION

**CRIS Number** : BG2003/004-937.04.01

**Project Title** : Vessel Traffic Management and Information System (VTMIS) Phase 2

**Sector** : Transport

**Project Location** : Bulgarian Black Sea Coastal waters, Port approaches, Inland Waterways and Ports

2. OBJECTIVES

2.1 Overall Objectives

1- Strengthening of marine safety in the Bulgarian territorial waters¹:
   - prevention of dangerous situations on the Bulgarian territorial waters,
   - limitation of effects of accidents in the Bulgarian territorial waters.
   - assistance in cases of distress and Search and Rescue.

2- Enhancing the efficiency in the Bulgarian ports contributing to the development of the transport multi-modal chain in connection with the EU Transport Corridors. Development is aimed at both sides: inland and seaside.

3- Protection of the (marine) environment on Bulgarian territorial waters (prevention of damage to the quality of surface water and air by shipping in the Bulgarian coastal area, harbour basins and navigable inland waters).

2.2 Purpose of the Project

To enhance the technical structure of the Bulgarian VTMIS as an integrated instrument for full achievement of the objectives stated above and also in line with the EC-Directives 93/C-271/01, 2158/93, 94/57/EC and 95/21/EC, and the IMO Resolution A.857 (20), SOLAS 74/78 as amended, ITU-GMDSS, in conformity with the IALA (International Association of Lighthouse Authorities) VTS Guide and the IALA( International Association of Lighthouse Authorities) AIS Guide.

2.3 Accession Partnership and NPAA priority

Within the scope of the Project Phase 2 is the alignment with the achievements of the EC countries in the vessel traffic management, port information systems and SAR services. The first NPAA priority is the maritime safety. With the vessel information services, the institutional building and the legal framework, the Maritime Administration will better fulfill the responsibilities of the Coastal State under the requirements of UNCLOS.

2.4 Cross border impact

¹ Bulgarian territorial waters are coastal waters within the 12 nautical miles zone, the ports and inland waterways, including the Danube River.
When interconnected with the VTS centers of the neighboring countries to exchange vital traffic and SAR information. To ascertain that all the west coast of the Black sea is covered with reliable communication possibilities, distress urgency and safety information, provided to the shipping.

3. DESCRIPTION OF THE PROJECT

3.1 Background and Justification:

To complete the Bulgarian system and to ensure that the aim of the VTMIS is reachable there have to be done a sound investment. To acquire a bank loan for that purpose is very difficult in the present situation and the time span of the project will be extended unjustifiably. With the help of the PHARE program the Project Phase 2 can be justified timely in the shortest possible period.

The scope of supply in the Project VTMIS PHARE BG 0012.01 is:
- VHF Communication subsystem for coverage of the GMDSS area A1,
- AIS transponder subsystem (base stations) for coverage of the Bulgaria coast,
- Telecommunication network which includes Microwave Carrier Link (MCL), WAN equipment (routers), wireless and wired LAN and the associated components for connecting the communication components of the VTMIS,
- The equipment of the Operating Centers and the Technical Service Unit for management and maintenance of the system.

With the completion of the Project PHARE BG 0012.01 the communication backbone of the VTMIS will be built.
The radar sensors are not included in this tender.
The RDF equipment in the supply contract is for partially coverage only. There are only 3 RDF sets.
The DGPS equipment is only for coverage of the Varna Lake – 1 DGRP reference station.
The IT/DB subsystem system for management and disseminating of the traffic information to the external users is not included in the contract.
The Civil Works for I phase, which are required for building and setting up of the communication sites, have been secured by national co-financing. This includes mast towers, housing of the equipment, power supply arrangements, connecting roads and infrastructure, preparation and renovation of the rooms and the buildings at the communication sites and the operational centers.
The core of a VTMIS is a radar subsystem and image processing capability.
Due to the limited resources for the Phase 1 of the Project only 3 available radars have been integrated into initial VTMIS. That justifies the necessity to create this new project with a package of activities for the initial start of the operation of the system as a next step in the establishment of the whole Bulgarian system VTMIS.

3.2 Linked Activities

The current Project is based on:

3.2.1 Project “Emona” – January 1996 – April 1998 financed by the shipping company Navigation Maritime Bulgare
3.2.2 Project PSO99/BG/3/6 Vessel traffic Management and Efficiency in Bulgaria – December 1999 – May 2000 – co-financed by the Bulgarian and Dutch government
3.2.3 Environmental Impact Assessment Study - within the scope of the Emona Project.
3.2.4 Bulgarian Vessel Traffic Safety and Efficiency (Baseline Document and Feasibility Study, March 10, 2000) – within the scope of the Project PSO99/BG/3/6
3.2.5 The Project VTMIS PHARE BG 0012.01 is financed by the PHARE and co-financed by the Bulgarian government.

In the last project, BG 0012.01, there is a Contract for Supply of Vessel Traffic Management and Information System (VTMIS) that was awarded and signed between CFCU, Ministry of Finance

The tender for the civil works in connection with the Project VTMIS PHARE BG0012.01 has been finalized and the contract will be signed until the end of April 2003.

3.3 Results

By the end of this Project the following results will be achieved:

- Supply and implementation of the Radar Sensors and Radar tracking systems will contribute to the safety in Bulgarian territorial waters as well as protection of environment. This will lead to economic improvement by means of having proper and really actual information for the ships and ships movement in these waters and ports. A newly build-up of hi-tech facility will be created that will improve the quality of the maritime safety;
- Radar data processing system will contribute for the facilitating of ships maneuvering in VTS embarrassed waters, ports and near ports spaces;
- Improving the ships safety and security with Radio Direction Finding that will facilitate improvement of tracking of crafts impossible to be observed by the radars as well as finding of vessels having correct or false radio emissions;
- A serious improvement in ships movement in narrow and difficult for navigation waters like lakes and canals and close to coast waters using DGPS;
- Properly maintained technical system after implementation of VTMIS using measuring instruments and special tools.

3.4 Activities

The VTMIS Phase 2 will create an enhanced and upgraded system with:

- New radar observation, radar multitracking and multifusion processing subsystem implemented on the base architecture of the telecommunication system laid up in Phase 1. 3 Long range and 6 Sort range radars with the radar processing systems, radar multifusion and multitracking systems are envisaged.
- The completion of the RDF coverage with additional 3 RDF systems to contribute for the coverage of the whole Bulgarian coast. This is a requirement for detection and homing of small (Non-SOLAS) crafts.
- The expansion of the MCL subsystem with 5 hops is for the connection of the radar subsystem with the TN and the possibility for data exchange of communication with the new radar sites.
- The additional DGPS subsystem is for the coverage of the Burgas area and for coverage of the Bulgarian coast.
- The hardware and the software for the Database subsystem is for the management of the traffic data, dissemination and data exchange with the external users (the SAR authority, the other governmental agencies, the shipping community and the other users). The database platform is very important for the VTMIS structure with the possibility for evaluation and statistical analysis of the system performance and for the support of the system information resources. At this stage only the hardware and the system operation software platform is envisaged to be provided. The specialized software platform for database management dissemination and Internet based applications will be developed in the next phase of the VTMIS Project (supposedly Phase 3).
- To provide the tools and measuring equipment which include - Digital Storage Oscilloscopes, Spectrum Analyzers, Cable fault and diagnostics equipment, Microwave frequency counters, Handled Spectrum Analyzers, Power Meters, Portable PDH Analyzers, Portable LAN (Ethernet) analyzers.
- To provide power supply and the security equipment which include: - Power supply rectifiers, UPS devices, Emergency power supply, burglar and security equipment for the new radar sites.

The Civil Works will cover: reconstruction of some existing sites, building of new constructions, installation and setting up of the radar sites.
4. INSTITUTIONAL FRAMEWORK

The Beneficiary institution is the Bulgarian Executive Agency Maritime Administration (EA MA) at the Ministry of Transport and Communications (MoTC). The CFCU will be responsible for the implementation of the project (IA), which will act under the general supervision of the Ministry of Finance (PAO – Dep. Minister). The Beneficiary institution will establish a PIU. Senior Project Officer (SPO) has been determined from MoTC. Depending on the specific tasks, the experts will stay either in the Headquarters of the EA MA or in the regional offices in Bourgas and Varna.

The Bulgarian VTMIS should be operated in accordance within the following legal framework:

- **International**
  - IMO S? L? S Convention
  - SAR Convention
  - ITU Radio Regulations
  - IALA VTS/VTMIS Guidelines
  - Relevant EC Directives

- **National**
  - Merchant Shipping Code
  - Telecommunication Law
  - Sea Spaces Law
  - Ordinance of the Executive Agency Maritime Administration

5. DETAILED BUDGET

<table>
<thead>
<tr>
<th>Phare Support</th>
<th>National Co-financing</th>
<th>IFI*</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Support</td>
<td>Institution Building</td>
<td>Total Phare (I+IB)</td>
<td></td>
</tr>
<tr>
<td>Supply Contract</td>
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<td>2,137,500.00</td>
<td>712,500.00</td>
</tr>
<tr>
<td>Technical Assistance</td>
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<td>130,000.00</td>
<td>-</td>
</tr>
<tr>
<td>Civil Works</td>
<td>210,000.00</td>
<td>210,000.00</td>
<td>140,000.00</td>
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<tr>
<td>Supervision for Civil Works</td>
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<td>22,500.00</td>
<td>7,500.00</td>
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<tr>
<td>Total</td>
<td>2,500,000.00</td>
<td>2,500,000.00</td>
<td>860,000.00</td>
</tr>
</tbody>
</table>

National co-financing will be provided by the Ministry of Finance through the National Fund. The detailed budget is shown in ANNEX 2.
6. IMPLEMENTATION ARRANGEMENTS

6.1 Implementing Agency

The Ministry of Finance (Central Financing and Contracting Unit) will act as an Implementing Agency.

The Senior Project Officer:
- Attends/presides project meetings;
- Approves the official documents;
- Officially signs all the contracts;
- Reports to the Ministry.

Contact details:
Address: 9, Djakon Ignatij str. Sofia 1000, Bulgaria
Tel: 359 2 930 0930
Fax: 350 2 930 0920
E-mail: bma@marad.bg

6.2. Non-standard aspects

For non-standard contract/tender procedures PRAG will be strictly followed.

6.3. Contracts

For the fulfillment of VTMIS Phase 2 Project the following contracts will be signed:
- Technical assistance
- Supply of required equipment
- Civil works
- Supervision

6.3.1. Technical assistance for 130 000 € from PHARE support
- Preparation of Tender dossier and technical specification of complex maritime radar observation, radar processing, multitracking and multifusion target display.
- Updating of the feasibility study.

6.3.2. Supply contract for 2 850 000 € from which the PHARE investment is 2 137 500 €

6.3.3. Works for 350 000 € from which the PHARE investment is 210 000 €

6.3.4. Supervision for 30 000 € from which the PHARE investment is 22 500 €

7. IMPLEMENTATION SCHEDULE

Start of tendering: March 2004
Start of project activity: January 2005
Project Completion: December 2006

8. RATES OF RETURN

The Feasibility study for the whole VTMIS Project has been performed by a consortium of Maritime Systems Technology / Port Management Consultants and Frederic R. Harris and attached to fiche for the VTMIS Project Phase 1(Project PHARE BG 0012.01).

An assessment of the safety benefits has been made through a qualification and quantification of safety and efficiency effects of a future VTMIS.
For the purpose of the Project VTMIS Phase 2 the Feasibility study will be updated within the scope of the technical assistance.

9. INVESTMENT CRITERIA

Catalytic Effect
The Project provided will be completed successfully for at least the greater part of the coast line and will have a positive effect on trade and industry in Bulgaria.

Co-financing
The project is co-financed by the national budget with total amount of 860 000 €.

Additionally
No other financing sources from the private sector or from IFIs are available for this project.

Project Readiness and size
The Project VTMIS PHARE BG 0012.01 (Phase 1) is at the implementation stage. The contract for the supply and installation of the equipment has already been signed. The Implementation and Supervisory Unit of the EAMA jointly with the Suppliers Project Team are working together according to the implementation plan. The human resources in the scope of the EAMA for the operation and the maintenance of the overall system have been approved by the Council of the Ministers on the 14.02.2003.
The preliminary studies for the Project VTMIS Phase 2 are performed but further activities have to be envisaged for better definition of components involved.

Sustainability
The sustainability is in the future better results in shipping traffic and risky situations and decrease of accidents; decrease of environment pollution.

Compliance with state aids provisions
Full compliance with the state aids provisions.

10. CONDITIONALITY AND SEQUENCING

Conditionality
Required financial resources for the National co-financing will be secured from the National Budget by the Ministry of Finance (Direction National Fund).

Office space and equipment in the central and regional areas will be provided by the EA MA for the duration of the foreign consultants assignment. They will be supported by a qualified Bulgarian staff. The project management team created for the Project PHARE BG0012.01 with skilled experts in project management will support also the current project.

Sequencing
The need for a comprehensive legal framework, containing regulations for the vessel traffic has been identified. The Ministry of Transport and Communications shall take appropriate measures including the use of technical assistance to prepare appropriate draft regulations and their adoption by the Council of Ministers. The responsible Bulgarian authorities should reorganise the institutional structures for efficient management and operation of the whole VTMIS system.
List of Annexes to the Project Fiche

1. Log-frame matrix

2. Detailed Budget

3. Detailed Implementation Chart.

4. Contracting and Disbursement Schedule.

5. Current status of the project
**ANNEX 1**

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project title</th>
<th>Vessel Traffic Management Information System Phase 2</th>
<th>Total Budget of the whole Project</th>
<th>Total Requested PHARE financing</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Vessel Traffic Management Information System Phase 2</td>
<td>Euro € 3 360 000</td>
<td>Euro € 2 550 000</td>
<td></td>
</tr>
</tbody>
</table>

### Wider Objectives
- Promotion of marine safety in the Bulgarian territorial waters
- Promotion of the economic development through improvement of transport through Bulgarian Ports and through industrial development in Bulgaria.
- Promotion of the protection of the (marine) environment on Bulgarian territorial waters.

#### Indicators of achievement
- Reduction in accident rates and effects
- Increased cargo throughput of Bulgarian ports
- Reduction in accidental and illegal oil spills

#### Sources of information
- the EC-Directives 93/C-271/01, 2158/93, 94/57/EC and 95/21/EC,
- the IMO Resolution A.857 (20) and SOLAS 74/78 convention,
- ITU Recommendations (AIS M.1371-1, DSC-M.493, M.541)
- SOLAS ch. IV - GMDSS requirements.
- MARPOL Requirements.

#### Assumptions
- Bulgaria’s drive towards an open and competitive market economy is maintained
- Continued EU and IFI support

### Immediate Objectives
- To create the technical means of a VTMIS as an integrated instrument to achieve the Bulgarian Government’s objectives with regard to marine safety, protection of the environment and economic development.
- To develop technical and institutional capabilities in Bulgaria to realise and maintain the VTMIS.
- To use and operate the VTMIS in an optimal way.

#### Indicators of achievement
- Buildings, sensor equipment, data processing equipment, display equipment (computers and software), communication equipment, automatic identification aids, direction-finding, observation (CCTV and thermovision image processing).
- VTS legal and organisational framework
- Training facility (VTS simulator computers & software)
- Training staff, maintenance management staff
- Certified VTS Operators

#### Sources of information
- IALA guidelines
- Consultancy services
- System engineering experience, local and foreign.
- Varna Initial System
- Study visits
- Local operational experience
- Local Maritime Training expertise

#### Assumptions
- Support and confidence from management and staff
- Stable National economy

### Results of the Project
- Improvements can be derived from the decrease in the number of conflict situations, near misses and accidents – about 25 % for the first 5 Years after the official registration of the Service

#### Indicators of achievement
- Reduction of distress situations and accident occurrences, incl. non SOLAS crafts;
- Reduction of accident effects;
- Reduction of near misses;
- Safety-oriented consciousness of the shipping society;

#### Sources of information
- Accident records
- Near miss records

#### Assumptions
- Vessel Traffic Management implemented according to the pre-defined operational requirements.

#### Risks
- Failure to meet quality, planning and budget requirements.
### ANNEX 2

#### DETAILED BUDGET

<table>
<thead>
<tr>
<th>Components</th>
<th>Investment</th>
<th>Phare Support (in Euro)</th>
<th>National Co-Financing</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply Contract</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 VTS subsystem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Radar tracking system and radar sensors (3 Long range radars and 6 Short range radars)</td>
<td>€ 1,200,000.00</td>
<td>€ 900,000.00</td>
<td>€ 300,000.00</td>
<td>€ 1,200,000.00</td>
</tr>
<tr>
<td>1.2 Radar data processing system extension for multi-fusion and multi-tracking system</td>
<td>€ 700,000.00</td>
<td>€ 525,000.00</td>
<td>€ 175,000.00</td>
<td>€ 700,000.00</td>
</tr>
<tr>
<td>1.3 RDF – For Radio Direction Finding of Ships in Distress (one mobile station and 3 complementary base stations)</td>
<td>€ 310,000.00</td>
<td>€ 232,500.00</td>
<td>€ 77,500.00</td>
<td>€ 310,000.00</td>
</tr>
<tr>
<td>1.4 Radio Relay Equipment for extension of the existing system – 5 hops.</td>
<td>€ 200,000.00</td>
<td>€ 150,000.00</td>
<td>€ 50,000.00</td>
<td>€ 200,000.00</td>
</tr>
<tr>
<td>1.5 DGPS-VHF Reference station on mobile platform (4x4 vehicle) – 1 mobile station (extension of the existing DGPS system in VTMIS – I to cover Burgas and the coastal area)</td>
<td>€ 80,000.00</td>
<td>€ 60,000.00</td>
<td>€ 20,000.00</td>
<td>€ 80,000.00</td>
</tr>
<tr>
<td>1.6 IT/DB subsystem: DB software platform + Hardware (redundant storage, servers and work stations),</td>
<td>€ 160,000.00</td>
<td>€ 120,000.00</td>
<td>€ 40,000.00</td>
<td>€ 160,000.00</td>
</tr>
<tr>
<td>1.7 Additional equipment for the enhanced system - measuring equipment and special tools, power supply and burglar security extensions</td>
<td>€ 130,000.00</td>
<td>€ 97,500.00</td>
<td>€ 32,500.00</td>
<td>€ 130,000.00</td>
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<tr>
<td>1.8 Installation and Commissioning</td>
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<td>€ 17,500.00</td>
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<td>€ 2,137,500.00</td>
<td>€ 712,500.00</td>
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<tr>
<td>2 Technical assistance</td>
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<tr>
<td>3 Civil Works</td>
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<tr>
<td>4 Supervision Civil Works</td>
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<tr>
<td><strong>TOTAL Contracts</strong></td>
<td></td>
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</tbody>
</table>

**Notes:**
- Phare Support and National Co-Financing values are rounded to the nearest thousand for simplicity.
- The TOTAL values are calculated by summing the respective columns.
1. VTS subsystem comprising:

1.1 Radar tracking system and radar sensors (3 Long range radars and 6 Short range radars).
1.2 Radar data processing system extension for multi-fusion and multi-tracking system.
1.3 RDF – For Radio Direction Finding of Ships in Distress (one mobile stations and 3 complementary base stations), with this the coverage will be completed.
1.4 Radio Relay Equipment for extension of the existing system – 5 hops. This will be necessary for connection of the new radar sites to the system backbone (the Telecommunication Network).
1.5 DGPS-VHF Reference station on mobile platform (4x4 vehicle) – 2 mobile stations (extension of the existing DGPS system in VTMIS –I to cover Burgas and the coastal area). With this additional equipment the Bulgarian Coastline will be covered.
1.6 First part of the IT/DB subsystem:

- DB software platform and the necessary hardware (redundant platform of cluster of 2 servers, EMC storage and work stations). The software platform for the specialized IP based for the Port community and the shipping business network will be in the scope of the next Phase 3 of the VTMIS Project.
1.7 Additional equipment for the enhanced system - measuring equipment and special tools, power supply and burglar security extensions. This equipment and tools will be necessary for testing, maintenance, monitoring and troubleshooting of the complete system.
1.8 Installation and Commissioning for the complete system integration.

2. Technical assistance for the image processing, multi-tracking and multi-fusion processing and the system integration.
3. The Civil Works will be necessary for building and setup of the radar sites (radar towers, masts, housing) and the preparation of the places where the equipment will be installed.
## Implementation Chart

<table>
<thead>
<tr>
<th>A Preparation, tendering and contracting of supply</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Drafting of the Tender Dossier</td>
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<tr>
<td>2 Approval of the Tender Dossier</td>
<td></td>
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<tr>
<td>3 Publication of the Tender Announcement</td>
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<tr>
<td>4 Tender Period</td>
<td></td>
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<tr>
<td>5 Tender Evaluation</td>
<td></td>
<td></td>
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<tr>
<td>6 Contract Negotiation</td>
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<tr>
<td>7 Endorsement of Contract</td>
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<td></td>
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<tr>
<td>8 Signature of Contract</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>B Implementation</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Technical assistance</td>
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<tr>
<td>3 Civil works</td>
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<tr>
<td>4 VTS subsystem</td>
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<tr>
<td>Initial planning and engineering</td>
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<tr>
<td>FAT (Factory acceptance test)</td>
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<tr>
<td>Delivery</td>
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<td></td>
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<tr>
<td>Installation and commisioning</td>
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<td>SAT (Site acceptance test)</td>
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<tr>
<td>5 Final System Acceptance Test</td>
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</table>
ANNEX 4

Cumulative Quarterly Contracting Schedule in Euro / €

<table>
<thead>
<tr>
<th>Projects/Subprojects</th>
<th>Disbursement (Payment) Schedule (quarters)</th>
<th>Budget Allocation (Phare Funds)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004</td>
<td>2005</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>III</td>
</tr>
<tr>
<td>Supply Contract</td>
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<td></td>
</tr>
<tr>
<td>Technical assistance</td>
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<tr>
<td>Civil works</td>
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<tr>
<td>Supervision</td>
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<td>30,000</td>
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</table>

Cumulative Quarterly Disbursement Schedule in Euro / €

<table>
<thead>
<tr>
<th>Projects/Subprojects</th>
<th>Disbursement (Payment) Schedule (quarters)</th>
<th>Budget Allocation (Phare Funds)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2004</td>
<td>2005</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>III</td>
</tr>
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<td>50 000</td>
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<tr>
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<tr>
<td>Supervision for CW</td>
<td>6 000</td>
<td>6 000</td>
</tr>
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</table>
ANNEX 5

Current Status of the project

The feasibility studies on which the currently proposed project is based are two:
Project “Emona” and Project PSO99/BG/3/6 Vessel Traffic Management and Efficiency in Bulgaria. The documents are not shown here.

References:
Documentation, related to the Emona Project;
Project PSO99/BG/3/6 Vessel Traffic Management and Efficiency in Bulgaria;
Project VTMIS PHARE BG0012.01 – Contract Supply of VTMIS;
Environmental Impact Assessment Study - an Environmental Impact Assessment Study has been done within the scope of the Emona Project.

Status of the Project VTMIS PHARE BG0012.01:

1. The preparation of the Technical specification is carried;
2. The tender procedure was carried out;
3. The evaluation process is done;
4. The contract was signed on 29.11.2002 with TRANSAS MARINE Ltd.
5. The subject of the contract is the manufacture, delivery, installation, system integration, putting into operation, acceptance tests within 10 months and maintenance during one year warranty by the Supplier of the following goods:
   5.1 GMDSS Area A1 - VHF system for distress, safety and public correspondence;
   5.2 VTMIS –vessel traffic management and information system (including specific subsystems and an extension of Varna Initial System);
   5.3 Telecommunications Network which includes Microwave Carrier Link (MCL), WAN equipment (routers), wireless and wired LAN and other transport media connecting and integrating the components of VTMIS and GMDSS;
   5.4 Operation Centers and Technical Service Unit for management and maintenance of the system.
6. The construction works, the supply, the installation, the integration and the final acceptance tests are supervised by the Project Director under the supervision of the Project officer with the support of the Project bureau (Implementation and Supervisory Unit of the EAMA).
7. The Project Director will ensure that a system maintenance management department will be set up in close co-operation with the system suppliers, prior to the end of the warranty period for the VTMIS or parts of the VTMIS. The maintenance management department will be responsible for the system technical and operational quality management and for the management of system maintenance contracts.
8. The Project VTMIS PHARE BG 0012.01 (Phase 1) is at the implementation stage. The Implementation and Supervisory Unit of the EAMA jointly with the Suppliers Project Team are working together according to the implementation plan.
9. The human resources in the scope of the EAMA for the operation and the maintenance of the overall system have been approved by the Council of the Ministers on the 14.02.2003.
10. There is an Inception Report that describes the starting points for the project, which is directed at improvement of the maritime safety & efficiency in the Bulgarian territorial waters, which is not part of the fiche and the granted Project PHARE BG0012.01.
11. An update of the feasibility study for the scope of the Project VTMIS Phase 2 is envisaged with the help of a technical assistance and consultancy.

The project is an initiative of the Bulgarian Maritime Administration of the Ministry of Transport & Communications of Bulgaria.
The aim of the assignment is to arrive at the outline description of the whole Vessel Traffic Management & Information System (VTMIS) for the Bulgarian ports and territorial waters, to be developed over a period of approximately 8 years.