PHARE 2002  
STANDARD SUMMARY PROJECT FICHE

1. Basic Information  
1.1 Desiree Number: RO-2002/000-586.04.10  
1.2 Title: Management and professional training for the road, inland waterway and air sectors  
1.3 Sector: Transport  
1.4 Location: Romania: Bucharest

2. Objectives

2.1 Overall Objective(s):

- Ability to comply with the acquis communautaire in the field of transport

2.2 Project purpose:

- Improvement of the training centres and increase their capacity to raise awareness of managers of transport companies about the need of training (road, inland waterway and air transport).

2.3 Accession Partnership and NPAA priority:

- NPAA 2001 - short-term priorities: "recognition, by the relevant bodies, of the professional training institutions of the staff working in the transport field (education and training)";
- NPAA 2001 - medium-term priorities: "continuing of recognition, by the relevant bodies, of the professional training institutions of the staff working in the transport field (education and training)";

2.4 Link with the Acquis:

- EU Council Directives for the road sector: CPC for Road transport operators 98/76, 91/439 for Driving Licences and the new 2000/56; 76/914 for the minimum level of training for road transport drivers; 96/86 for transport of dangerous goods; 2000/18 for the minimum examination requirements for Safety Advisors;
- EU Council Regulation for the Air Transport sector: No. 3922/91 on the harmonisation of technical requirements and administrative procedures in the field of civil aviation;
3. Description

3.1 Background and justification:

The movement of people and goods is increasing and will continue to do so. Mobility is now an integral fact of society so much so that the modern economy is dependent upon it. However, while the increase in mobility is essential for the development of competitive economies, the increased traffic has also resulted in increased social and health care costs because of increased accident rates. It is therefore imperative that the improvement of transport safety be a priority.

There are two basic concepts to improved transport safety: prevention and infrastructure. Prevention mainly concerns the human factor, the experience and behaviour of transport users. The human factor is the cause of the vast majority of accidents.

Now, the transport organisations have requested and the Romanian Government has understood and gave priority to the development of the Centres for vocational training within the transport sector. The strengthening of the administrative capacity and increase of these centres activity will create benefits, as:

- Increase traffic safety;
- Give access to profession to the road carriers;
- Awareness of the managers in the transport companies about the need of permanent training;
- Increasing the ability of the transport managers on the organisation of the transport activity;
- Allow mutual acceptance of personnel licences for the exercises of functions in civil aviation;
- Improving the quality of training of the sailing personnel to achieve a high standard of professional competency.

3.1.1. Road sector

The training improves skills and therefore reduces accidents and within the legal framework Governments can make certain skills obligatory when entering a profession / market. Through the training centres it will be possible to acquire certain skills which in turn allows to transport professions and transport markets which lead to better skilled people in transport and less accidents. Training for trainers is recognised as a necessity for ADR (ADR is the European Agreement concerning the transport of the dangerous goods with the road vehicles), ADR counsellors, Transport Managers (CPC) and Driving instructors. Training centres according to EU standards should facilitate mutual acceptance of training certificates and therefore facilitate the free movement of people and goods.

There are several centres in the field of road sector which assure the improvement of the professional drivers skills or road carriers activity: 3 training centres, professional schools and other schools providing training for professional drivers only. In general, the training centres within the road sector are well equipped. The international recognition of the certificates issued by the training centres represents one of the main obstacles for them, with the related implications at the level of the road carriers.

There are 3 main training centres in the field of road transport, with branches in all (8) regions over the country - IFPTR, SETAR Institute and SETAR Foundation, which are
functioning with 15 trainees each and with other trainers on a part-time contractual basis. These three centres are authorised by the Ministry of Public Works, Transport and Housing and they are self financing. They are not only focused on technical skills (like driving), but also on managerial skills, ADR, ADR counsellors, Transport Managers (CPC). Safety starts with good management and a good organisation. About ten thousands persons per year are trained in each of the three training centres.

The other training centres existing in the field of road transport are focused on the training courses for professional drivers and most of them are professional schools.

The training of the trainers is necessary in order to allow them to sustain new training programmes within the Training Centres, such as:


- These directives and national regulations have stipulated that every road transport company must appoint at least one person designated to manage permanently and effectively the road transport activity.
- These directives specify the professional competencies of the person designated to manage permanently and effectively the road transport activity and who must be included in the training programme.
- The training programmes are organized in all districts with trainers/lecturers trained by the Training Centers and MPWTH, ARR and RAR specialists included.
- Romanian Road Authority (ARR) performs the periodical examination.


- These directives adopted by our legislation stipulate the obligation of road transport undertaking to appoint at least one safety adviser who is familiar with ADR provisions.
- The training and improvement programme is according with the provisions of restructured ADR.

C) Professional Training and Improvement of ADR Drivers and National and International Traffic. The programme is according to the provisions from the Minister of Transport, Order no. 82/1994 and complying with the provisions of restructured ADR.

- The vehicles involved in national and international traffic must be driven only by the well trained and authorized drivers.
- The training is developing according with the provisions of restructured ADR.
D) **Professional Training and Improvement Programmes for the Instructors and Teachers of Road Legislation.** The programme is according to national regulations elaborated by the Ministry of Transport and by the Ministry of Internal Affairs.

- Driving schools are accredited by the Ministry of Public Works, Transport and Housing – Romanian Road Authority;
- Driving schools personnel, instructors and teachers of road legislation are authorized through the courses organized by the Training Centers.

E) **Professional Training and Improvement Programme of the Defensive Driving Techniques.** The programme is especially designed for the transport companies, for the car fleet holders according to their task book.

- The specialized training programmes are designed for the road transport companies.
The specific aims of these courses are the diminution of road traffic accidents and their consequences, as well as, the improvement of vehicle drivers performances, including through the reduction of fuel consumption and of environment pollution.

3.1.2. Air sector

Main relevant institutions within the sector and beneficiaries of the project:
- Romanian Civil Aeronautic Authority (RCAA) - regie autonome under the MPWTH authority;
- Romanian Aviation Academy (RAA) - self financed public institution under the MPWTH responsibility

Since December 2000, the Romanian Civil Aeronautic Authority (RCAA) is a full Joint Aviation Authority (JAA) member and it is its main concern to assure that all international safety regulations, practices and standards are observed within the operation of the Romanian airports. The RCAA is not only a regulatory body, but also in charge of providing the operational safety and balancing its standards with the economical development requirements. The Directorate for Airport and Technical Services for Air Navigation is the airports branch of the RCAA, (RCAA – ATSAND). The short-term strategy is focusing on the following issues:

1. Creating of a steering frame concerning the establishment of the complete airport authority on the agents operating in the airport: licensing of the agents, by taking into account minimal conditions, economical capacity, personnel and operation periods;

2. Establishing the two steps to authorize regional airports in Romania as handling agents;

2.1. Qualification of the aircraft handling personnel – theoretical training followed by practice with the airports specific equipment;
2.2. Complex programs for all handling operations, regulatory frames, personnel authorization / certification / licensing and finally qualification of airport training instructors.

3. The Directorate for Airports and Technical Services for Air Navigation (DATSAN) is developing a set of national specific requirements for airports design and
operation, technical and operational requirements for low visibility operation, procedures for inspection of airports, operation safety in the airside, etc.

The RCAA is supporting the operational safety of the Romanian airports by following means:

- Enforcing application of international regulations, standards and requirements by the Romanian airport operators;
- Issuing of standards and national regulations in aerodromes operational safety;
- Safety certification of aerodromes;
- Safety inspections, certification and supervision for aerodromes and airport aeronautical agents;
- NAVAIDS flight inspection and calibration;
- Consulting on technical issues for aerodromes operators and aviation agents operating on the aerodromes;
- Approving of constructions, work and operations within the safety areas of the airports;
- Supervision and certification of all agents/organizations operating within airports, which could influence in way the operational safety.

RCAA – DATSAN is performing technical inspections for all aerodrome operators as well as operators of other airfields (mainly helicopter landing platforms), checking that all national and international standards and regulations shall be observed in order to assure safe operation.

The part of this PHARE project concerning the air sector concerns both RCAA and the Romanian Aviation Academy as possible beneficiaries. The proposed project will be focused on three issues: A) the Airport Certification; B) Adequate training for RCAA inspectors in aerodrome field and C) Training of flight instructors and Flight Training Organization Licensing for the RAA.

A) The **Airport certification** is a new type of activity introduced according to the latest issue of ICAO Annex 14. National regulations according to the upgraded Annex 14 are already developed and are in the approval process by the Ministry of Public Works, Transports and Housing. This certification includes the following steps:

1. Training of airport inspectors to perform the necessary activities;
2. Training of airport personnel trainers able to disseminate information for specific activities to require licensing of personnel according to applicable regulations;
3. Training of airport personnel involved in providing operational safety;
4. Assessment of the current situation of the RCAA in order to take necessary action to upgrade activity and organisation;
5. Assessment of the current situation of the Romanian Airports;
6. Providing and adequate database for airport certification;
7. Personnel licensing according to applicable regulations, including airport inspectors and airport personnel trainers;
8. The certification itself and supervision of the certified aerodromes/airports.

From the previous stated steps the RCAA has to complete the steps 1, 2, 4, 5, and 6 in its own structure. The reason is that there is a new kind of activity, involving also its own personnel and its own operations.

One of the most important airport certification issue is that RCAA should have its own trained and authorized personnel with adequate practical knowledge. Under the
circumstances of Annex 14 ICAO Amendments, the training in Safety Management Systems must focus on the practical experience. There is required that the practical activities and on site training should develop inside medium and high traffic airports since in Romania the practical training would be restricted as the actual traffic level is low.

The implementation of licensing requirements and personnel training in airport safety activities involve close knowledge of other European countries experience. The procedures shall focus on:

- Aerodrome Safety Management Systems;
- CAA Aerodrome Inspectors;
- Airport Safety and Handling Trainers;
- Training of the Trainers;
- Aerodrome handling Supervisors;
- Licensing of handling Services Suppliers.

B) Adequate training for RCAA inspectors in aerodrome field in order to carry out the aerodrome certification and subsequent safety inspection tasks.

The typical duties of an RCAA aerodrome inspector should include but not be limited to: verification and audits of aerodrome operating procedures, checking and testing of aerodrome facilities and equipment, the overall aerodrome safety system, prevention of unauthorised entry to the movement area, etc.

C) Concerning the flight training responsibilities, the RCAA is focussing on training of pilot instructors, mainly with the purpose to certify the training pilots and to enable the certification of the Romanian Aviation Academy (RAA) as Flight Training Organization according to the Joint Aviation Regulations in power in Europe. This will include also own personnel and the FTO licensing personnel for RAA.

It is widely recognized the paramount importance of training in civil aviation and in 1999 the Romanian Aviation Academy was established as a center for training pilots, maintenance personnel, flight attendants, ATC personnel and other aviation personnel. Since its establishment, the MPWTH invested more than 2 MEURO in renewing and refurbishing its facility and for purchasing of the training airplanes and simulator. However, in order to acquire the status of recognized Flight Training Organization (FTO), the RAA would require technical assistance for the implementation of the relevant standards, training for its trainers in modern training techniques that will enable the RAA to become a regional training center in civil aviation.

3.1.3. Inland waterway sector

Due to the high level of education and professional training, as well as seafarers’ training certification and attestation, Romania is on the "White List" (IMO-MSC) of nations which fully implemented the provisions of the International Convention on training standards for seafarers, certification / attestation and watch-keeping, adopted in London, on 7th of July 1978 (STCW 1978). As recognition, several maritime administrations (e.g. United Kingdom) expressed their intention to ensure the training of their seafarers in Romania. At the same time, crewing agencies from countries with tradition in navigation (e.g. Norway) were established and are operating in Romania.

The only training centre for the inland waterway sector is functioning in Galati, with 37 employees. The centre is in the subordination of the MPWTH and is self financed, through the fees applied for the training courses. About 4,500 trainees are trained per
year and the courses are dedicated to the qualification, improvement of capabilities and also special courses for the auxiliary non-qualified employees. During one year Galati Training Centre organise almost 450 training programmes. One training group has 25 trainees and it last usually for:
- 5 weeks for adapted courses;
- 2 weeks for conventional courses and for the training courses according to IMO requirements.

According to the international standards, 50% of the time dedicated to a training course represents practical applications.

Because of the training centre budget constrains, the practical applications are made with the support of other equipment providers (fire fighters, ambulance, etc.), on a contractual basis which is not always available at the requested time, or not in a suitable condition.

According to the identified needs, the improvement of services provided by the training centre needs the organisation of training for trainers and also purchase of its own equipment for the practical applications.

The present PHARE project will be limited to:
- training for trainers,
- updating/purchasing the documentary material (conventions, resolutions, recommendations, directives, CDs and video cassettes) and
- purchase of small equipment for practical applications.

The main topics for the training courses are as follows:
1. Courses for inland and maritime sailing personnel:
   - Intervention in case of an emergency situation occurred on board;
   - Human relations and social responsibilities on board
2. Basic training programme for maritime safety
3. Safety familiarization for uncertified personnel
4. Specialised technical training
5. Training programmes for the persons who want to have the occupation of cargoes carrier (UE Directive 87/540/CEE/09.11.1987).

The documentary material to be purchased under the project will be related mainly to the provided training courses. Additional documentation needed for the centre will be proposed and recommended by the Consultant, under the available project budget.

The indicative list of small equipment to be purchased for the practical applications includes instruments, devices, equipment for the following courses:
1. Life-saving on water;
2. Prevention and fire fighting;
3. Personal protection;
4. Medical first aid.

Additional equipment for the practical applications performed by the Training Centre in Galati could be the subject of another PHARE project, after a proper needs assessment made under a PPF in order to check the feasibility of such investment for the Centre.

As it was mentioned in the NPAA document, Romania has to prove that is able to get accreditation for its training centres by the relevant bodies.
3.2 Linked activities:

- **RO 9402-02-01-L001 "Airports Master Plan and Training":** under this project was prepared the "Noise Monitoring System to Bucharest – Otopeni International Airport" and was delivered the training of the noise monitoring equipment in the implementation phase.

- **PHARE COP'96 - RO 9604-01-03-03 "Equipment for Romanian Railway Training Centre":** the aim of this sub-project was the improving the training conditions for the railway personnel in the main Training Centre of the Romanian Railway (there were poor training conditions due to missing or obsolete relevant equipment).

- **PHARE Multi-country Transport Programme 98-0605 "Vocational Training Centres in PHARE countries":** Through this project were established 13 vocational training centres, one for each Phare country. Institutional strengthening of the centres had comprised three major areas that included:
  - provision of training (training the trainers, training the senior management staff)
  - provision of training equipment
  - provision of training materials

- **PHARE RO 0107.11 "Improvement of Road Safety and Institutional Building in the field of transport" - sub-project 1: Twinning to further harmonise the road safety legislation and strengthen the related institutions in order to comply with EU requirements:** this sub-project involves the following:
  - further transposition of the acquis in the filed of road safety and finalisation of the legal harmonisation;
  - elaboration of secondary legislation;
  - strengthening of enforcement structures;
  - preparation of set of procedures and training of controllers.

3.3 Results:

3.3.1. Road sector

- Business plans reviewed for the three training centres;
- Access to profession to the road carriers;
- Trained trainers to be able to disseminate information;
- Training materials available for the training centres;

3.3.2. Air sector

- Business plan reviewed for Romanian Aviation Academy;
- Adequate training for RCAA inspectors in aerodrome field;
- Trained trainers in the aviation sector;
- Training materials available for the training centre;
- Romanian Aviation Academy become a recognised Flight Training Organisation and regional training centre;

3.3.3. Inland waterway sector

- Business plan reviewed for the Training Centre in Galati;
- Trained trainers in the field of inland waterway sector;
- Training materials available for the training centre;
- Small equipment purchased for the practical applications;

3.4 Activities:

3.4.1 Road sector:

- Assessment of the current activities of the 3 training centres - SETAR Institute, SETAR Foundation and IFPTR;
Updating/purchasing of the training materials and of the teaching aids;
- Training for trainers/lecturers and examiners of the 3 training centres.

To respond to the objectives described in the background, the programme proposals for the training of the trainers are:

1. Training Managers Program:
2. ADR Trainers Improvement Program:
3. Improvement Trainers for the Person Designated to Manage Permanently and Effectively the Road Transport Activity Program
4. Road Safety Trainers Improvement Program
5. Provisions Program for the training institutes with a library of transport, management and marketing literature and EC legislation (also the Acquis Communautaire for Road Transport).

The detailed list of training for road transport and the envisaged didactic materials are given under Annex 4.

3.4.2. Air sector:

3.4.2.1 Airport certification.

The implementation of licensing requirements and personnel training in airport safety activities involve close knowledge of other European countries experience. The procedures shall focus on:
- Aerodrome Safety Management Systems;
- CAA Aerodrome Inspectors;
- Airport Safety and Handling Trainers;
- Training of the Trainers;
- Aerodrome handling Supervisors;
- Licensing of handling Services Suppliers.

To support these steps following courses will be organised under the present project:

<table>
<thead>
<tr>
<th>No</th>
<th>Course Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Senior Civil Aviation Management</td>
</tr>
<tr>
<td>2</td>
<td>Aerodrome Regulation</td>
</tr>
<tr>
<td>3</td>
<td>Advanced Terminal Design for the Commercial Airport</td>
</tr>
<tr>
<td>4</td>
<td>Airport Marketing &amp; Air Service Development</td>
</tr>
<tr>
<td>5</td>
<td>Airport Advanced Business Management</td>
</tr>
<tr>
<td>6</td>
<td>Airport Management and Ground Handling Operations</td>
</tr>
<tr>
<td>7</td>
<td>Airport Strategic Management</td>
</tr>
<tr>
<td>8</td>
<td>Management of Aviation Facilitation</td>
</tr>
</tbody>
</table>

Note: Certain training organizations within EU countries are able to provide such kind of training, e.g. Ecole Nationale d’Aviation Civile (France), Lufthansa Training (Germany), Instilux (Luxemburg), Institute for Aviation (Sweden), UK-CAA (UK), University of Southampton (UK). The training organization shall be able to provide also adequate airport training practice.
3.4.2.2. Adequate training for RCAA inspectors in aerodrome field provided by a specialised consultant. The workshops will be based on the following issues:
- verification and audits of aerodrome operating procedures
- checking and testing of aerodrome facilities and equipment,
- the overall aerodrome safety system,
- prevention of unauthorised entry to the movement area, etc.

3.4.2.3. The activities concerning the FTO certification for the RAA are:
- Assessment of the RAA current situation;
- Recommendations for the improvement of the training centre activities, including business plans and didactic equipment;
- Train of the trainers.

For purposes concerning the FTO licensing of RAA and, possible, for other organizations the following courses will be organised under the present project:

<table>
<thead>
<tr>
<th>No</th>
<th>Course Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aeroplane and Navigation Procedures Trainers</td>
</tr>
<tr>
<td>1.1</td>
<td>JAR-STD-3A</td>
</tr>
<tr>
<td>1.2</td>
<td>JAR-STD-2A</td>
</tr>
<tr>
<td>1.3</td>
<td>JAR-STD-1A</td>
</tr>
<tr>
<td>2</td>
<td>Class Rating Instructor</td>
</tr>
<tr>
<td>3</td>
<td>Type Rating Instructor</td>
</tr>
<tr>
<td>4</td>
<td>Crew Resource Management</td>
</tr>
<tr>
<td>5</td>
<td>Quality Assurance for FTOs/TRTOs</td>
</tr>
<tr>
<td>6</td>
<td>JAR – Flight Crew Licensing</td>
</tr>
</tbody>
</table>

The detailed list of training for air transport and the envisaged didactic materials are given under Annex 5.

3.4.3. Inland waterway sector

The Galati Training Centre proposed as its general objectives:
- the improving the quality of training of the sailing personnel in order to achieve a high standard of professional competency in accordance with UE Directives and STCW 95 requirements
- the training and competency assessment of the sailing personnel using the most modern procedures of theoretical and practical training and evaluation

In order to achieve the general objectives, Galati Training Centre applied for financing under the Phare programme for the following specific objectives:
1) Training the trainers
2) Acquisition of teaching materials and equipment necessary for the training activity

In order to carry out the objective 1) “Training the trainers”, the trainers from the centre should attend one of the training programs listed in the Annex 6.1 and for carrying out the objective 2) “Acquisition of teaching materials and equipment necessary for the training activity”, it should be acquired the teaching materials and
some small equipment listed in the Annex 6.2 necessary for the programmes organized by the Galati Training Centre.

Below, there are the centralised tables of the training programmes and didactic materials and small equipment proposed by Galati Training Centre for financing under the PHARE Programme:

**Table 1 (details are attached in Annex 6.1)**

<table>
<thead>
<tr>
<th>No.</th>
<th>Training course</th>
<th>No. of the participant s</th>
<th>Estimated cost/pers. (EURO)</th>
<th>Total (EURO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Train the instructors</td>
<td>12</td>
<td>3,000</td>
<td>36,000</td>
</tr>
<tr>
<td>2</td>
<td>Train the assessors</td>
<td>12</td>
<td>3,000</td>
<td>36,000</td>
</tr>
<tr>
<td>3</td>
<td>Train auditors</td>
<td>12</td>
<td>2,000</td>
<td>24,000</td>
</tr>
<tr>
<td>4</td>
<td>Specializaton instructors-MARPOL</td>
<td>12</td>
<td>2,500</td>
<td>30,000</td>
</tr>
<tr>
<td>5</td>
<td>Train experts in the field of dangerous goods</td>
<td>12</td>
<td>3,000</td>
<td>36,000</td>
</tr>
<tr>
<td>6</td>
<td>Train auditors for applying System of quality, safety and environment</td>
<td>6</td>
<td>2,500</td>
<td>15,000</td>
</tr>
<tr>
<td>7</td>
<td>Master courses on training the adults</td>
<td>12</td>
<td>2,500</td>
<td>30,000</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL (around)</strong></td>
<td></td>
<td></td>
<td><strong>210,000 EURO</strong></td>
</tr>
</tbody>
</table>

**Table 2 (details are attached in Annex 6.2)**

<table>
<thead>
<tr>
<th>No.</th>
<th>Training programme</th>
<th>COSTS OF THE TEACHING AIDS (EURO)</th>
<th>Total Cassettes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Video Equipment Manuals</td>
<td>Total Cassettes</td>
</tr>
<tr>
<td>1</td>
<td>Personal safety and social responsibilities on board ship</td>
<td>12,150 687 360</td>
<td>13,197</td>
</tr>
<tr>
<td>2</td>
<td>Elementary medical first aid</td>
<td>4,070 7,200 -</td>
<td>11,270</td>
</tr>
<tr>
<td>3</td>
<td>Fire prevention and fire fighting</td>
<td>4,530 26,090 200</td>
<td>30,820</td>
</tr>
<tr>
<td>4</td>
<td>Personal survival techniques</td>
<td>2,990 19,380 -</td>
<td>22,370</td>
</tr>
<tr>
<td>5</td>
<td>Proficiency in survival craft and rescue boats</td>
<td>3,985 26,700 120</td>
<td>30,805</td>
</tr>
<tr>
<td>6</td>
<td>Carriage of dangerous goods</td>
<td>3,080 5,000 845</td>
<td>8,925</td>
</tr>
<tr>
<td>7</td>
<td>Prevention of pollution from ships</td>
<td>4,525 14,000 -</td>
<td>18,525</td>
</tr>
<tr>
<td>8</td>
<td>Maritime English. Phrasal vocabulary</td>
<td>3,540 10,890 700</td>
<td>15,130</td>
</tr>
<tr>
<td>9</td>
<td>Ro-Ro passenger ships and passenger ships other than Ro-Ro</td>
<td>1,540 5,000 450</td>
<td>6,990</td>
</tr>
<tr>
<td>10</td>
<td>Oil tanker, liquefied gas tanker and chemical tanker</td>
<td>6,675 34,000 1,000</td>
<td>41,675</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL (around)</strong></td>
<td><strong>47,000 149,000 4,000</strong></td>
<td><strong>200,000</strong></td>
</tr>
</tbody>
</table>

The detailed list of training for inland waterway transport and the envisaged didactic materials are given under Annex 6.1 and 6.2.
4. **Institutional Framework**

The final beneficiaries of this PHARE project are:
- for road sector: The Training Centres (SETAR Foundation, SETAR Institute and IFPTR Institute) in the road transport and Romanian Road Transport Authority (institution under the MPWTH authority);
- for air sector: Romanian Aviation Academy (public institution under the MPWTH responsibility) and the Romanian Civil Aeronautic Authority (regie autonome under the MPWTH authority);
- for inland waterway sector: Galati Training Center – self financed public institution subordinated to the MPWTH.

The beneficiaries will prepare the Tender Dossiers, under the supervision of the General Directorate for Foreign Financial Affairs - Ministry of Public Works, Transport and Housing.

5. **Detailed budget**

<table>
<thead>
<tr>
<th>Phare</th>
<th>Support</th>
<th>Total Phare (=I+IB)</th>
<th>National Co-financing*</th>
<th>IFI*</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA Contract</td>
<td>-</td>
<td>1,200,000</td>
<td>0</td>
<td>-</td>
<td>1,200,000</td>
</tr>
<tr>
<td>Lot 1 (road)</td>
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<td>320,000</td>
<td>0</td>
<td>-</td>
<td>320,000</td>
</tr>
<tr>
<td>Lot 2 (air)</td>
<td>470,000</td>
<td>470,000</td>
<td>0</td>
<td>-</td>
<td>470,000</td>
</tr>
<tr>
<td>Lot 3 (IWT)</td>
<td>410,000</td>
<td>410,000</td>
<td>0</td>
<td>-</td>
<td>410,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>-</strong></td>
<td><strong>1,200,000</strong></td>
<td><strong>0</strong></td>
<td><strong>-</strong></td>
<td><strong>1,200,000</strong></td>
</tr>
</tbody>
</table>

6. **Implementation Arrangements**

6.1 **Implementing Agency**: The Central Finance and Contracting Unit (CFCU) represents the Implementing Agency in charged with tendering and contracting of the projects.
- Contact person: Mrs. Jeana Buzduga
- Central Finance and Contracting Unit (CFCU)
  - 36-38 Mendeleev str., 4th floor
  - sector 1, Bucharest, Romania
  - Tel: 0040-1-310.37.72
  - Fax: 0040-1-312.42.08

6.2 **Implementing Authority**: Ministry of Public Works, Transport and Housing
- General Directorate For Foreign Financial Affairs
- Contact persons: Mrs. Liliana Barna - General Director
  - Mrs. Florentina Teodorovici - Head of Community Programmes Financing Unit
- 38 Dinicu Golescu Av, 1st floor, room 17, sector 1, Bucharest, Romania
- Tel/fax: 0040 - 1-212.61.27 / 222.20.70
- e-mail addresses: news27@mt.ro / phare1@mt.ro
6.3 Beneficiaries:

Romanian Road Authority (ARR)
Contact person: Florin Suciu - General Director
38 Dinicu Golescu av, 2nd floor
sector 1, Bucharest, Romania
Tel: 0040 - 1 - 312.21.14
Fax: 0040 - 1- 222.56.63

IFPTR Institute
Contact person: Marin Lepadatu - General Director
16, Illoara Street
sector 3, Bucharest, Romania
Tel: 0040 - 1 - 348.45.09
Fax: 0040 - 1- 348.45.11

SETAR Institute
Contact person: - Virgiliu Cucliciu, President
61 Matei Basarab Street
sector 3, Bucharest, Romania
Tel/fax: 0040 - 1 - 321.32.37
e-mail: mail@isetar.ro

SETAR Foundation
Contact person - Ion Bedrosian - General Director
60 Enăchită Văcărescu,
Bucharest, Romania
Tel: 0040 - 92.245.032

Romanian Aviation Academy
Contact person: Mr. Adrian Marinescu - General Director
13 Gratioasă str., sector 1, Bucharest
Romania
Tel: 0040 - 1 - 232.11.01
Fax: 0040 - 1 - 232.11.42

Romanian Civil Aviation Authority
Contact person: Ovidiu Traichioiu – Director
km.16.5 Sos. Bucuresti – Ploiesti
cod 71950, Bucharest,
Romania
Tel : 0040 – 1 – 312.19.38
Fax: 0040 – 1 – 203.27.72
e-mail: dir.gen@caa.ro

Training Centre for Inland Waterway Transport in Galati
Contact person: Doina Brada - General Director
23 Portului Street
Galati, Romania
Tel: 0040 - 36 - 416773
Fax: 0040 - 36 - 471011
6.4 Non-standard aspects: The Practical Guide to PHARE/ISPA/SAPARD implementation will strictly be followed and this project will be implemented by way of procurement of services and equipment in accordance with the PHARE rules for procurement.

6.5 Contracts: 1 TA tender will be launched with 3 lots, and one to three TA contracts shall be granted. Didactic material and small didactic equipment will be included within the TA contract as provisional budget.

7 Implementation schedule
7.4 Start of tendering/call for proposals: 01.02.2003, ToR will be ready in December 2002
7.5 Start of TA activity: 01.07.2003
7.6 Project completion: 01.01.2006 (it includes the guarantee period for equipment purchased)

8 Equal Opportunity
Equal participation in project by women and men will be assured. Women’s participation will be measured by the extensive use of monthly time-sheet for the personnel.

9 Conditionality and sequencing
- The beneficiaries undertakes to finance any additional cost which may arise in order to ensure timely completion of the project;
- The beneficiaries commit to finance the running and maintenance costs of the small equipment that will be supplied.
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 (including disbursement period)
4. Indicative list of the programmes proposed for the training of the trainers in the road sector
5. Indicative list of the training programmes for the air sector
6. Indicative list of the training programmes, didactic materials and small equipment needed for the inland waterway sector:
   6.1 Training programmes for the trainers of the Galati Training Centre
   6.2 Indicative lists for didactic materials and small equipment for the Galati Training Centre
### LOGFRAME PLANNING MATRIX FOR

<table>
<thead>
<tr>
<th>Programme name and number</th>
<th>Contracting period expires: 30/11/2004</th>
<th>Disbursement period expires: 30/11/2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Management and professional training for the road, inland waterway and air sectors&quot;</td>
<td>Total budget: 1.2 MEURO</td>
<td>Phare budget: 1.2 MEURO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall objective</th>
<th>Objectively verifiable indicators</th>
<th>Sources of verifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Ability to comply with the acquis communautaire in the field of training in the transport sector</td>
<td>- Progress in the EU integration process</td>
<td>- EC reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ministry of Public Works, Transport and Housing reports</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project purpose</th>
<th>Objectively verifiable indicators</th>
<th>Sources of verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Enforcement of the training centres and increase their capacity to raise awareness of the managers in the transport companies about the need of training within the transport sector (road, inland waterway and air transport).</td>
<td>- Number of the diploma or certificates issued by the Training Centers</td>
<td>- Galati Training Center reports</td>
<td>- Adequate implementation of the knowledge obtained during the training courses sustained within the Training Centers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Road Training Centers reports</td>
<td>Romanian Civil Aviation Authority reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Romanian Aviation Academy reports</td>
<td>Romanian Auto Authority reports</td>
</tr>
<tr>
<td>Results</td>
<td>Objectively verifiable indicators</td>
<td>Sources of verification</td>
<td>Assumptions</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Road sector</strong></td>
<td>Road sector</td>
<td></td>
<td>- Adequate use of the small equipment by trained staff</td>
</tr>
<tr>
<td>- Business plans reviewed;</td>
<td>- detailed business plan reviewed</td>
<td>- Hand-over certificates</td>
<td></td>
</tr>
<tr>
<td>- Access to profession to the road carriers;</td>
<td>- number of the persons trained by the trainers</td>
<td>- Reports from CFCU, Ministry of Public Works, Transport and Housing and final beneficiaries</td>
<td></td>
</tr>
<tr>
<td>- Trained trainers to be able to disseminate information;</td>
<td>- Number of the trained trainers in the road field</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Training materials available for the training centres;</td>
<td>- training materials for each course implemented under the Phare project</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Air sector</strong></td>
<td>Air sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Adequate trained Romanian Civil Aeronautical Authority inspectors in aerodrome field;</td>
<td>- number of the trained aerodrome inspectors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Trained trainers in the aviation sector;</td>
<td>- number of the trained trainers in the air field</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Training materials available for the training centre;</td>
<td>- training materials for each course implemented under the Phare project</td>
<td></td>
<td>- Adequate implementation of the knowledge gained by the trainers</td>
</tr>
<tr>
<td>- Romanian Aviation Academy become a recognised Flight Training Organisation and regional training centre;</td>
<td>- implementation of the relevant standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inland waterway sector</strong></td>
<td>Inland waterway sector</td>
<td></td>
<td>- Adequate implementation of the solutions proposed by the consultants engaged</td>
</tr>
<tr>
<td>Activities</td>
<td>Means</td>
<td>Sources of verification</td>
<td>Assumptions</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------</td>
</tr>
<tr>
<td>- Assessment of the current situation of the training centres;</td>
<td></td>
<td>- Reports from CFCU, Ministry of Public Works, Transport and Housing and final beneficiaries</td>
<td>- High quality consultant and suppliers</td>
</tr>
<tr>
<td>- Updating/purchasing of the training materials and of the teaching aids;</td>
<td>- Service contracts</td>
<td></td>
<td>- On-time preparation of ToR and Technical Specifications</td>
</tr>
<tr>
<td>- Training for trainers/lecturers and examiners.</td>
<td>- Supply contracts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Purchasing of the small equipment needed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- development of the maps needed to assure the correct positioning of obstacles and NAVAIDS in the aerodrome areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preconditions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-time ratification of the Financing Memorandum</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEX 2

DETAIL TIME IMPLEMENTATION CHART

"Management and professional training for the road, inland waterway and air sectors"

<table>
<thead>
<tr>
<th>Calendar months</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>D</td>
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<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
</tbody>
</table>

D = Design/Tender preparation  C = Contracting  I = Implementation
ANNEX 3

"Management and professional training for the road, inland waterway and air sectors"

CUMULATIVE CONTRACTING AND DISBURSEMENT SCHEDULE

<table>
<thead>
<tr>
<th>Cumulative contracting schedule by quarter in MEUR (planned)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Q1</td>
</tr>
<tr>
<td>Total contracting:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cumulative disbursement schedule by quarter in MEUR (planned)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Q1</td>
</tr>
<tr>
<td>Total disbursement:</td>
</tr>
</tbody>
</table>
ANNEX 4: Indicative list of the programmes proposed for the training of the trainers in the road sector

1. Training Managers Program:
   - **Course Duration:** 5 days
   - **Number of participants:** 20 people
   - **Number of programs:** 3
   - The training program must include development of business plans, management of training programs, training tools, training equipment, marketing of training programs, financial management for guarantee of loyal competition in the road transport field.

2. ADR Trainers Improvement Program:
   - **Course Duration:** 5 days
   - **Number of participants:** 20 people
   - **Number of programs:** 6
   - Through this programme it is aimed to improving the teaching techniques, of the course content and practice exercises models for the students. Each lecturer/trainer must receive training materials in English or French or Romanian language.

3. Improvement Trainers for the Person Designated to Manage Permanently and Effectively the Road Transport Activity Program
   - **Course Duration:** 5 days
   - **Number of participants:** 20 people
   - **Number of programs:** 6
   - Through this program it is aimed the improving of the teaching techniques, of the course content and practice exercises models for the students. Each lecturer/trainer must receive training materials in English or French or Romanian language.

4. Road Safety Trainers Improvement Program
   - **Course Duration:** 5 days
   - **Number of participants:** 20 people
   - **Number of programs:** 6
   - Through this program it is aimed the improving of the teaching techniques, of the course content and practice exercises models for the students. Each lecturer/trainer must receive training materials in English or French or Romanian language.

5. Provisions Program for the training institutes with a library of transport, management and marketing literature and EC legislation (also the Acquis Communautaire for Road Transport).
   - **Number of programs:** 3 (one for each training center)

Estimated budget per programe (20 persons, 5 days)

<table>
<thead>
<tr>
<th>No.</th>
<th>Expenses</th>
<th>Unit cost</th>
<th>Total (Euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hotel accommodations</td>
<td>35 Euro/person/night</td>
<td>3,500</td>
</tr>
<tr>
<td>2</td>
<td>Restaurant</td>
<td>25 Euro/person/day</td>
<td>2,500</td>
</tr>
<tr>
<td>3</td>
<td>Meeting room</td>
<td>75 Euro/day</td>
<td>375</td>
</tr>
<tr>
<td></td>
<td>Service Description</td>
<td>Rate</td>
<td>Cost</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------</td>
<td>------------------</td>
<td>---------</td>
</tr>
<tr>
<td>4</td>
<td>Interpreter</td>
<td>115 Euro/day</td>
<td>575</td>
</tr>
<tr>
<td>5</td>
<td>Equipment rent</td>
<td>115 Euro/day</td>
<td>575</td>
</tr>
<tr>
<td>6</td>
<td>Transport</td>
<td>35 Euro/person</td>
<td>700</td>
</tr>
<tr>
<td>7</td>
<td>Administrative expenses</td>
<td>35 Euro/day</td>
<td>175</td>
</tr>
<tr>
<td>8</td>
<td>Administrative personnel</td>
<td>50 Euro/day</td>
<td>250</td>
</tr>
<tr>
<td>9</td>
<td>Training material translation</td>
<td>10 Euro/page</td>
<td>2,000</td>
</tr>
<tr>
<td>10</td>
<td>Training material multiplication</td>
<td>0,15 Euro/page</td>
<td>600</td>
</tr>
<tr>
<td></td>
<td><strong>Total cost per course</strong></td>
<td><strong>11,250 EURO</strong></td>
<td></td>
</tr>
</tbody>
</table>

Estimated total costs for 24 courses: 24 courses x 11,250 EURO/course = 270,000 EURO

Equipment – Video projector, Flipchart, Wall Screen, Video, TV
Training material – 200 pages

Estimated total costs for equipment and training material = 50,000 EURO
ANNEX 5: Indicative list of the training programmes for the air sector

1) For the implementation of licensing requirements and personnel training in airport safety activities are necessary the following courses:

<table>
<thead>
<tr>
<th>No</th>
<th>Course Subject</th>
<th>Training</th>
<th>Persons RCAA/RAA</th>
<th>Duration</th>
<th>Fee (Euro)/pers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Senior Civil Aviation Management</td>
<td>Authorized Course by IATA</td>
<td>1</td>
<td>15 days</td>
<td>7,535</td>
</tr>
<tr>
<td>2</td>
<td>Aerodrome Regulation</td>
<td>Authorized Course by IATA</td>
<td>3</td>
<td>10 days</td>
<td>4,100</td>
</tr>
<tr>
<td>3</td>
<td>Advanced Terminal Design for the Commercial Airport</td>
<td>Authorized Course by IATA</td>
<td>4</td>
<td>10 days</td>
<td>6,460</td>
</tr>
<tr>
<td>4</td>
<td>Airport Marketing &amp; Air Service Development</td>
<td>Authorized Course by IATA</td>
<td>3</td>
<td>5 days</td>
<td>3,220</td>
</tr>
<tr>
<td>5</td>
<td>Airport Advanced Business Management</td>
<td>Authorized Course by IATA</td>
<td>1</td>
<td>5 days</td>
<td>3,660</td>
</tr>
<tr>
<td>6</td>
<td>Airport Management and Ground Handling Operations</td>
<td>Authorized Course by IATA</td>
<td>4</td>
<td>10 days</td>
<td>5,120</td>
</tr>
<tr>
<td>7</td>
<td>Airport Management</td>
<td>Strategic Course</td>
<td>1</td>
<td>10 days</td>
<td>6,750</td>
</tr>
<tr>
<td>8</td>
<td>Management of Aviation Facilitation</td>
<td>Authorized Course by IATA</td>
<td>2</td>
<td>7 days</td>
<td>3,100</td>
</tr>
</tbody>
</table>

Note: Certain training organizations within EU countries are able to provide such kind of training, e.g. Ecole Nationale d'Aviation Civile (France), Lufthansa Training (Germany), Instilux (Luxemburg), Institute for Aviation (Sweden), UK-CAA (UK), University of Southampton (UK). The training organization shall be able to provide also adequate airport training practice.

2) For purposes concerning the FTO licensing of RAA and, possible, also for other organizations there are taken into account following courses:

<table>
<thead>
<tr>
<th>No</th>
<th>Course Subject</th>
<th>Training</th>
<th>Persons RAA / RCAA</th>
<th>Duration</th>
<th>Fee/pers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aeroplane and Navigation Procedures Trainers</td>
<td>JAA authorized</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>JAR-STD-3A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>JAR-STD-2A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>JAR-STD-1A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Class Rating Instructor</td>
<td>JAR-FCL</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Type Rating Instructor</td>
<td>JAR-FCL</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Crew Resource Management</td>
<td>JAR-FCL</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Quality Assurance for FTOs/TRTOs</td>
<td>JAA authorized</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>JAR – Flight Crew Licensing</td>
<td>JAR-FCL</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

200 – 570 EURO/day for each participant according to the type of training program and training organization.
The prices for the previous stated courses are only informal and if these prices are negotiated on a common base, perhaps including attendees also from other organizations and countries, the training providers will be able to offer reduced prices, without affecting the training quality.
ANNEX 6: Indicative list of the training programmes, didactic materials and small equipment needed for the inland waterway sector

### TABLE 1

<table>
<thead>
<tr>
<th>No.</th>
<th>Training course</th>
<th>No. of the participants</th>
<th>Estimated cost/pers. (EURO)</th>
<th>Total (EURO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Train the instructors</td>
<td>12</td>
<td>3,000</td>
<td>36,000</td>
</tr>
<tr>
<td>2</td>
<td>Train the assessors</td>
<td>12</td>
<td>3,000</td>
<td>36,000</td>
</tr>
<tr>
<td>3</td>
<td>Train auditors</td>
<td>12</td>
<td>2,000</td>
<td>24,000</td>
</tr>
<tr>
<td>4</td>
<td>Specialization instructors-MARPOL</td>
<td>12</td>
<td>2,500</td>
<td>30,000</td>
</tr>
<tr>
<td>5</td>
<td>Train experts in field of dangerous goods</td>
<td>12</td>
<td>3,000</td>
<td>36,000</td>
</tr>
<tr>
<td>6</td>
<td>Train auditors for applying System of quality, safety and environment</td>
<td>6</td>
<td>2,500</td>
<td>15,000</td>
</tr>
<tr>
<td>7</td>
<td>Master courses on training the adults</td>
<td>12</td>
<td>2,500</td>
<td>30,000</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL (around)</strong></td>
<td></td>
<td></td>
<td><strong>210,000 EURO</strong></td>
</tr>
</tbody>
</table>

### TABLE 2

<table>
<thead>
<tr>
<th>No.</th>
<th>Training programme</th>
<th>COSTS OF THE TEACHING AIDS (EURO)</th>
<th>Video</th>
<th>Equipment</th>
<th>Manuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Personal safety and social responsibilities on board ship</td>
<td></td>
<td>12,150</td>
<td>687</td>
<td>360</td>
</tr>
<tr>
<td>2</td>
<td>Elementary medical first aid</td>
<td></td>
<td>4,070</td>
<td>7,200</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Fire prevention and fire fighting</td>
<td></td>
<td>4,530</td>
<td>26,090</td>
<td>200</td>
</tr>
<tr>
<td>4</td>
<td>Personal survival techniques</td>
<td></td>
<td>2,990</td>
<td>19,380</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Proficiency in survival craft and rescue boats</td>
<td></td>
<td>3,985</td>
<td>26,700</td>
<td>120</td>
</tr>
<tr>
<td>6</td>
<td>Carriage of dangerous goods</td>
<td></td>
<td>3,080</td>
<td>5,000</td>
<td>845</td>
</tr>
<tr>
<td>7</td>
<td>Prevention of pollution from ships</td>
<td></td>
<td>4,525</td>
<td>14,000</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Maritime English. Phrasal vocabulary</td>
<td></td>
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<td>Ro-ro passenger ships and passenger ships other than ro-ro</td>
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<td>10</td>
<td>Oil tanker, liquefied gas tanker and chemical tanker</td>
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<td>6,675</td>
<td>34,000</td>
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<td>47,000</td>
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TOTAL I + II = 200,000 EURO + 210,000 EURO = 410,000 EURO

Details in the Annexes 6.1 and 6.2
ANNEX 6.1: Training programmes for the trainers of the Galati Training Center

1) Training courses for train the trainers in accordance with IMO requirements listed in model course 6.09
   Number of the participants: 12
   Estimated cost: 12 x 3,000 EURO/person = 36,000 EURO

2) Training courses for train the assessors in accordance with IMO requirements stipulated in model course 3.12
   Number of the participants: 12
   Estimated cost: 12 x 3,000 EURO/person = 36,000 EURO

3) Training courses for train the auditors in order to apply the Safety Management of Ship’s Code
   Number of the participants: 12
   Estimated cost : 12 x 2,000 EURO/person = 24,000 EURO

4) Courses for the instructors’ specialization on MARPOL 73/78 as amended
   Number of the participants: 12
   Estimated cost : 12 x 2,500 EURO/person = 24,000 EURO

5) Experts training courses in the field of carriage of dangerous goods on sea and on inland waterways
   Number of the participants: 12
   Estimated cost: 12 x 3,000 EURO/person = 36,000 EURO

6) Training courses for train the auditors in order to apply the Systems of quality, safety and environment in accordance with ISO standards
   Number of the participants: 6
   Estimated cost : 6 x 2,500 EURO/person = 15,000 EURO

7) Master courses on adults’ training
   Number of the participants: 12
   Estimated cost : 12 x 2,500 EURO/person = 30,000 EURO

TOTAL COST FOR 7 COURSES:  207,000 EURO
ANNEX 6.2: Indicative lists for didactic materials and small equipment for the Galati Training Centre

1. **Personal safety and social responsibilities on board ship - Teaching aids**

   a) **Video cassettes**

   V1 – Personal safety on board ship (code 553-563) – 10 pieces  
   Estimated cost: 672 EROU/piece x 10 pieces = 6,720 EURO

   V2 – Personal hygiene (code 293)  
   Estimated cost 660 EURO

   V3 – Safe mooring practice (code 616)  
   Estimated cost 740 EURO

   V4 – Heath and welfare advice for seafarers (code 510)  
   Estimated cost 660 EURO

   V5 – Personal protective equipment (code 597)  
   Estimated cost 490 EURO

   V6 – Alcohol beware! (code 348)  
   Estimated cost 660 EURO

   V7 – Drugs – Way off course (code 486)  
   Estimated cost 740 EURO

   V8 – Entering into enclosed spaces (code 534)  
   Estimated cost 740 EURO

   V9 – Welding safety (code 495)  
   Estimated cost 740 EURO

   **TOTAL COST VIDEO CASSETTES: 12,150 EURO**

   b) **Equipment**

   E1 – Helmet – 3 pieces  
   Estimated cost 35 EURO/piece x 3 pieces = 105 EURO

   E2 – Goggles – 3 pieces  
   Estimated cost 12 EURO/piece x 3 pieces = 36 EURO

   E3 – Gloves – 3 pieces  
   Estimated cost 7 EURO/piece x 3 pieces = 21 EURO

   E4 – Safety shoes – 3 pieces  
   Estimated cost 10 EURO/piece x 3 pieces = 30 EURO

   E5 – Dust masks – 3 pieces  
   Estimated cost 50 EURO/piece x 3 pieces = 150 EURO
E6 – Gas masks – 3 pieces  
Estimated cost 100 EURO/piece x 3 pieces = 300 EURO  

E7 – Safety clothing – 3 pieces  
Estimated cost 15 EURO/piece x 3 pieces = 45 EURO  

**TOTAL COSTS FOR EQUIPMENT 687 EURO**  

c) Bibliographical manuals  

**B1** - ILO Code of Practice for Accident Prevention on Board Ship at Sea an in Port 
Estimated cost – 60 EURO  

Estimated cost – 60 EURO  

Estimated cost – 60 EURO  

Estimated cost – 60 EURO  

Estimated – 60 EURO  

B6 - Olav Bø, Accident Prevention  
Estimated cost – 60 EURO  

**TOTAL COSTS FOR MANUALS – 360 EURO**  

**TOTAL COSTS FOR TEACHING AIDS - POINT 1 = 13,197 EURO**  

These teaching aids are listed in the model course 1.21 made by International Maritime Organizaton, where it is said that the video cassettes are available from Videotel Marine International Ltd. London  
We mention that these teaching aids may be also used for the training programme of the inland waterways sailing personnel such as: ‘Personal protection’. The video cassettes’ prices are taken from the Marine Training Catalogue, 1999/2000 Edition. 
The equipment’s prices are taken from offers of the specialized companies that commercialize these articles.  

2. **Elementary first aid - Teaching aids**  

a) Video cassettes  

V1 – A matter of life and death (code 564)
Estimated cost – 650 EURO

V2 – Dealing with shock (code 565)
Estimated cost – 650 EURO

V3 - Bone and muscle injuries (code 566)
Estimated cost – 650 EURO

V4 – Dealing with the unexpected (code 567)
Estimated cost – 650 EURO

V5 – Staying healthy on working trips (code 599)
Estimated cost – 740 EURO

V6 – Medical first aid in case of fractures, dislocations (code 570)
Estimated cost – 730 EURO

TOTAL COSTS FOR VIDEO CASSETTES 4,070 EURO

b) Equipment

E1 – Ship’s medical chest with contents – 1 piece
Estimated cost – 700 EURO

E2 – Resuscitation kit – 1 piece
Estimated cost – 500 EURO

E3 – Dummies for cardiopulmonary resuscitation – 2 pieces
Estimated cost – 1,000 EURO

E4 – Video equipment (video projector and video recorder) – 1 piece
Estimated cost – 5,000 EURO

TOTAL COSTS FOR EQUIPMENT 7,200 EURO

TOTAL COSTS FOR TEACHING AIDS – POINT 2: 11,270 EURO

These teaching aids are listed in the model course 1.13 and 1.14 published by International Maritime Organizaton, where it is said that the video cassettes are available from Videotel Marine International Ltd. London
We mention that these teaching aids may be also used for the training programme of the inland waterways sailing personnel such as: ‘Medical first aid’ ‘Preventing and fire-fighting’ ‘Personal protection’, ‘Carriage of dangerous goods on river’, ‘Carriage of passengers’.
The equipment’s prices are taken from INTERNET offers of the specialized companies that commercialize these articles.

3. Fire prevention and fire fighting - Teaching aids

a) Video cassettes
V1 – Fire prevention – part 1 (code 673)  
Estimated cost – **755 EURO**

V2 - Fire prevention – part 2 (code 674)  
Estimated cost – **755 EURO**

V3 – Fire party operations (code 509)  
Estimated cost – **725 EURO**

V4 – Safe air to breathe (code 431)  
Estimated cost – **755 EURO**

TOTAL COSTS FOR VIDEO CASSETTES: **2,990 EURO**

b) Equipment

E1 – Water extinguishers (9 litre) – 2 pieces  
Estimated cost – 30 EURO / piece x 2 pieces = **60 EURO**

E2 – Foam extinguishers (9 litre) – 2 pieces  
Estimated cost – 50 EURO / piece x 2 pieces = **100 EURO**

E3 – Carbon dioxide extinguishers (5 kilogram) – 2 pieces  
Estimated cost – 50 EURO / piece x 2 pieces = **100 EURO**

E4 – Dry powder extinguishers (10 kg) – 2 pieces  
Estimated cost – 60 EURO / piece x 2 pieces = **120 EURO**

E5 – Halon extinguishers – 2 pieces  
Estimated cost – 10 EURO / piece x 2 pieces = **200 EURO**

E6 – Extinguishers for combustible metals – 2 pieces  
Estimated cost – 150 EURO / piece x 2 pieces = **300 EURO**

E7 – Extinguishers for galleys and restaurants – 2 pieces  
Estimated cost – 200 EURO / piece x 2 pieces = **400 EURO**

E8 – Fireman thermic protection suit – 1 piece  
Estimated cost – **1,500 EURO**

E9 – Self-contained breathing apparatus – 1 piece  
Estimated cost – **200 EURO**

E10 – Compressed-air apparatus – 2 pieces  
Estimated cost – 1200 EURO / piece x 2 pieces = **2,400 EURO**

E11 – Smoke detector – 1 piece  
Estimated cost – **5,000 EURO**

E12 – Temperature detector – 1 piece  
Estimated cost – **1,000 EURO**

E13 – Flame detector – 1 piece
Estimated cost – 1,000 EURO

E14 – Fireman suit – 2 pieces
   Estimated cost – 1,000 EURO x 2 pieces = 2,000 EURO

E15 – Video projection equipment (video projector and video recorder) – 1 piece
   Estimated cost – 5,000 EURO

TOTAL COSTS FOR EQUIPMENT: 19,380 EURO

TOTAL COSTS FOR TEACHING AIDS – POINT 3: 22,370 EURO

These teaching aids are listed in the model course 1.20 made by International Maritime Organization, where it is said that the video cassettes are available from Videotel Marine International Ltd. London
We mention that these teaching aids may be also used for the training programme of the inland waterways sailing personnel such as: ‘Fire prevention and fire fighting’ and ‘Personal protection’.
The equipment’s prices are taken from INTERNET offers of the specialized companies that commercialize these articles.

4. Personal survival techniques - Teaching aids

a) Video cassettes

V1 – SOLAS chapter III part 1 – Preparing for abandonment (code 297.1)
   Estimated cost – 700 EURO

V2 - SOLAS chapter III part 2 – Abandonment by lifeboat (code 297.2)
   Estimated cost – 700 EURO

V3 - SOLAS chapter III part 3 – Abandonment by liferaft (code 297.3)
   Estimated cost – 700 EURO

V4 - SOLAS chapter III part 4 – Techniques of survival (code 297.4)
   Estimated cost – 700 EURO

V5 - SOLAS chapter III part 5 – SOLAS amendments (code 463)
   Estimated cost – 700 EURO

V6 – Cold water casualty (code 527)
   Estimated cost – 380 EURO

V7 – Man overboard (code 644)
   Estimated cost – 650 EURO

TOTAL COSTS FOR VIDEO CASSETTES: 4,530 EURO

b) Equipment

E1 – Lifejackets – 36 pieces
Estimated cost – 60 EURO/piece x 36 pieces = 2,160 EURO

E2 – Inflatable lifejackets – 5 pieces  
Estimated cost – 150 EURO/piece x 5 pieces = 750 EURO

E3 – Lifebuoys – 2 pieces  
Estimated cost – 340 EURO/piece x 2 pieces = 680 EURO

E4 – Rigid liferaft – 1 piece  
Estimated cost – 4,000 EURO

E5 – 20 persons inflatable liferaft – 1 piece  
Estimated cost – 5,000 EURO

E6 – Complet set of lifeboat equipment – 1 set  
Estimated cost – 1,000 EURO

E7 – Complet set of liferaft equipment – 1 set  
Estimated cost – 1,000 EURO

E8 – SART operating on 9 GHz frequency – 1 set  
Estimated cost – 450 EURO

E9 – EPIRB operating on 460 MHz  
Estimated cost – 950 EURO

E10 – Hidrothermic suits – 6 pieces  
Estimated cost – 800 EURO/piece x 6 pieces = 4,800 EURO

E11 – Lifebuoys – 6 pieces  
Estimated cost – 50 EURO/piece x 6 pieces = 300 EURO

E12 - Video projection equipment (video projector and video recorder) – 1 piece  
Estimated cost – 5,000 EURO

TOTAL COSTS FOR EQUIPMENT: 26,090 EURO

c) Bibliographical manuals

Estimated cost – 50 EURO

Estimated cost – 50 EURO

Estimated cost – 50 EURO

Estimated cost – 50 EURO

TOTAL COSTS FOR MANUALS – 200 EURO

TOTAL COST FOR TEACHING AIDS – POINT 4: 30,820 EURO

These teaching aids are listed in the model course 1.19 made by International Maritime Organizaton, where it is said that the video cassettes are available from Videotel Marine International Ltd. London. We mention that these teaching aids may be also used for the training programme of the inland waterways sailing personnel such as: ‘Human rescue on sea’, ‘Naval communications’, ‘Transport of passengers’, ‘Craft manoeuvring’.

The video cassettes’ prices are taken from the Marine Training Catalogue, 1999/2000 Edition. The equipment’s prices are taken from INTERNET offers of the specialized companies that commercialize these articles.

5. Proficiency in survival craft and rescue boats - Teaching aids

a) Video cassettes

V1 – Personal survival part 1 (code 645)
   Estimated cost – 675 EURO

V2 - Personal survival part 2 (code 646)
   Estimated cost – 675 EURO

V3 – Lifeboat on-load release mechanism (code 596)
   Estimated cost – 725 EURO

V4 – Viking inflatable liferaft (code 404)
   Estimated cost – 445 EURO

V5 - Viking david launchable lifeboat (code 404)
   Estimated cost – 610 EURO

V6 – Viking marine escape slide (code 274)
   Estimated cost – 445 EURO

V7 – Viking marine evacuation system (code 275)
   Estimated cost – 410 EURO

TOTAL COSTS FOR VIDEO CASSETTES: 3,985 EURO

b) Equipment

E1 – Lifeboat with engine – 1 piece
   Estimated cost – 5,000 EURO

E2 – Portable hoist unit suitable for recovery of rescue boats – 1 piece
   Estimated cost – 1,000 EURO

E3 – Rescue boat with engine – 1 piece
Estimated cost – **1,000 EURO**

**E4 – Portable hoist unit suitable for recovery of lifeboat – 1 piece**  
Estimated cost – **1,000 EURO**

**E5 – Inflatable liferaft – 1 piece**  
Estimated cost – **3,500 EURO**

**E6 – Portable two-way radiotelephones approved for used in survival craft – 3 pieces**  
Estimated cost – 400 EURO/piece x 3 pieces = **1,200 EURO**

**E7 – Video projection equipment (video projector and video recorder) – 1 piece**  
Estimated cost – **5,000 EURO**

**TOTAL COSTS FOR EQUIPMENT: 26,700 EURO**

c) **Bibliographical manuals**

**B1 - C.H.Wright, Proficiency in survival craft certificates (Glasgow: Brown, Son and Ferguson, 1988)**  
Estimated cost – **60 EURO**

Estimated cost – **60 EURO**

**TOTAL COST FOR MANUALS: 120 EURO**

**TOTAL COSTS FOR TEACHING AIDS – POINT 5: 30,805 EURO**

These teaching aids are listed in the model course 1.23 made by International Maritime Organizaton, where it is said that the video cassettes are available from Videotel Marine International Ltd. London  
We mention that these teaching aids may be also used for the training programme of the inland waterways sailing personnel such as: ‘Human rescue on sea’, ‘Naval communications’, ‘Transport of passengers’, ‘Craft maneovring’.  
The equipment’s prices are taken from INTERNET offers of the specialized companies that commercialize these articles.

6. **Carriage of dangerous goods - Teaching aids**

a) **Video cassettes**

**V1 - Dangerous goods at sea, part 1 (code 125)**  
Estimated cost – **770 EURO**

**V2 – Handling and storage of dangerous goods in port areas (code 126)**  
Estimated cost – **770 EURO**

**V3 – Portable tanks and tank containers, part 2 (code 126)**  
Estimated cost – **770 EURO**
V4 – Safe packing and securing of cargo in freight containers and vehicles (code
124)
Estimated cost – **770 EURO**

1.1. **TOTAL COSTS FOR VIDEO CASSETTES: 3,080 EURO**

b) **Equipment**

E1 - Video projection equipment (video projector and video recorder) – 1 piece
Estimated cost – **5,000 EURO**

c) **Bibliographical manuals**

B1 - United Nations Recommendations of the Transport of Dangerous Goods
or Geneva
Estimated cost – **65 EURO**

B2 - Manual of Tests and Criteria, parts I to IV – United Nations, Sales Section,
New York or Geneva
Estimated cost – **65 EURO**

B3 - Technical Instructions for the Safe Transport of Dangerous Goods by Air and
999 University Street, Montreal, Quebec, Canada H3C 5H7
Estimated cost – **65 EURO**

B4 - UNEP Basel Convention on the Control of Transboundary Movements of
Hazardous Wastes and their Disposal
Estimated cost – **65 EURO**

B5 - European Agreement concerning the International Carriage of Dangerous
Goods by Road (ADR), 1997 edition, United Nations, Sales Section, New York or
Geneva
Estimated cost – **65 EURO**

B6 - Convention concerning International Carriage by Rail (COTIF), appendix B:
Uniform Rules concerning the Contract for International Carriage of Goods by Rail
(CIM)
Estimated cost – **65 EURO**

B7 - Annex 1 to CIM Regulations concerning the International Carriage of Dangerous
Goods by Rail (RID), 1997 edition – HMSO Publications Centre, PO Box 276,
London SW8 5DT, United Kingdom
Estimated cost – **65 EURO**

B8 - International Air Transport Association (IATA), Dangerous Goods Regulations,
38th edition, 1998 – International Air Transport Association, 2000 Peel Street,
Montreal, Quebec, Canada H3A 2R4
Estimated cost – **65 EURO**

B9 - Sax, N. Irving and Richard, J.Lewis Sr., Dangerous Properties of Industrial
Materials,
7. Prevention of pollution from ships - Teaching aids

a) Video cassettes

V1 – Oily water separators (code 124)
Estimated cost – 770 EURO

V2 – Safe oil transfer procedures (code 588)
Estimated cost – 770 EURO

V3 – Waste and garbage management (code 627)
Estimated cost – 775 EURO

V4 – Prevention of pollution at sea (code 432)
Estimated cost – 660 EURO
V5 – Prevention & reaction to marine oil spills (code 591)
Estimated cost – **775 EURO**

V6 - Prevention & reaction to marine oil spills – the seafarer’s role (code 592)
Estimated cost – **775 EURO**

**TOTAL COSTS FOR VIDEO CASSETTES: 4,525 EURO**

b) Equipment

E1 – Meter for testing the pollution of sea – 2 pieces
   Estimated cost – 4,500 EURO/piece x 2 = **9,000 EURO**

E2 – Retro projector and projection apparatus
   Estimated cost – **5,000 EURO**

**TOTAL COSTS FOR EQUIPMENT: 14,000 EURO**

**TOTAL COSTS FOR TEACHING AIDS – POINT 7: 18,525 EURO**

These teaching aids are listed in the model course 1.11 made by International Maritime Organization, where it is said that the video cassettes are available from Videotel Marine International Ltd. London.

We mention that these teaching aids may be also used for the training programme of the inland waterways sailing personnel such as: ‘Prevention and fighting against pollution on inland waters’, ‘Carriage and handle of dangerous goods on river’ ‘Personal protection’, ‘Transport of passengers’.


The equipment’s prices are taken from INTERNET offers of the specialized companies that commercialize these articles.

8. **Maritime English. Phrasal vocabulary - Teaching aids**

a) Video cassettes

V1 – Shipboard familiarization (code 593)
   Estimated code **740 EURO**

V2 – Understanding English on board ship, part 1 (code 525)
   Estimated code **740 EURO**

V3 - Understanding English on board ship, part 2 (code 526)
   Estimated code **740 EURO**

V4 – Anchors and cables (code 111)
   Estimated code **660 EURO**

V5 – Bridge resource management series part 4 – Accident prevention (code 637)
   Estimated code **660 EURO**
TOTAL COSTS FOR VIDEO CASSETTES : 3,540 EURO

b) Equipment

E1 – Color TV – set – 1 piece
   Estimated cost - 3,570 EURO

E2 – Video recording – 1 piece
   Estimated cost - 2,860 EURO

E3 – Equipment for titrating the video cassettes – 1 piece
   Estimated cost - 1,600 EURO

E4 – Combine (tape recorder & CD) – 1 piece
   Estimated cost - 2,860 EURO

TOTAL COSTS FOR EQUIPMENT : 10,890 EURO

c) Bibliographical materials

   Estimated cost - 100 EURO

B₂ –
   Estimated cost – 100 EURO

B₃ –
   Estimated cost – 100 EURO
Estimated cost – 100 EURO

Estimated cost – 100 EURO

Estimated cost – 100 EURO

Estimated cost – 100 EURO

TOTAL COSTS FOR MANUALS: 700 EURO

TOTAL COSTS FOR TEACHING AIDS – POINT 8: 151,130 EURO
These teaching aids are listed in the model course 3.17 made by International Maritime Organization, where it is said that the video cassettes are available from Videotel Marine International Ltd. London. We mention that these teaching aids may be also used for the training programme of the inland waterways sailing personnel such as: ‘Radio telephonist operator’, ‘Naval communications’, ‘Standard vocabulary for river sailing’. The video cassettes’ prices are taken from the Marine Training Catalogue, 1999/2000 Edition. The equipment’s prices are taken from INTERNET offers of the specialized companies that commercialize these articles.

9. Ro-ro passenger ships and passenger ships other than ro-ro - Teaching aids

a) Video cassettes

V1 – Passenger mustering and crowd control (code 603)
   Estimated cost – 770 EURO

V2 – Crisis management, part 1 (code 507)
   Estimated cost – 770 EURO

TOTAL COSTS FOR VIDEO CASSETTES: 1,540 EURO

b) Equipment

E1 – Video projection equipment (video recording and video projector)
   Estimated cost – 5,000 EURO

TOTAL COSTS FOR EQUIPMENT : 5,000 EURO

c) Bibliographical materials

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**TOTAL COSTS FOR TEACHING AIDS – POINT 9: 6,990 EURO**

These teaching aids are listed in the model courses 1.28 and 1.29 made by International Maritime Organizaton, where it is said that the video cassettes are available from Videotel Marine International Ltd. London. We mention that these teaching aids may be also used for the training programme of the inland waterways sailing personnel such as: ‘Transport of passengers’, ‘Ship vitality’, ‘Human life saving on sea’, ‘Preventing and fire fighting’. The video cassettes’ prices are taken from the Marine Training Catalogue, 1999/2000 Edition. The equipment’s prices are taken from INTERNET offers of the specialized companies that commercialize these articles.

**10. Oil tanker, liquefied gas tanker and chemical tanker - Teaching aids**

**a) Video cassettes**

V1 – An introduction to liquefied gas carriers (code 103)  
Estimated cost - 700 EURO

V2 – Fire fighting in carriage of liquefied gas (code 254)  
Estimated cost - 800 EURO

V3 – Chemistry on liquefied gas (code 641)  
Estimated cost - 800 EURO

V4 - Physics on liquefied gas (code 642)  
Estimated cost - 700 EURO

V5 – Maintaining operations of the inert gas system (code 116)  
Estimated cost - 700 EURO
V6 – Crude oil washing (code 11)
   Estimated cost - **700 EURO**

V7 – Over and back pressure in tanks (code 533)
   Estimated cost - **600 EURO**

V8 – Personal safety on tankers (561)
   Estimated cost - **675 EURO**

V9 – Chemical tanker and operations, part 1 and 2 (code 329.1 and 329.2)
   Estimated cost - **1,000 EURO**

**TOTAL COSTS FOR VIDEO CASSETTES: 6,675 EURO**

b) Equipment

E1 – Portable oxygen meter – 1 piece
   Estimated cost - **250 EURO**

E2 – Portable combustible-gas detector – 2 pieces
   Estimated cost – 4,500 EURO/piece x 2 pieces = **9,000 EURO**

E3 – Inflammable gas detector – 2 pieces
   Estimated cost – 4,500 EURO/piece x 2 pieces = **9,000 EURO**

E4 – Personal oxygen monitor – 1 piece
   Estimated cost – **3,000 EURO**

E5 – Toxic gas detector – 1 piece
   Estimated cost – **2,500 EURO**

E6 – Meter of permanent control of oxygen content – 1 piece
   Estimated cost – **300 EURO**

E7 - Retro projector and projection apparatus
   Estimated cost – **5,000 EURO**

**TOTAL COSTS FOR EQUIPMENT: 6,400 EURO**

c) Bibliographical manuals

| B3 | International Chamber of Shipping, Tanker Safety Guide (Chemicals), 2nd |  |
Estimated cost – 50 EURO  

B₄ – M.Grey (editor), Chemical/Parcel Tankers, 3rd ed. (London, Fairplay  
Estimated cost – 50 EURO  

B₅ – B.Bengtsson, Sea Transport of Liquid Chemicals in Bulk, 3rd ed. (Öckerö,  
Estimated cost – 50 EURO  

B₆ – ICS/OCIMF/IAPH/INTERTANKO/CEFIC/SIGTTO, Ship/Shore Safety  
Estimated cost – 50 EURO  

B₇ – International Chamber of Shipping, Tanker Safety Guide (Liquefied Gas),  
Estimated cost – 50 EURO  

B₈ – SIGTTO, Liquefied Gas Handling Principles on Ships and in Terminals,  
Estimated cost – 50 EURO  

B₉ – Gas Measurements on Combination Carriers and Crude Oil Tankers,  
(NSOS, Grenseveien 99, N-0601, Oslo 6, Norway)  
Estimated cost – 50 EURO  

B₁₀ – International Chamber of Shipping/Oil Companies International Marine  
Forum, Ship to Ship Transfer Guide (Petroleum), 3rd ed. (London,  
Estimated cost – 50 EURO  

B₁₁ – International Chamber of Shipping/Oil Companies International Marine  
Estimated cost – 50 EURO  

B₁₂ – U.S. Coast Guard, CHRIS, Manual II, Hazardous Chemical Data,  
Estimated cost – 50 EURO  

B₁₃ – N.I. Sax, and R.J. Lewis, Sr., Hawley’s Condensed Chemical Dictionary,  
Estimated cost – 50 EURO  

B₁₄ – Tank Cleaning Guide, 6th ed. (Rotterdam, B.V. Chemical Laboratory “Dr.  
A. Verwey”, 1998)  
Estimated cost – 50 EURO  

B₁₅ – Bureau VERITAS, Gas and Chemical Ship Safety Handbook, 2nd ed.  
Estimated cost – 50 EURO
Estimated cost – 50 EURO

Estimated cost – 50 EURO

Estimated cost – 50 EURO

Estimated cost – 50 EURO

**B_{20} –** INTERTANKO, Measures to Prevent Accidental Pollution, 1990

TOTAL COSTS FOR MANUALS: 1,000 EURO

TOTAL COSTS FOR TEACHING AIDS – POINT 10: 14,075 EURO

These teaching aids are listed in the model course 1.01, 1.02, 1.04 and 1.06 made by International Maritime Organizaton, where it is said that the video cassettes are available from Videotel Marine International Ltd. London.

We mention that these teaching aids may be also used for the training programme of the inland waterways sailing personnel such as: ‘Carriage and handle of dangerous goods on river’, ‘Pollution prevention on inland waters’


The equipment’s prices are taken from INTERNET offers of the specialized companies that commercialize these articles.