1. Basic Information
   1.1 Desiree Number: RO-0107.12
   1.2 Title: Improvement of maritime and inland waterway safety
   1.3 Sector: Transport
   1.4 Twinning Component: N/A
   1.5 Location: Romania (mainly: port of Constanta and Danube)

2. Objectives

   2.1 Wider Objective(s):
   - Improve maritime safety standards in Romania
   - Improve inland waterway safety on the Danube

   2.2 Purposes of the project:
   - Continue the transposition of the acquis communautaire in the field of maritime safety
   - Strengthen the maritime authorities in the implementation of the SAR (Search and Rescue) 1979 and SOLAS 1974 conventions for search and rescue activities and protection of life at sea, respectively, as well as in the implementation of the OPRC (Oil pollution Preparedness, Response and Co-ordination) convention on fight against pollution
   - Develop a vessels traffic management and surveillance system on the Romanian part of the Danube to improve safety and traffic conditions in difficult sections

   2.3 Accession Partnership and NPAA priority

   AP 1999 – Short term priority: “align legislation on maritime safety standards”

   AP 1999 – Medium term priority: “align on the acquis in particular on maritime transport, aviation (in particular air safety and air traffic management), rail, road freight sectors (rules for dangerous goods, safety rules and taxation) and inland waterways (technical requirements for vessels).”

   NPAA 2000 – Short term priorities: “implementation of VTMS on Black Sea – Danube and Poarta Alba-Midia Canals”

   2.4 Cross Border Impact

   The vessels traffic management system along the Danube is intended to cover the whole length of the river between km 1075 and the Black Sea. Therefore, it will be
possible also for the Bulgarian Danube authorities to be interconnected with the system that will be developed.

3. Description

3.1 Background and justification:

Maritime safety

Improvement of maritime safety and alignment of the maritime legislation on the acquis communautaire are key issues for Romania, as underlined in the Accession Partnership and in the last Regular Reports. Progress has been made on harmonising the legislation in 2000, but further alignment of legislation will be needed (particularly in the field of Flag State Control) as well as continuous support and strengthening for the actual implementation. Moreover, maritime institutions still need to be strengthened and to be supplied with necessary monitoring systems.

Through the Law 31/1999 (approving Government Ordinance 115/1998), Romania has become a member of the Search and Rescue (SAR) 1979 International Convention. In order to fulfil its obligations regarding the search and rescue activity, the national SAR system needs to be completed with several specialised SAR boats (Three SAR boats are recommended by the on-going twinning project).

In addition, Romania needs to strengthen the national SAR group and train its staff. The Maritime Intervention and Rescue Group (GISN) has been created in Constanta, in order to provide the basic SAR units and oil pollution combating equipment, as defined in the OPRC convention (Oil pollution Preparedness, Response and Co-ordination). GISN requires further strengthening.

As part of its obligations as a member of the SOLAS 1974 convention, Romania shall implement a communication system with sea vessels for regular transmission of meteorological data on part of the international waters of the Black Sea (Navarea III). The proposed Navtex system will provide the necessary interface between raw meteorological data and the existing emission system, in order to transmit the relevant data regularly (hourly) and under an adapted format.

These two sub-projects which involve mainly procurement of equipment (SAR boat and Navtex system) have also been identified as priority investments under the on-going maritime safety twinning.

Inland waterway safety

As regards navigation on the Danube, a pilot project has already been implemented along the Danube – Black Sea Channel (2000 – 2001), with a view to develop a traffic management system. The Constanta Port has already been equipped with complete Vessel Traffic Management System (VTMS), which is currently being modernised (2000-2001).
A VTMS is a service implemented by a competent authority, designed to improve safety and efficiency of traffic and collect statistic. It may range from the provision of a simple information to extensive management of traffic within ports and waterways. The commissioning of such an information system would contribute and facilitate the implementation of Directive 80/1119 on statistical returns in respect of carriage of goods by inland waterways and Directive 82/714 laying down technical requirements of inland waterway vessels.

On the Danube itself, the navigation authorities are poorly equipped. The present project is the first phase of a complete VTMS along the Danube and will focus on the most difficult and trafficked ports and navigation areas, in order to reduce the risk of accidents as well as improving management of the traffic.

3.2 Linked activities:

- RO 99 – Twining Project for Maritime Safety (on-going), which aims at assisting 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, at assisting the Romanian Authorities in further harmonisation with the EC legislation regarding maritime safety, and at strengthening the capacity of the Inspection for Civil Navigation (INC) and the Romanian Register of Shipping (RNR). The Draft Final Report on “Search and Rescue (SAR) and Oil pollution Preparedness, Response and Co-ordination (OPRC) that has been elaborated in the framework of this twinning is of particular relevance.

- RO9503-04-01 "Emergency review of maritime safety", project completed in July 1998. This project has defined the basis for the modernisation of the GISON in Constanta.

- RO9503-01-04 "Technical Assistance to the European Integration Unit within the Ministry of Transport", project completed in May 1999. Under this project, the main orientations for the EU integration policy in the transport sector have been defined.

- Multi-Country Transport Programme: Course on Port State Control, in Klaipeda 25-29 October 1999. Two persons from Romania attended this training course and extensive documentation on the principles and procedures for Port State control has been received.

- Multi-Country Transport Programme 98-0468: “Study to Improve Navigation on the Danube in Bulgaria and Romania”. This study, completed in 1999, has assessed the feasibility of major hydrological works on the Romanian and Bulgarian sections of the Danube to improve navigation and transit times.

- The EIB is currently assessing the possibility to finance the protection of the banks of the Sulina Canal (waterway between the upstream Danube – Tulcea – and the Black Sea), which would be complementary to the proposed sub-project 4.
3.3 Results:

- Improved capacity of the Romanian Authorities to transpose and implement the acquis, particularly in the field of Flag State Control
- Acquisition of two SAR boats in the Black Sea ports,
- Acquisition of OPRC (Oil pollution Preparedness, Response and Co-ordination) equipment,
- Acquisition of a Navtex system in Constanta,
- Commission of the first phase of a vessels traffic management system on the Danube.

3.4 Activities:

3.4.1- Further strengthening of the maritime institutions

This technical assistance project will be mainly a follow-up of the existing twinning project for maritime safety, which started in October 2000 and should last until mid 2002. Indeed, the twinning project will not be enough to solve the entire problem that Romania faces concerning maritime safety and some technical assistance will be needed for addressing the remaining issues and for implementing the recommendation of the Pre Accession Adviser.

This sub-project will be further detailed during the second half of 2001, with the assistance of the Pre Accession Adviser. However, the main activities will be:

- assistance to the Ministry of Public Works, Transport and Housing for further legal transposition of the maritime safety acquis,
- assistance to the Romanian authorities (mostly Ministry of Public Works, Transport and Housing, Civil Navigation Inspectorate and any new institution responsible for maritime safety issues that might be established meanwhile) for implementation and enforcement of the acquis, in particular in the field of Flag State Control (for instance, audit, training, short-term assistance),
- strengthening of the national Search and Rescue system, in line with the SAR 1979 and SOLAS 1974 conventions, and GSN staff training as well as elaboration of a co-ordination mechanism between all the bodies involved in SAR activities, including Coast Guards, the Navy, etc.; this institution building sub-project will be closely linked with sub-projects n°2 and 3 (procurement of SAR boat and Navtex system),
- if necessary, procurement of equipment for the maritime institutions in order to help them to improve their Flag State controls. This shall concern inspection-related equipment.

The estimated budget for this sub-project is 1.5 MEUR.

3.4.2- Procurement of equipment for SAR (Search and Rescue) and OPRC (Oil pollution Preparedness, Response and Co-ordination)
Through this second sub-project, it is planned to acquire equipment that is necessary for Romania to fulfil its obligation as regards SAR and OPRC. The need for such equipment has been identified in the “Draft Final Report”, Fact Finding on SAR and OPRC (Twinning Project RO99/IB/-TR-01)

The procurement of two SAR boats that will be operated by the GISN (Intervention and Rescue Group in Constanta) is foreseen. It should be noted that the above mentioned report recommends the procurement of three similar boats to be placed in Mangalia and Sulina Ports, but Phare will first concentrate its assistance on Constanta Port and one other boat will be purchased out of the co-financing funds. Apart from emergency interventions, the daily activity of the SAR boat will consist in:

- Routine control (and patrols) for detecting and monitoring accidental or major pollution,
- Routine control for maritime safety activities,
- Routine control and interventions in case of non-respect of the national legislation, in support to the coast guards,
- Search and monitoring of vessels in distress,
- Interventions for emergency medical services,

Each SAR boat has an estimated cost of 0.9 MEUR and will have the following main characteristics (indicative):
- Length: from 12 m,
- Width: 4-5 m,
- Draught: 0.7-1 m,
- Dead-weight: 12-17 tons,
- Engine power: minimum 2x400 HP,
- Staff requirements: 2-4 persons,
- First Aid Medical facilities appropriate for sea rescue necessities,
- Autonomy: 4-6 hours at full speed,
- Range of action: 80-120 Maritime miles,
- Maximum degree of sea agitation: 10.

The Maritime Rescue and Co-ordination Centre (MRCC), which is located in the Harbour master office in Constanta also need some equipment. The supplementary SAR equipment will be provided:
- MRCC computer network and hardware: about 30,000 EUR
- MRCC equipment and computer software for SAR programs as register databases and search area calculation: about 70,000 EUR.

As regards Oil pollution Preparedness, Response and Co-ordination (OPRC), the following equipment has been identified for Romania to satisfy the requirement of OPRC acquis:
- Port/Beaches booms (around 3,000 meters – estimated cost: 280,000 EUR)
- High Sea booms (around 5,000 meters – estimated cost: 1.1 MEUR)
- Skimmers of 10 to 20 cubic meter/hour (around 5 units – estimated total cost: 0.1 MEUR)
− Skimmers of about 100 cubic meters/hour (around 2 units – estimated total cost: 0.1 MEUR)
− Skimmer vessels, small size (around 5 units – estimated total cost: 1.32 MEUR)
− Storage portable tanks
The GISN will own this equipment, which will be managed from GISN headquarters in the Constanta port but distributed and stored at critical locations along the coast.

3.4.3- Acquisition of a Navtex system

The third sub-project is the acquisition of a Navtex system for the National Company Radionav S.A, in order to transmit meteorological data, according to the requirements of the SOLAS 1974 Convention. This system enables the formatting (under digital format) and automatic hourly transmission of meteorological data (as well as emergency warnings), on dedicated frequency bands (490 and 518 KHz) from the Constanta area to the vessels located in the international waters of the Black Sea (Navarea III).

The National Company Radionav S.A., as part of its public services obligations will operate the Navtex system. Radionav has already the related infrastructure (emission - reception equipment) and suitably trained staff.

For the operation of this system, it is necessary to request and obtain a slot allocation at Navtex Panel at the International Maritime Organisation (IMO). The obtaining of the slot allocation will be prior to the disbursement of Phare funds for this sub-project.

The estimated cost of the system is 0.6 MEUR

3.4.4- Vessel Traffic Management System on the Danube (Phase 1)

Background on VTMS

This sub-project represents the first phase of the implementation of a complete vessel traffic management system (VTMS) on the Danube. The system will provide the following functions:
- general information and statistics services, to the Inspectorate for Civil navigation and further to the Ministry of Public Works, Transport and Housing
- navigational assistance and traffic organisation. Information will be centralised at the level of each relevant traffic management centre, and transmitted to the other traffic management centres as well as to the inland waterway traffic.
- pollution monitoring. The information will be collected by the harbour masters and dispatched to the relevant Port Administration and/or Danube Administration for intervention and to the traffic for prevention.
- search and rescue. The information will be collected by the harbour masters and dispatched to the relevant Port Administration and/or Danube Administration and to the traffic for intervention and prevention.
The functions are implemented by a combination of personnel, hardware (computer and specialised equipment), software and procedures, under the direction of a human VTS operator.

**Scope of the sub-project 4**

The present sub-project will focus on the most dangerous and trafficked areas (locations with high frequency of river crossing vessels and locations with sharp bends) of the Danube, while also providing a large coverage and being fully operational. The next phases will aim at concentrating the computer and radar network, around the nucleus developed under phase 1.

In phase 1, the system will be located in four main zonal sectors: Drobeta Turnu Severin (km 930), Giurgiu (km 493), Galati (km 150) and Tulcea (km 71). Four sub-sectors will be developed: Calarasi (km 375), Cernavoda (km 300), Hirsova (km 253) and Sulina (km 0), each of these being under the responsibility of a main, zonal centre. Each sector is corresponding to a main harbour master office, responsible for traffic safety; however, the main headquarters will be located in Galati.

The activities to be performed include:
- Completion of technical designs, preparation of tender documentation and assistance during the procurement process as a technical assistance contract of about 0.5 MEUR.
- Procurement of the system, including installation, software development. A provisional list of equipment to be procured (total) is:
  - X band surveying radars or/and transpondeurs,
  - radar processors,
  - dedicated communication links,
  - operator consoles,
  - processing equipment,
  - digital recorders,
  - VHF communication systems,
  - ships location equipment.
- Installation of this equipment and realisation of the necessary civil works such as poles (sustaining the radars), power supply, etc.
- Training of the staff.

The Inspectorate for Civil Navigation (INC), through the local harbour master offices will operate the system and will bear the running costs. The total cost for the first phase is about 8.97 MEUR. The total cost of the full VTMS is estimated at 27 MEUR.

**4. Institutional Framework**

The Ministry of Public Works, Transport and Housing (MLPTL) represents the State Authority in the field of transport. Within the MLPTL, the General Directorate for European Integration is co-ordinating the transposition of the acquis communautaire.
This General Directorate and the institutions responsible for maritime safety in Romania will be the main beneficiary of sub-project 1.

The National Company Radionav S.A. is a State-owned commercial company, with particular missions of public service, such as the Maritime Radio-Communication Service. It operates under the monitoring of the General Directorate for Navigation of the Ministry of Public Works, Transport and Housing and will be the beneficiary of sub-project 3.

The Inspectorate for Civil Navigation is an independent body (since 1 October 1998), functioning under the authority of the MLPTL. Its main attributions are to issue regulations for the civil navigation, to implement the legislation in force and to monitor the observance of the respective laws. The Inspectorate for Civil Navigation will be the beneficiary of sub-project 4.

The Inspectorate for Civil Navigation is also co-ordinating the search and rescue activities, including the activity of the Maritime Intervention and Rescue Group (GISN) based in Constanta. On the Danube, the Inspectorate for Civil navigation also includes the local harbour master offices, and in particular the Maritime Rescue and Co-ordination Centres (MRCC), located in the Harbour master office of Constanta. Both GISN and the MRCC will be the beneficiaries of sub-project 2.

All the above mentioned beneficiaries are committed to bear the running and maintenance costs of the envisaged equipment.

5. Detailed Budget

<table>
<thead>
<tr>
<th>MEUR</th>
<th>Phare</th>
<th>Support</th>
<th>Total Phare (=I+IB)</th>
<th>National Cofinancing</th>
<th>IFI</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-projects:</td>
<td>Investment Support Building</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1- Further strengthening of the maritime institutions</td>
<td>1.50</td>
<td></td>
<td>1.50</td>
<td></td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td>2- Procurement of equipment for SAR and OPRC</td>
<td>3.6</td>
<td></td>
<td>3.6</td>
<td>1.20</td>
<td>4.80</td>
<td></td>
</tr>
<tr>
<td>3- Acquisition of a Navtex system</td>
<td>0.45</td>
<td></td>
<td>0.45</td>
<td>0.15</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>4- Vessel Traffic Management System on the Danube (Phase 1)</td>
<td>6.65</td>
<td>0.50</td>
<td>7.15</td>
<td>2.32</td>
<td>9.47</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10.70</td>
<td>2.0</td>
<td>12.7</td>
<td>3.67</td>
<td>16.37</td>
<td></td>
</tr>
</tbody>
</table>
* The co-financing will be ensured by transfers from the National Budget to the GISN, Inspectorate for Civil Navigation and Radionav S.A. (through the Ministry of Public Works, Transport and Housing)

6. Implementation Arrangements

6.1 Implementing Agency

The programme will be managed in accordance with the Decentralised Implementation System (DIS) and the Practical Guide to PHARE / ISPA / SAPARD implementation.

The Implementing Agency will be the Central Finance and Contracts Unit within the Ministry of Public Finances (CFCU). The Implementing Authority will be the Ministry of Public Works, Transport and Housing.

The beneficiaries of the project will be:
- Sub-project 1: General Directorate for European Integration and General Directorate for Navigation within the Ministry of Public Works, Transport and Housing, Inspectorate for Civil Navigation and Romanian Register of Shipping,
- sub-project 2: GISN and MRCC
- sub-project 3: Radionav S.A.
- sub-project 4: Inspectorate for Civil Navigation

The final beneficiaries will prepare the related Terms of Reference and technical specifications.

6.2 Non-standard aspects

The Practical Guide to PHARE / ISPA / SAPARD contract procedures will be strictly followed and this project will be implemented by way of procurement of equipment and services, in accordance with the PHARE rules for procurement.

6.3 Contracts

It is intended to have five main contracts:
- technical assistance (sub-project 1), with an estimated value of 1.5 MEUR;
- acquisition of SAR boats and equipment (sub-project 2), with an estimated value of 1.9 MEUR;
- acquisition of OPRC equipment (sub-project 2), with an estimated value of 2.9 MEUR;
- acquisition of a Navtex equipment (sub-project 3), with an estimated value of 0.6 MEUR;
- completion of technical specifications and preparation of tender documents (sub-project 4), with an estimated value of 0.5 MEUR;
- acquisition of a traffic management system on the Danube (phase 1) (sub-project 4), with an estimated value of 8.97 MEUR.
7. Implementation Schedule

Taking into account the relative complexity of the supply projects, for which a one year guarantee period is requested, the disbursement period will end two years after the end of the commitment period on 30 November 2005.

**Sub-project 1**

<table>
<thead>
<tr>
<th>Start of tendering</th>
<th>Start of project activities</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2002</td>
<td>June 2002</td>
<td>June 2004</td>
</tr>
</tbody>
</table>

**Sub-project 2**

<table>
<thead>
<tr>
<th>Start of tendering</th>
<th>Start of project activities</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2002</td>
<td>July 2002</td>
<td>January 2004</td>
</tr>
</tbody>
</table>

**Sub-project 3**

<table>
<thead>
<tr>
<th>Start of tendering</th>
<th>Start of project activities</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2002</td>
<td>July 2002</td>
<td>January 2004</td>
</tr>
</tbody>
</table>

**Sub-project 4**

<table>
<thead>
<tr>
<th>Start of tendering</th>
<th>Start of project activities</th>
<th>Completion</th>
</tr>
</thead>
</table>

8. Equal Opportunity

Equal participation in project by women and men will be assured.

9. Environment

The equipment to be procured does not have impact on the environment. On the contrary, it will improve navigation safety and enable to avoid the occurrence of accidents or incidents.

10. Rates of return

N/A

The main objective of this project is to comply with the acquis communautaire and improve navigation safety. The equipment to be procured will be used for the provision of public services, without direct revenue generation. The main benefits are difficult to
quantify: prevention of accidents, improvement of safety, compliance with the acquis communautaire and the international legislation in the field.

11. Investment criteria

11.1 Catalytic effect:

The Phare support will finance equipment and commissioning of an information system for compliance to the acquis communautaire in the field of navigation safety. The procurement of equipment will be made in parallel with several port and navigation modernisation projects and will participate in the overall modernisation of the navigation sector in Romania.

11.2 Cofinancing:

The Romanian Government will ensure the co-financing of the investment components of this project (25% of the total cost).

11.3 Additionality:

No other donors are likely to finance similar actions.

11.4 Project readiness and Size:

For sub-project 1, Terms of Reference will be prepared by the Ministry of Public Works, Transport and Housing, using the results of the on-going twinning project.

For sub-projects 2 and 3, the final beneficiaries will prepare the relevant technical specifications.

For sub-project 4, a feasibility study has been prepared by the Romanian Consultant Incertrans. This study will be completed and reviewed under the technical assistance foreseen under this sub-project. On this basis, technical specifications and the tender documentation will be prepared.

11.5 Sustainability:

The final beneficiaries will cover the operation and maintenance costs.

11.6 Compliance with state aids provisions

The final beneficiaries (Ministry of Public Works, Transport and Housing, Inspectorate for Civil Navigation, GSN and Romanian Register of Shipping) are public bodies carrying out public services, with the exception of the national company Radionav S.A.. However, Radionav is carrying out public services missions. The equipment to be procured is aiming at strengthening these public services.

12. Conditionality and sequencing
1. The Romanian Government will ensure its co-financing commitment on the project.

2. The Romanian Government undertakes to finance any additional cost which may arise in order to ensure timely completion of the project.

3. The beneficiaries commit to finance the running and maintenance costs of the equipment that will be supplied.

4. For sub-project 3 (Navtex System), the disbursement of Phare Funds will be made after a slot allocation has been obtained at the Navtex Panel at IMO. In case such slot allocation can not been obtained, then the Phare allocation for this component (0.45 MEUR) will be reallocated to sub-project 2 or 4.

**ANNEXES TO PROJECT FICHE**

1. Logical framework matrix in standard format
2. Detailed implementation chart
3. Contracting and disbursement schedule by quarter for full duration of programme
4. Reference to feasibility /pre-feasibility studies
<table>
<thead>
<tr>
<th>Annex 1 : Logframe Matrix for project:</th>
<th>Contracting period expires:</th>
<th>Disbursement period expires:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement of maritime and inland waterway safety</td>
<td>30/11/2003</td>
<td>30/11/2005</td>
</tr>
<tr>
<td><strong>Overall objective</strong></td>
<td><strong>Indicators of Achievement</strong></td>
<td><strong>Sources of Information</strong></td>
</tr>
<tr>
<td>• Improve maritime safety standards in Romania</td>
<td>• Number of accidents,</td>
<td>• Ministry of Public Works, Transport and Housing reports,</td>
</tr>
<tr>
<td>• Improve inland waterway safety in the Danube</td>
<td>• Occurrence of oil pollution,</td>
<td>• EC reports.</td>
</tr>
<tr>
<td><strong>Project purpose</strong></td>
<td><strong>Indicators of Achievements</strong></td>
<td><strong>Sources of Information</strong></td>
</tr>
<tr>
<td>• Continue the transposition of the acquis communautaire in the field of maritime safety</td>
<td>• Implementation of Flag State control: number of vessels controlled, number of rejections,</td>
<td>• INC and GISN reports,</td>
</tr>
<tr>
<td>• Strengthen the maritime authorities in the implementation of the SAR 1979 and SOLAS 1974 conventions for search and rescue activities and protection of life at sea, respectively, as well as implementation of the OPRC convention</td>
<td>• Number of interventions of the SAR boat,</td>
<td>• Radionav reports,</td>
</tr>
<tr>
<td>• Develop a vessels traffic management and surveillance system on the Romanian part of the Danube to improve safety and traffic conditions in difficult sections</td>
<td>• Evaluation of SAR exercises,</td>
<td>• Maritime and inland waterways operators reports</td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td><strong>Indicators of Achievement</strong></td>
<td><strong>Sources of Information</strong></td>
</tr>
<tr>
<td>• Improved capacity of the Romanian Authorities to transpose and implement the acquis, particularly in the field of Flag State Control</td>
<td>• Equipment delivered and operational,</td>
<td>• Hand-over certificates,</td>
</tr>
<tr>
<td></td>
<td>• Reports approved, including procedures and proposals for</td>
<td>• Reports from CFCU, Ministry of Public Works, Transport and Housing</td>
</tr>
</tbody>
</table>
### Activities
- Acquisition of two SAR boats and related equipment in the Black Sea ports,
- Acquisition of OPRC equipment in the Constanta port,
- Acquisition of a Navtex system in Constanta,
- Commission of the first phase of a vessels traffic management system on the Danube.

### Means
- Supply contracts, Services contracts.

### Assumptions
- High quality suppliers, contractors and consultants
- On-time preparation of ToRs and technical specifications
- Availability of co-financing on due time

### Flag State Implementation
- INC and GISN staff trained.

### Final beneficiaries

### Enforcement of Flag State control
### Improvement of maritime and inland waterway safety

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Further strengthening of the maritime institutions</td>
<td>JASOND</td>
<td>JFMAMJ</td>
<td>JASOND</td>
<td>JFMAMJ</td>
<td>JASOND</td>
</tr>
<tr>
<td>2. Procurement of two Search and Rescue Boats and OPRC Equipment</td>
<td>DDDDCCCC</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>3. Acquisition of a Navtex system</td>
<td>DDDDCCCC</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>4. Vessels Traffic Management System on the Danube (Phase 1)</td>
<td>DDCCCC</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Technical Assistance</td>
<td>DDCCC</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Supply</td>
<td>DDDDDDCCCC</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>

**Legend:**
- D = Design/Tender preparation
- C = Contracting
- I = Implementation/works
- R = Review/evaluation
Annex 3 – Contracting and disbursement schedule by quarter

**Improvement of maritime and inland waterway safety**

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cumulative contracting schedule by quarter in MEUR (planned)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>0.5</td>
<td>6.05</td>
<td>6.05</td>
<td>12.7</td>
</tr>
<tr>
<td>Q1</td>
<td>6.05</td>
<td>6.05</td>
<td>12.7</td>
<td>12.7</td>
</tr>
<tr>
<td><strong>Total contracting:</strong></td>
<td>6.05</td>
<td>6.05</td>
<td>12.7</td>
<td>12.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cumulative disbursement schedule by quarter in MEUR (planned)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1</td>
<td>2.50</td>
<td>2.85</td>
<td>3.10</td>
<td>3.50</td>
</tr>
<tr>
<td>Q2</td>
<td>3.50</td>
<td>8.85</td>
<td>9.10</td>
<td>9.30</td>
</tr>
<tr>
<td>Q3</td>
<td>9.50</td>
<td>12.05</td>
<td>12.05</td>
<td>12.05</td>
</tr>
<tr>
<td>Q4</td>
<td>12.05</td>
<td>12.05</td>
<td>12.05</td>
<td>12.05</td>
</tr>
<tr>
<td><strong>Total disbursement:</strong></td>
<td>12.05</td>
<td>12.05</td>
<td>12.05</td>
<td>12.05</td>
</tr>
</tbody>
</table>
Improvement of maritime and inland waterway safety

Sub-project 4: Vessels Traffic Management System on the Danube (Phase 1)

Title of the study: Feasibility Study for the development of vessel traffic services for the danube Area covered by the zonal Master Harbour Drobeta – Turnu Severin

Performers: Romanian Consultant Incertrans

Client: zonal Master Harbour Drobeta – Turnu Severin

Date of realisation: 1996 – 1998

This study can be consulted/obtained at the Ministry of Public Works, Transport and Housing – General Directorate for Maritime Transport, Danube and Inland Waterways