PROJECT FICHE FOR PHARE 2006

for

TRANSPORTS

PHARE 2006/018-147.03.10

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1. BASIC INFORMATION

1.1 CRIS Number:

PHARE 2006/018-147.03.10

1.2 Title:

Improvement of safety and quality services in transport sector

1.3 Sector:

Transport

1.4 Location:

Romania

1.5 Duration:

2. OBJECTIVES

2.1. Overall Objective:

Application of the acquis communautaire in the transport sector in Romania.

2.2. Project purpose:

To continue the transposition of the current transport acquis

This to be achieved by the following tasks:

Task 1: To improve the safety and the quality of services as well as strengthen the institutions in the field of road transport through:

1.1. the implementation of the new safety aspects of the EU legislation in the field of road safety
1.2. the establishment of a national Road Safety Institute
1.3. the development of an efficient and modern accident's management system in Bucharest
1.4. the increasing of the programming capacity and the quality of construction/rehabilitation works for bridges

Task 2: To improve the safety and the quality of services as well as strengthen the institutions in the field of naval transport through:

2.1 the establishment of a reference system for hydrographical measurements on the Danube River to maintain minimal navigable depths
2.2 the increasing of the locational accuracy of vessels and direct emergency control for the Western Black Sea region, Romanian sea ports and Danube-Black Sea Canal
2.3 the development of an Automatic Identification System for ships operating in the Romanian waters

Task 3: To remediate the soil and groundwater at the CFR Calatori fuelling station and oil storage centre and to establish modern fuelling station and oil storage centre equipped with spill prevention measures and wastewater management system.

Task 4: To modernise and expand the MTCT's computer system to enable it to cope with the increasing demands of accession

2.3. Accession Partnership and NPAA priority

According to the commitments taken under Complementary Position Paper II, Romania accepts the community acquis in the field of road safety in force on 31 December 2002, and will be able to apply this acquis on its accession date to the EU.

NPAA 2002 - short-term priorities: "Improving road safety and institutional building in the transport field"
NPAA, Objective 2, Chapter 7 - " the rehabilitation of the transport services, improvement of services quality, alignment to the European conditions of transport for future integration in the European transport system"

"According to Roadmap 2002, the main priority in the field of road transport is as follows – "Further efforts will also be needed to implement the fiscal and social/technical acquis in the road sector".

Final Report Peer Review 2005 – Evaluation Mission on Road Transport Issues Romania – "It is strongly recommended to start with campaigns drawing people's attention to road safety in general and to follow the traffic rules starting with use of seat belts and omit driving and phoning"

Final Report Peer Review 2005 – Evaluation Mission on Inland Waterways Transport Issues Romania – "The peer review team had the opportunity to navigate on the stretch of the Danube where Romania is responsible for the safety of the fairway. With regard to the latter, the experts recommend that the marking of the fairway should be improved in order to ensure the safety of navigation. Such an improvement could cover both the question of buoying as well as general signalisation."

Monitoring Report for Romania – 2005 – "In the area of maritime transport….by the time of accession, Romania will need to incorporate the acquis in the field of maritime security which goes beyond the International Organisation's instruments"; "The quality of the new legislation regarding safety rules and standards and standards for passengers ships, maritime equipment and the Prestige package remains to be assessed"

2.4. Coherence with the National Development Plan

The proposed project and focus of activities are in accordance with the priorities set out in the National Development Plan 2004-06 for the transport sector.

2.5. Cross Border Impact:

The projects concerned with the improvement in the monitoring of the channels on the Danube River and the development of modern navigational systems will impact on navigation on the Romania/Bulgaria stretch of river and require close collaboration between the 2 countries.

3. DESCRIPTION

3.1. Background and justification:

The transport sector in Romania will play a critical role in the process of accession to the European Union and to its economic integration into the wider European economy and its 25 Member States. It will not only provide the arteries upon which to promote economic growth and development but will also lead to much greater mobilty of people and the improved movement of goods both internally and to neighbouring countries and beyond.

A critical component in the accession process is both the modernisation of transport infrastructure in compliance with international design standards combined with a legal framework that is consistent and compliant with the the Directives and Regulations laid down in the transport acquis. This needs to be complemented by the development of an institutional framework that provides the capacity to manage the transport system and to ensure the regulations are adequately monitored and enforced.

The promotion of internationally recognised safety standards in key transport modes and the development of an efficient, environmentally-sound and and sustainable transport network are paramount considerations in the achievement of these objectives.

Although there have been considerable investments in transport infrastructure in Romania over recent years combined with the provision of technical assistance for institution building, much of this funded by the European Union, there are still key areas where support is required to enable the country to meet its obligations for accession and to cope with the rapidly growing transport demands resulting from increased inter and intra-regional trade, greater vehicle ownership and rapidly increasing freight transport as the economy matures and develops.

The Government of Romania has recognised the importance of the transport sector as a key component in the process of transition and economic growth and in the integration of the country with its neighbours and the European Union. As a result, a strategy for transport in the context of EU integration was adopted in 1993 and largely focused on the approximation of legislation and standards. Romania has made considerable progress in transforming its legal framework to make it compliant with

that of the acquis communautaire. It is now focusing on achieving the implementation of this legislation.

In this context, this Project Fiche seeks to reinforce and strengthen this process with the focus on completing the transposition of the transport acquis in order to improve safety especially on the roads and inland waterways and to bring about capacity building and institutional reform to provide the necessary structures to implement the legislation.

The critical areas covered in this programme have been subjected to detailed discussions and consultations with the relevant stakeholders not only in Bucharest but in the regions of Romania. These have not only included other agencies but also the general public and interest groups since it is they who will be responsible for ensuring the success of the projects. This is particularly the case with the road safety campaigns.

Road Sector

The Romanian national road network has some 15,000 kms of national roads, 34,673 kms of county roads and 29,581 kms of local roads.

At present, the number of the vehicles in Romania is around 4.5 million of which some 3.1 million are cars. Whilst this is a relatively low figure for a population of 22 million, the rate of increase in car ownership is growing rapidly at approximately 5-8% per annum and the number of vehicles in Bucharest alone has grown from 200,000 in the late 1990s to some 750,000 to date. This is posing a considerable strain on the prevailing transport networks and the situation is exacerbated by the rapid growth in freight transport both within the country and as transit traffic to other countries.

One of the major consequences of the rapid growth in traffic within the country has been a major escalation in the number of road traffic accidents and in the number of deaths on the roads. This has been particularly severe in the rural areas where over 70% of fatalities have been recorded. In 2002, the number of serious car accidents amounted to 6,909 with deaths of 59 per 100,000 vehicles and 42 deaths per 100 injured. It is estimated that the costs of accidents amounted to some 3% of GDP.

In the light of the above statistics, one of the major objectives of road transport policy is to significantly reduce the number of road traffic accidents with a target of a 50% reduction over the next 5 years. This will require a major road safety programme designed to reinforce enforcement measures, to raise public awareness and to introduce safety satndards and enforcement mechanisms.

Linear Villages/Accident Black Spots
Amongst the various activities aimed at improving traffic safety, two projects financed under Phare 2001 have provided the following:

- A study on traffic safety improvements in linear villages (including a “catalogue” of typical safety measures);
- A database for traffic and accidents, including the identification of “black spots “ on national roads.

In the case of linear villages, the local population has an important role as beneficiary of the safety and promoter of the project. At present, the project management

capacity and the financial resources at the local level are very limited. Under these conditions, for the period 2004 – 2006, the National Company for Motorways and National Roads in Romania – S.A. will be the management body for the "Linear villages" component.

Given the limits of the annual Phare budget in the perspective of the wide needs for safety measures across the country, the fiche aims to consolidate the work undertaken in the 2004 and 2005 programming exercise and to continue the process developing road safety programmes in selected linear villages and accident black spots. The 2004-2006 period will be a pilot phase.

After 2006, the "Linear villages" and "Blackspots" road safety programme will be extended to the national level and for all the road types. For the future there is expected to be a common approach to the provision of road maintenance for all the national road network. Indeed, once the mechanism of implementation, the eligibility and the selection criteria are defined, the projects can roll-on with the new budgets made available each year.

Road/Bridge Construction

A key issue for ensuring traffic safety is the quality of the roads. The National Company for Motorways and National Road in Romania is the administrator of the public national roads network (14,880 km) and has the responsibility of managing the funds for road rehabilitation works, periodical maintenance, preserving the structural stability of the roads and bridges and ensuring the safety conditions for the road traffic. In this context, the verification of the quality of roads and bridges is a priority.
In Romania, the control of the quality of road construction works is undertaken by a network of seven regional road laboratories, each under the responsibility of a district of the National Company for Motorways and National Road (NCMNR). In addition, CESTRIN (Centre for Technical and Road Studies and Informatics), a national research and studies institute, also under the responsibility of NCMNR, co-ordinates the activities of the regional laboratories and assists in the implementation of national norms and standards.
The existing laboratory equipment of CESTRIN and of the regional road laboratory is either ageing or does not have the technical capacity to measure compliance with the Regulations currently in force in the European Union regarding the quality control for the construction of roads and bridges.

CESTRIN requires new equipment for performing long-term surveys on material behaviour and structure evolution, which can be included into the Bridge Management System. The provision of modern equipment will ensure that a systematic approach can be applied to performance testing and the evaluation of the whole bridge inventory in the country.

Data obtained from field inspections and investigations can be used for:

- The immediate verification of construction, maintenance, repair, and rehabilitation works;
- The evaluation of bridge conditions;
- The development and validation of deterioration models included in BMS;
- The development of Work Effect Models;

- The evaluation and validation of the use of new materials in bridge construction.

Accident Investigation

Another very important aspect for ensuring traffic safety is road traffic control facilities and the enforcement of relevant legislation. One of the responsible institution in this field is the Ministry of Administration and Interior, and the Traffic Police.

In 2004, 49,059 traffic accidents occurred in capital city, Bucharest, of which 48,322 involved severe damage. According to the Law, Bucharest Traffic Police Brigade investigates the accidents through dedicated units.

Due to the great number of accidents per day, the legal procedure is slow and generates considerable frustration and stress. There are also extensive delays due to the lack of staff, complex procedures and the high volume of accidents, which need investigation. The facilities available such as parking areas, dedicated spaces for the completion of the documentation and utilities are insufficient and basic.

There is therefore an urgent need to improve facilities, to streamline the process and to provide the traffic police units with adequate resources to undertake their tasks.

The inclusion of accident data into the National Traffic Police Accidents' Database will permit the analyses of traffic accidents and their cause and geographical distribution and this will have a significant impact on policing and developing measures to improve safety and enforce legislation. Regarding severe accidents (involving fatalities and injuries), will allow for a much more rigorous and proactive system.

Road Safety Research

In Romania there is a gap in the road safety policy circle because there is no centre for nation wide planning and coordinating interdisciplinary road safety research and development. The infrastructural and geographical conditions, the growing economy and the increasing motorization will have severe consequences in the next future. These challenges can only be solved by scientifically based political decisions and complex measures.

The transport safety policy must be subject to an ongoing monitoring and evaluation process. The success of the different planning and implementation phases of road safety policies relies on the availability of appropriate evaluation techniques. These need to be developed and optimized by continuous interdisciplinary road safety research.

While there is a wide range of road safety measures in force and numerous programmes underway, there is a need for a systematic and coordinated approach to road safety and for the establishment of an institution that can act as the focal point for research and the development of measures in this area. Moreover, the setting up of a Research Road Safety Institute was one of the recommendations issued by the

technical assistance under the 2001 Phare Programme - "Technical Assistance for Road Safety Measures Implementation (Safety Audit System). The Project Fiche, therefore, includes a sub-component designed to establish a Road Safety Institute, which will function as a centre for research and development in this area similar to facilities operational in the EU Member States such as the TRRL in the United Kingdom. This will be responsible for the dissemination of information on established practices operating in the EU, for research in critical area, for initiating road safety campaigns and stimulating public awareness, and acting as a think tank on policies for the promotion of road safety.

Railway Sector

At present, there are three state-owned railway companies in Romania, which are independent and are operating on a commercial basis:

- CFR, the national railway infrastructure company (providing the network and ancillary services);
- CFR-Passengers (CFR Calatori), the national passenger railway operator;
- CFR-Freight (CFR Marfa), the national freight railway operator.

The Romanian State is the single stockholder, which exercises its rights and obligations through the Ministry of Transport, Constructions and Tourism (MTCT).

Maintenance Units

CFR Passengers SA (CFR Calatori) owns a specific rolling stock fleet (locomotives and coaches). The rolling stock fleet is maintained and serviced at the maintenance units operated by CFR. The maintenance units comprise fuelling stations, workshops, and oil products storage and distribution centres.

Decades of poor management and operations, however, combined with the lack of investment in technical upgrading and poor environmental practices have resulted in the deterioration of the surrounding environment.

Lack of spill-prevention measures, the leakage of diesel oil from fuel tanks, numerous spills during filling operations, spills of petroleum products at workshops and oil storage and distribution centres has resulted in soil and groundwater contamination at many rolling stock maintenance units.

Surface spills of petroleum products, poor wastewater management and lack or inefficient wastewater pre-treatment facilities have resulted in the run-off of petroleum products with storm- and wastewater to public sewage systems or to surface waters.

The preliminary studies carried out by CFR Calatori show that an alarming situation is present at approximately. 30 rolling stock maintenance units and there is an immediate need for the implementation of necessary remedial actions.

Old and worn out fuel and oil installations require modernisation and/or replacement as well as the development of environmentally sound operational procedures in order to prevent the environment from further deterioration which will pose a severe threat for groundwater resources and human health.

Recently, the Environmental Authorities requested the CFR Calatori to undertake various remedial actions at the maintenance units, aiming at the protection of environment.

The initial studies and ranking of the rolling stock maintenance units presenting a serious environmental threat showed that the maintenance unit in Bucharest (Depoul Bucharest Calatori) represents the largest problem in terms of impact on the environment and human health, safety and fire protection. The Depot Bucharest is very important for the CFR Calateri due to its geographical location. Therefore, in order to continue the operation of Depot Bucuresti, it is necessary to undertake immediate remedial and modernisation works as a priority.

A pilot project, aiming at the modernisation of a selected rolling stock maintenance unit and the remediation of the soil would demonstrate an environmentally sound example for the modernisation of the remaining maintenance units (approx. 30) across Romania.

The pilot project would also provide a good example of the technical solutions available, incorporating environmentally- sound and safe operation and maintenance procedures as well as soil remediation technique. These could be adopted at the remaining maintenance units with similar environmental problems.

Maritime Sector

In the maritime sector, considerable progress has been made in the adoption of the acquis and in institution building. Nevertheless, additional measures need to be undertaken to improve navigational safety both at sea and on the inland waterways. This will require hydrographic surveys, vessel communication systems and information technology infrastructure.

Automatic Identification System

The SOLAS (Safety of Lives at Sea) Convention, Chapter V (Safety of Navigation), Regulation 19, requires that *"All ships of 300 gross tonnage and upwards engaged in international voyages and cargo ships of 500 gross tonnage and upwards not engaged in international voyages and passenger ships irrespective of size shall be fitted with* ***Automatic Identification System (AIS)*** *"*.

The AIS will improve navigational safety of by providing continuous and readily accessible information about ships equipped with on-board AIS and operating in the coverage area of the system. The information can be disseminated with important safety and efficiency implications to:

- The Vessel Traffic Management Systems;
- The Search and Rescue Co-ordination Centre;
- The Monitoring Centre of Pollution;
- Pilots;
- Port operators;
- Ship owners;
- Service operators.

The AIS data is necessary for the following services

- Traffic management;
- Search and rescue;

- Pilot coordination;
- Navigational Warning and Weather Information;
- Fleet management;
- Port information;

The AIS data will provide these services with new functions and capabilities. A complete set of data is sent automatically and in real time (the period of data refreshing is 2-3 seconds in critical situation) from the ships to shore systems. Also Shore Systems are sent to the ships Navigational Warning and Weather Information message. This real time data permits bridge officers and VTS, SAR operators to avoid or minimise dangerous situations.

The feasibility study for the AIS was finished in November 2004 as the results of the Phare project RO 0107.12.01.03 - Feasibility study for an Automatic Identification System (AIS).

The Automatic Identification System for the Romanian Black Sea Shore consists of:

- 5 AIS base stations in Constanta, Sulina, Mangalia, Enisala/Sf. Gheorghe and the Petromar offshore platform. These base stations will assure AIS data radio communications with any ship in Romanian area.
- The AIS central station located in Constanta, at the Romanian Naval Authority. This central station will gather all data, process them and distribute them to ships and to all involved partners. Central station will also monitor and configure the AIS network.
- The data communication network to transfer data between AIS base stations, AIS central stations, AIS central stations and the users of the AIS data.

This AIS system will use a part of the infrastructure developed through the RoRIS project.

The Automatic Identification System for the Romanian Black Sea Shore will be integrated with the Automatic Identification System for the maritime section of the Danube, which represents a subsystem of The Vessel Traffic Management and Information System on the Romanian Danube (project EuropeAid / 116211/D/S/RO)

Danube Navigational System

The river Danube, the second largest in Europe, passes through 10 countries and is 2,850 km long. The Danube together with the river Rhine is the main inland waterway in Europe. Through the two navigation canals Main-Danube and Danube-Black Sea, the North and the Black Sea have been linked. Due to its importance in the European system of transport, the Danube and the Canal Danube-Black Sea were designated Pan-European Corridor No.VII.

The Belgrade Convention on Navigation on the Danube from 1948 demands the best conditions for the maintenance of the navigable waterway of the Danube, according to the provisions of Articles 3 and 39.

To improve transport conditions and the environment, transport safety will be improved through regular control system providing information on the main

characteristics of the inland waterway. The system will include different recording points providing information on the depths and width of the channel (signalling and hydro-geotechnical measurements) permitting the control of infrastructure conditions (banks, locks, etc.) and substantially improving safety for ships on the river. This will also facilitate the planning of remedial works essential for improved navigation.

The current project aim to establish the location for approximately 150 bollards position along the Danube River. Moreover, after the construction phase, a team will establish the coordinates for each bollard using the DGPS technology in order to have an accurate system for topographical determination which will ensure an improved inland traffic safety system. The bollard system will be used for regular measurements of the fairway conditions.

GPS System(maritime navigation)

In Romania, the radio communications for the Public Service of Naval Radio Communications for Calling, Distress and Rescue are provided by RADIONAV, which is a national company with its head office at the Romanian Coast Station premises in Agigea.
This is provided on the international dedicated frequencies (as per IMO international regulations). Romania therefore complies with its obligations in accordance with the SOLAS Conventions provisions and other conventions to which Romania is a party.

Other major tasks for RADIONAV SA are alerting the responsible authorities in the case of receipt of a danger signal from a vessel; transmitting weather forecasts and providing navigational warnings to vessels.

The Company is able to supply these services at a high quality standard, which cover the largest part of the Black Sea Coast with GMDSS A1 VHF-DSC radio communications (cca. 20 Nm), A2 area with MF/DSC (over 100nm); fulfills the responsibilities incurred to Romania for the implementation of the ISPS Code by providing security radio communications between ships and port facilities..

Regarding the A1 area, the existing infrastructure at RADIONAV S.A. Constanta already in operation consists of 4 (four) A1 area VHF – DSC (Digital Selective Calling) base stations situated in Sf. Gheorghe, Enisala, Mahmudia and Agigea and a control console in Agigea. To cover all the A1 Black Sea Zone with VHF – DSC VHF – DSC it is necessary to complete the system with 2 A1 VHF – DSC base stations situated in Sulina and Mangalia and a receiving station at MRCC Constanta.

The implementation of a DGPS base station is necessary for the development of terrestrial infrastructure requested in order to enhance the safety and navigation in the coastal areas and inland waterways.

The DGPS base station will broadcast, on a dedicated MF frequency, the corrected signals for increasing the accuracy of ship locations as per IALA recommendations. The system will provide the DGPS users a high order of accuracy and a quality system that is commonly used for hydrographic surveys. DGPS is also a basic

component in maritime transponder systems, which is today a part of all modern VTMIS systems.

The development of the AIS along the Danube – Black Sea Canal and the DBS Channel in the Western Black Sea region, requires more accurate information and this will be provided by the Differential Global Positioning System (DGPS) in accordance with the Global Maritime Distress and Safety System (GMDSS) Convention regulations.

Ministry of Transport, Construction and Tourism Computer Facilities

The main segment of the existing computer network was put into operation over 11 years ago and provided for about 50 workstations at a transfer speed of 10 Mbps. The later important upgrade of the network infrastructure was performed 7 years ago for about 150 workstations when some additional equipment supporting the speed of 100 Mbps were introduced into the structure of the network.
Since that time, inappropriate extensions have been installed in response to the continuous increase in user number, due to repeated ministry reorganisations from the Ministry of Transport into The Ministry of Public Works, Transport and Housing and later into Ministry of Transport, Construction and Tourism
The network extensions were installed producing maximum capacities on the existing cabling and network components. Due to the fact that the network equipment is old, and there is high pressure on the cabling extension, this has created an unreliable and inefficient network and a complete redesign of the whole computer network is an urgent necessity.
Using the existing network some important applications are functioning such as the Romanian Laws database, the ISPA Oracle financial data base, some financial applications, payroll, Intranet, Internet and e-mail. Since 1999, the MTCT has spent considerable funds and computer acquisitions were performed every year. The old 486-based processors computers were replaced with computers that support Windows XP operating system.
The extremely rapid evolution of the operating systems and computer workstations with high performances, which were purchased, created considerable pressure on the network and its reliability has declined. Today, MTCT has over 500 Windows XP workstations which access the network resources and in the near future this number will be increased to 700. The actual network infrastructure acts as a major constraint on the operations of the MTCT.
Because of the lack of the automation in the management of the electronic files, the manual management of paper documents is often undertaken including the archive activity. More than 80 percent of the information in the organisation is “unstructured” information. Given the massive increase in this unstructured information, a new system is required to provide the management tools upon which the MTCT will increasingly rely as the accession process intensifies.
Modernisation of IT data communication infrastructure and the data management system will allow the MTCT to operate more efficiently, apply modern technologies currently offered in data communication as well as to comply with growth in demand for the network services as the Ministry’s role expands and develops.

3.2. Sectoral Rationale

The Government's commitment to the transport sector in Romania reflects its understanding of the importance of the sector to the economic growth and development of the country. With the pace of accession accelerating, there is an urgent need to focus on areas where compliance with the acquis communautaire is required. In this context, issues of safety both on the roads and at sea and on the inland waterways are extremely important concerns, The Fiche for 2006, therefore, aims to address these key issues through a variety of initiatives that build on previous work with the emphasis on road safety and maritime safety as well as on improving environmental conditions at the main rail company. These safety aspects will have a widespread impact at both the national and international levels and will integrate Romania into the wider EU transport policy framework.

Identification of Projects

a) Road Sector

Despite road safety initiatives, accident rates in Romania are still very high compared with EU norms. The Government has set a target of a 50% reduction in accidents over the next 5 years and a major road safety programme needs to be introduced to achieve this. This will require not only raising public awareness but also the introduction of safety standards and enforcement mechanisms. In this context, a number of projects are proposed to achieve these objectives. These include the following:

- The continuation of the 2004/05 projects with the focus on developing a range of safety measures for Linear Villages and accident black spots. It is hoped that public support for these programmes will effect a dramatic reduction in accidents in the se designated areas.
- The establishment of a national Road Safety Institute which will act as the focal point for research into road safety similar to institutes operating in other countries of the EU. There is clearly a need for this institute since no facilities exist in Romania for research in this area. The institute will, however, act not only as a centre for research but also as a think tank on government policies in this area.
- Accident Investigation. With over 49,000 accidents recorded in Bucharest alone in 2004, there is an urgent need to streamline the process of accident investigation in the capital. This needs investments in facilities combined with improved procedures. The aim of the project is therefore is to refurbish and rehabilitate 3-4 police stations to enable them to provide a more efficient service and to prevent the excessive delays that characterise the investigation process.
- The improvement in the standards of bridge and road design to ensure that they comply with EU standards. While current standards meet national needs, there is a requirement to improve and disseminate standards so that Romania meets its EU commitments.

b) Maritime & Inland Water Sector

Although considerable progress has been made in the adoption of the acquis communautaire and in institution building in the maritime sector, there is still a need to improve safety aspects both at sea and on the key inland waterway, the Danube River. In this respect, there are a number of projects included in this fiche that specifically address these issues. These include the following:

- The establishment of an Automatic Identification System (AIS) for the Romanian Black Sea Shore will ensure that Romania complies with the SOLAS (Safety of Lives at Sea) Convention, which requires that all ships should be fitted with an AIS system. This will substantially improve navigational safety at sea but will also integrate the sea and inland waterway navigational systems.
- The project to improve navigation on the Danube River (Corridor VII) will have a significant impact on safety and navigation on this major waterway since it will through a system of base stations be able to provide real time monitoring of the river flows, channel depths and widths, which will facilitate the planning of dredging operations and enable the river authorities to provide up to date information o for navigation.
- The project to develop improved communications along the Romanian Black Sea Coast through the installation of DGPS and A1 VHF-DSC systems will substantially improve navigational accuracy and search and rescue operations. It will also build on systems already in operation.

c) Rail Sector.

There are clearly problems with groundwater contamination at the CFR Calatori fuelling station and these needs to be addressed urgently to prevent contamination of the groundwater. The proposed project is designed to address these problems by establishing a modern fuelling station and oil storage centre. It would also provide a model of how to develop similar systems in other locations to comply with EU environmental laws.

d) Computer System Upgrading.

The computer system at the MTCT has been developed and updated over the last 11 years to meet the increasing demands of the Ministry as its mandate has been enlarged. Unfortunately, many of the upgrades have been ad hoc extensions with the result that network is now diffuse, overloaded and slow. There is therefore an urgent need to develop a new IT data communication system as well as a data management system to enable the Ministry to cope with the increasing demands as the accession process intensifies.

3.3. Results:

Task 1:

1.1 Improved safety standards (less accidents) on the roads through safety infrastructure improvement works in high-risk locations on the national roads network (black-spots) and public awareness campaign;
1.2 A fully operational National Road Safety Research Institute established with a clear mandate and public support;

1.3 Rehabilitation of 4-5 police stations in Bucharest to accelerate the processing of road traffic accidents and substantially reduce delays;

1.4 Standardised equipment for bridge testing in order to comply with international Bridge Management System requirements; Standardised equipment (EU standards) for quality control of road construction works dedicated to the central and local laboratories of RNCMNR.

Task 2:

2.1 An established monitoring/referencing system on the Danube for topo-hydrographical measurements to facilitate dredging operations and improve navigation; Personnel trained in managing and operating the system.

2.2 Improved locational accuracy, traffic surveillance and search and rescue facilities along the Romanian section of the Black Sea Coast through the provision of a DGPS base station, 2 A1 VHF –DSC base stations and one receiving station.

2.3 An Automatic Identification System (AIS) developed for ships on the Romanian Black Sea Shore to provide for the more accurate monitoring of ships in Romanian waters.

Task 3:

- Soil and groundwater remediation at the CFR Calatori fuelling station and oil storage centre site;
- Modern fuelling station and oil storage centre established and equipped with spill prevention measures and wastewater management system.
- A "pilot" project implemented demonstrating good examples for soil remediation techniques and technical solutions for modernisation of remaining (approx. 30) rolling stock maintenance units at CFR Calatori.

Task 4:

- Upgraded IT data communication infrastructure established at the MTCT together with a modern Document Management System (DMS) introduced and staff trained in its use.

3.4. Activities:

Task 1:

1.1 Implementation a the new safety aspects of the EU legislation in the field of road safety

On the basis of the works identified and designed under the Phare 2004 TA, the next priority investments which could not be financed under Phare 2005 shall be financed under this 2006 Programme. These works will be contracted and implemented on the basis of FIDIC Conditions of Contract (Red Book, 1999).

The task shall also include technical assistance for the works supervision, but also implementing of an awareness campaign for improving the behavior of the road users – which will include

- A local campaign for the village inhabitants for a good understanding of the safety measures;
- a regional campaign/national (along the road) for all the road users;

Critical decisions i.e. on the main features of the behavioral campaign shall be taken by the Steering Committee on the basis of the Consultant's recommendations. The following institutions shall be represented in the Steering Committee: MTCT, RNCMNR, and Road Traffic Police. The composition of the Steering Committee can be extended with other interested institutions. The EC Delegation and the Ministry of Public Finance will be invited to the Steering Committee meetings as observers.

1.2 Establishment of a national Road Safety Institute

Twinning component

- Analysis of existing research potential in Romania comparative with the European standards in the field.
- Elaboration of a set of recommendations for setting up an effective and efficient institutional structure including:
    - Organisation, attributions and powers of a road safety research coordinator by creating an institute as an independent body;
    - Resources (staffing, implementing and operating costs, financing sources, equipment endowment, etc.);
    - Identification of and consultation with all relevant traffic safety stakeholders who shall represent the Road Safety Institute;
    - Working procedures, including relations/co-operation mechanism with the institutes representatives and international institutions;
    - Producing legal framework, if needed.

The twinning partner shall analyse the existing road safety audit law and the recommendations made under "Safety audit and linear villages" PHARE 2001 project regarding the implementation of the national road safety audit system.

Investment component:

- Procurement of the equipment needed for the proper functioning of the Institute. The twinning partner shall prepare the equipment list and technical specifications.

1.3 Development of an efficient and modern accident's management system in Bucharest

- Technical assistance for:
    - Establishing revised administrative and legal procedures regarding crash accident handling with the aim of improving the management of the specific activities (registration, information, assistance, enforcement procedures);
    - Preparation of a list of equipment that is needed for the proper functioning of the 4-5 dedicated accident administration units of Bucharest Traffic Police Brigade;
    - Supervision of the renovation/modernisation works of the premises of each of the four dedicated units of Bucharest Traffic Police Brigade.
- Works for renovation/modernisation of the premises of the four dedicated units of Bucharest Traffic Police Brigade, including parking areas, electrical and IT installation, and dedicated spaces for public information, waiting rooms and operational rooms.

- Supply of the hardware (computers, printers, stationary), dedicated software and appropriate furniture etc.

1.4 Increasing of the programming capacity and the quality of construction/rehabilitation works for bridges

- Procurement of testing equipment for roads and bridges.

Task 2:

2.1 Establishment of a reference system for hydrographical measurements on the Danube River to maintain minimal navigable depths

The scope of this sub-project is the provision of a turnkey solution comprising engineering, supply, installation and commissioning of a reference system for hydrographical measurement. This will include the following:

- Analysis of the current situation in the maintenance field: measurement and sounding, signalisation, inspection;
- Create a concept (plan) for inspection of the signalization, sounding, maintenance of the minimum depth for navigation;
- Create a concept to use the DGPS system available in order to achieve the necessary accuracy for the measurements;
- Prepare a topographical study to establish the location of the based points referred to the soil characteristics and the navigation requirements;
- Establish the characteristics for every base points;
- Install the fixed points;
- Determinate the base points coordinates by high accuracy measurements, based on national reference system and European reference system, which will provide an updated database of geodesic data;
- Check the maturation of the every fixed point after 6 months;
- Establish the transformation parameters from the Romanian system of reference (S70) to the European system of reference (WGS84) for the geodesic coordinates;
- Assess the capacity of the specific Bulgarian and Serbian waterways' administration to use their data or measurements points;
- Create a concept for the implementation of RIS CD and the integration of the sounding results and hydrology measurement in RIS;
- Check, develop and integrate the system for notices to skippers in inland navigation in line with RIS CD standard;
- Train the staff in the sounding and hydrology measurements, data collection and data analyses;

2.2 Increasing of the locational accuracy of vessels and direct emergency control for the Western Black Sea region, Romanian sea ports and Danube-Black Sea Canal

- ***Acquisition and installation of the DGPS for the Romanian Black Sea Coast***

The installation of the DGPS in accordance with the Technical Specifications. Plain reflective ground for the antenna will be provided by RADIONAV. RADIONAV will

execute all works for the layout of the earth mat, feeder positioning, foundation for the antenna mast, erection of the mast (with mast stays and insulators if the case).

- ***Acquisition and installation of the A1 VHF – DSC base stations for the Romanian Black Sea Coast.***

For the Extension of the A1 VHF DSC system operational in Agigea Control Centre, the following tasks must be executed:

- Transport and installation of the outdoor cabinets (if case) with all additional works (safe ground net, and lightning protection, antennae mounting on proper antennae mast and laying of coaxial cables);
- Providing proper communications flux E1 (2Mb/sec) transport from A1 VHF DSC base stations to the Control Centre in Agigea;
- Integration of these new stations into the operating stations (Mahmudia, Enisala, Sfintu Gheorghe and Agigea);
- Providing the connection to the MRCC (radio link or optical fiber) for 2 Mb/sec E1 data flux;
- Installation of one control Console in MRCC with appropriate software (compatible with the specifications);
- Providing of connections to this Control Console that will take over all Distress Traffic with other parts (Salvage group, Helicopters H/M of fix wing MRG, Fire Fighting Units, Coast Guard, also.);
- Developing links with RADIONAV CSOC licensed operators of the console;
- Operate the Control Console at MRCC with RADOINAV CSOC (Coast Station Operator Certificate) licensed operators

2.3 Development of an Automatic Identification System for ships operating in the Romanian waters

This will include the following:

- Supply and installation of the AIS system consisting of: 4 AIS base stations (Constanta, Mangalia, Enisala/Sf. Gheorghe, Petromar offshore platform) and an AIS Central station in accordance with the feasibility study. The AIS base station in Sulina will be equipped through RoRIS project.

The system installed must comply with the following regulations:

- The system fulfils requirements of the ITU-R Recommendation M.1371-1 and the AILA Technical Clarification;
- The system must function in accordance with the IALA Guidelines and Recommendations;
- The system is in accordance with the requirements of the General Inspectorate of Communications and Information Technology of the MCIT;
- The system is in accordance with local regulations;
- The (radio) equipment is type approved for Romania;
- The equipment is certified by a respected certification body (e.g. ‘wheelmark’ according the Marine Equipment Directive CD 96/98/EC, as amended)

- Supply and install the AIS related communications network in accordance with the feasibility study;
- Elaboration of solutions for Integration of complementary AIS data;
- Training for the technical and operational staff.

Task 3:

The activities would include the following:

- **Soil and groundwater remediation in the area of a fuelling station and oil storage centre.**

A detailed design will be undertaken of the soil and groundwater remediation project based on a detailed soil and groundwater investigation. On the basis of this, a remediation project will be carried out involving decontamination of groundwater from petroleum products and intensive bio-remediation of the site.

- **Establishing a modern fuelling station and oil storage centre, equipped with spill prevention measures and a wastewater management system.**

This will consist of the contracting, design and construction of a modern fuelling station and oil storage centre that complies with EU environmental standards. This will act as a model for replication in other rolling stock maintenance units throughout Romania and establish a network of environmental friendly facilities.

Task 4:

Component 1: Computer Network Infrastructure

The scope of this component is the provision of a turnkey solution comprising engineering, supply, installation and commissioning of an updated computer network infrastructure for the Ministry of Transport, Construction and Tourism. It will involve a number of activities including:

- Assessment of the current MTCT network infrastructure and the identification of the system requirements;
- Design of the new configuration of cabling and components in order to rehabilitate the network;
- Installation of the network and training of staff.

Component 2: Document Management System

The scope of this component is the provision of a turnkey solution comprising engineering, supply, installation and commissioning of a Document Management System for the Ministry of Transport, Construction and Tourism. This will include the following:

- Design the configuration of the DMS and identification of the equipment and software needed;
- Purchase and install the necessary equipment and software and develop the system;
- Provide training to operators and users of work stations in the use of the system.

3.5. Linked activities:

- **RO9503-02-05/1998 – "Upgrading of the existing computer system at the Ministry of Transport – Phase II – implementation** (Lot1 upgrade of the existing server to Internet Server and Lot 2 Upgrading of the existing Computer System) consisting of 1 server, 1 management station, 47 computers, 13 printers, 1 scanner and all necessary cabling for the computer network, plus the software previewed;
- **Multi - Country Transport Programme 9610: "Study to Improvement Navigation on the Danube in Bulgaria and Romania ";**

- **Multi-country Transport Programme 98-0297: Road Safety Study** – identification of ten short-medium term measures to be implemented in order to improve the road safety in Romania;
- **The International Bank for Reconstruction and Development (IBRD**) has financed, since 1998, a series of road safety actions: linear village safety, black points (40), improvement and other actions of road safety;
- **RO99/IB/TR-01 - Twinning project on Maritime Safety;**
- R**O 0107.11.02 "Safety Audit System" - t**he results of the project included a suitable and sustainable Road Safety Audit System, Guidelines for linear villages and Trained Trainers for the Road Safety Audits.
- **RO 0107.11.03 "Traffic and Accidents Database"** - this project produced a database for traffic and accidents. This allows for the analysis of the "Black spots" and of the behaviour of the road drivers for both passengers' cars and heavy lorries.
- **RO 01.07.12 – Improvement of the maritime and inland waterway safety transport",** Sub-project 6 "Vessel Traffic Management and Information System on Romanian Danube" (RoRIS) provides recommendations on the inland waterway vessel traffic from Sulina to Bazias and its compliance with the European River Information Services (RIS).
- **Maritime Safety Radio Communications Romania - A1 area VHF DSC- t**his is designed to provide coverage along the Romanian Black Sea Coast 1999-2001, in cooperation with a Consortium from the Netherlands
- **RO 0107.12.01.03 - Feasibility study for an Automatic Identification System (AIS**) -this provided a feasibility study for the AIS as well as the development of database software for National Register of Ships, National Register of Seafarers and Certificates of Competency, Port State Control and Ships carrying dangerous cargo;
- **RO 02/IB/TR/-01 Twinning on Inland Waterway Transport to align Romanian legislation and practice in the field of safety with the EU -**this project is designed to detect weak points in the Romanian infrastructure activity (project ongoing)
- **"Banks protection, topohydrographic measurements and signalling on Sulina Channel" -**Financed by the European Bank of Investments (50%) and Romanian Government (50%).
- **RO2002/000 – 586.04.09 "Assistance to implement financial and safety aspects of EU legislation and policy in the field of inland waterways and road transport", sub-project "Technical assistance to assess the Romanian inland waterway fleet and infrastructure -** This was to examine the potential for development and propose some corrective measures" It is designed to assist Romania in restructuring its inland waterway transport fleet through a commercial and financial study.
- In 2002, the **Romanian Railway Authority (AFER**) undertook a study concerned with the analysis of the stocking, transport and distribution systems of the mineral oil products for 32 subunits within the structure of SNTFC. Among these is the Passengers' Depot in Bucharest, which is the subject of one of the projects proposed in this Fiche.
- "Assistance to implement the new safety aspects of the EU legislation in the field of road safety and to consolidate the railway restructuring" Phare 2004/016-772.03.14.

3.6. Lessons Learned

See annex no 7.

4. INSTITUTIONAL FRAMEWORK

Task 1:

1.1 The main beneficiary shall be the National Company for Motorways and National Roads in Romania – S.A (NCMNR).

Contact person: Mrs. Daniela Draghia, director
38, Bld. Dinicu Golescu, sector 1, Bucharest
Tel: 0040-21-223.26.07

The local authorities and the road users are also beneficiaries of the project.

1.2 The main beneficiary will be the Road Safety Institute. The institute will be created with this project.

Contact person: Mr. Cristi CONSTANTINESCU,
Romanian Road Transport Authority (ARR)
38, Bld. Dinicu Golescu, sector 1, Bucharest
Tel: 0040-21-212.64.51

A new contact person will be appointed when the working group for establishing the Road Safety Institute has been set-up.

1.3 The beneficiary will be the Ministry of Administration and Interior, represented by Traffic Police Brigade within General Directorate of Bucharest Police

Contact person: Marian MOTOC, Police chief-Commissary
Chief of Bucharest Traffic Police Brigade
9-15 Logofat Udriste Street, sector 3, Bucharest
Tel: 0040-21-323.30.30, bpr@b.politiaromana.ro

1.4 The main beneficiary will be the National Company for Motorways and National Roads in Romania – S.A (NCMNR), through CESTRIN and the regional road laboratories.

Contact person: Mrs. Daniela Draghia, director
38, Bld. Dinicu Golescu, sector 1, Bucharest
Tel: 0040-21-223.26.07

Task 2:

2.1 The beneficiaries will be the River Administration of the Lower Danube Galati (AFDJ)

Contact person: Mr. Romeo SOARE
Head of Giurgiu Branch – The River Administration of the Lower Danube Galati
4, Stefan cel Mare Str. 4, cod 080388
Tel: 0040 - 246 213 329, Fax 0040 - 246 211 744
e-mail:**romeo_soare@yahoo.com**

2.2 The beneficiary will be RADIONAV SA
Contact person: Cristian Belea, Technical Manager
Horia Popa
RADIONAV S.A., Str. Ecluzei nr.3
907015 Agigea
Tel: +40 241 737102, 737103Fax: +40 241 737103
email: **horia.popa@radionav.ro**. cristian.belea@radionav.ro

2.3 The beneficieries will be the Romanian Naval Authority
Contact person: Silviu Apostol, Chief of Department
Incinta Port Nr.1
Constanta 900900
Tel: 241 616 219/ Fax: 241 616 229
E-Mail: **silviu.apostol@rna.ro**

Task 3:
The beneficiary will be the "CFR Passenger"
Contact person: Mr. Alexandru Noapteş, General Director
38, Bld. Dinicu Golescu, sector 1, Bucharest
Tel: 0040-21-222.25.18

Task 4:
The beneficiary will be The Ministry of Transport, Constructions and Tourism- IT Department
Contact person: Laurian Anania
Ioan Teodor Sanatescu
Tel: 0040-21-315.77.04
Email: **Laurian.Anania@mt.ro**; test@mt.ro

5. DETAILED BUDGET

	Phare/Pre-Accession Instrument support	**Co-financing**			**Total Cost**
€M		**National Public Funds**	**Other Sources**	**Total Co-financing**	
Year 2006 - Investment support jointly co funded					
1.1 Implementation of the new safety aspects of the EU legislation in the field of road safety	**3.0**	**1.0**		**1.0**	**4.0**
- Works black spots/ linear villages	2.7	0.90		0.90	3.60.4
- TA	0.3	0.1		0.1	
1.2 Establishment of a national Road Safety Institute	**0.22**	**0.08**		**0.08**	**0.3**
1.3 Development of an efficient and modern accident's management system	**0.75**	**0.25**		**0.25**	**1**

in Bucharest -Works&supply -TA, including supervision	0.65 0.1	0.25		0.25	0.9 0.1
1.4 Increasing of the programming capacity and the quality of construction/rehabilitation works for bridges	**1**	**0.4**		**0.4**	**1.4**
2.1 Establishment of a reference system for hydrological measurements on the Danube River to maintain minimal navigable depths	**0.52**	**0.18**		**0.18**	**0.7**
2.2 Increasing of the locational accurancy of vessels and emergency control for the Western Black Sea region, Romanian sea ports and Danube-Black Sea Canal	**0.41**	**0.14**		**0.14**	**0.55**
2.3 Development of an Automatic Identification System for ships operating in the Romanian waters	**0.37**	**0.13**		**0.13**	**0.5**
3. Implementation of environmentally sound operations at the CFR Calatori rolling stock maintenance unit.	**0.37**	**0.13**		**0.13**	**0.5**
4.1 MTCT IT data communication infrastructure	0.26	0.1		0.1	0.36
4.2 MTCT Document management system	0.49	0.15		0.15	0.64
Investment support – sub-total	**7.39**	**2.56**		**2.56**	**9.95**
Year 2006 Institution Building support					
1.2 Establishment of a national Road Safety Institute - twinning	**0.63**	**0.0**		**0.0**	**0.63**
IB support	**0.63**	**0.0**		**0.0**	**0.63**
Total project 2006	**8.02**	**2.56**		**2.56**	**10.58**

6. IMPLEMENTATION ARRANGEMENTS

6.1. Implementing Agency

The Implementing Agency will be the Central Finance and Contracts Unit (CFCU).

The Implementing Agency will retain the overall responsibility for the implementation of the programme, including: approval of tenders documents, evaluation criteria, evaluation of offers, signature of contracts, authorisation of invoices.

Contact person CFCU:
Mrs. Carmen Rosu, director

Central Finance and Contracting Unit (CFCU)
Mircea Voda Blvd, number 44, sector 3, Bucharest, Romania
Tel: 0040-1-326.55.55

6.2. Implemeting Authority

The Implementing Authority will be the Ministry of Transport, Constructions and Tourism. The beneficiaries of the above mentioned sub-project would be responsible for the preparation of the Terms of Reference/Technical specification and participation in the evaluation process, and the operational management of the project.

Contact persons:
Mrs. Liliana Barna - General Director
General Directorate for Foreign Financial Affairs
38 Dinicu Golescu Av, 1st floor, room 10,
Sector 1, Bucharest, Romania
Tel/fax: 0040 - 1- 212.61.27 / 222.20.70
E-mail addresses: dgrfe17@mt.ro / **phare1@mt.ro**

6.3. Non-standard aspects

There are no 'non-standards aspects'. 'The Practical Guide to contract procedures financed from the General Budget of the European Communities in the context of external actions' will strictly be followed.

6.4. Contracts

Task 1

1.1: One services contract for supervision and awareness campaign
One works contract for the safety measures in black spots/linear villages

1.2: One Twinning Covenant
One Supply contract

1.3: One Service contract
One Works contract, including supply component

1.4: One Supply contract(s)

Task 2

2.1: One Works contract

2.2: One Supply contract

2.3: One Supply contract

Task 3: Two Works (design and build) contracts

Task 4: Two Service contracts, (including supply of equipment)

7. IMPLEMENTATION SCHEDULE

Contracts	Start o tendering	Start of project Activity	Project completion
Task 1 **1.1** Works Black Spots/linear villages Service contract	 April 2007 July 2006	 September 2007 January 2007	 May 2009 May 2009
1.2 Twinning Supply contract(s)	 October 2006 February 2007	 January 2007 June 2007	 May 2007 May 2007
1.3 Works contract Service contract	 October 2006 October 2006	 April 2007 January 2007	 September 2008 September 2008
1.4: Supply contract(s)	July 2006	January 2007	January 2009
Task 2 **2.1** Works contract	July 2006	January 2007	December 2007
2.2 Supply contract	July 2006	January 2007	October 2007
2.3 Supply contract	July 2006	January 2006	September 2007
Task 3 Two Works (design and build) contracts	July 2006	January 2007	May 2009
Task 4 Two Service contracts, (including supply contracts)	August 2006	January 2007	August 2008

8. EQUAL OPPORTUNITY

Equal opportunity for men and women to participate in all the components of the project will be ensured.

9. ENVIRONMENT

This is an environmental project aiming to respect nature, leading to its conservation and maintenance, respecting the sustainable development principles.

10. RATES OF RETURN

N.A.

11. INVESTMENT CRITERIA

11.1 Catalytic effect:

Without Phare assistance, the project would have never taken place due to a lack of funds.

11.2 Co-financing:

Task 1:

1.1: The investment component is co-financed 25% by the state budget allocated to the National Company of Motorway and National Roads through the MTCT budget

1.2: The investment component is co-financed 26.7% from the state budget through the MTCT budget

1.3: The investment component is co-financed 27.8% through the Ministry of Administration and Interior budget

1.4: The project is co-financed 40% by the state budget allocated to the National Company of Motorway and National Roads, through the MTCT budget

Task 2:

2.1: Co-financing of 25.8 % will be assured by AFDJ, through the MTCT budget

2.2: Co-financing of 25.5% from the RADIONAV budget, through the MTCT budget

2.3: The project is co-financed 26% from the RNA budget.

Task 3: It is co-financed 26% by the State budget, allocated to CFR Passengers, through the MTCT budget

Task 4: The project is co-financed 25% by the State budget, through the MTCT budget

11.3 Additionality:

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

11.4 Project readiness and Size:

The project complies with the 2 MEURO minimum Phare allocation requirements. Agencies involved are ready to implement the projects.

11.5 Sustainability:

The final beneficiaries will cover the operation and maintenance costs.

11.6Compliance with state aids provisions:

The project respects the state aids provisions: the beneficiaries are public bodies carrying out public services.

12. CONDITIONALITY AND SEQUENCING:

Task 1.2: The National Road Safety Research Institute has to be established by the 1 of July 2006. Failure to comply with this condition may lead to the suspension of the Phare financing.

Task 1.3: The Ministry of Administration and Interior has to ensure that the premises of the Bucharest Traffic Police Brigade dedicated units have been renovated/modernized, including the spaces for parking areas, by the start of the contract. Failure to comply with this condition may lead to the suspension of the Phare financing

ANNEXES TO PROJECT FICHE

1. Log frame in standard format
2. Detailed implementation chart
3. Contracting and disbursement schedule, by quarter, for full duration of project
4. For all projects: reference list of feasibility/pre-feasibility studies, in-depth ex ante evaluations or other forms of preparatory work.
5. Reference list of relevant laws and regulations
6. Reference list of relevant strategic plans and studies
7. Lessons Learnt

ANNEX 1 - LOG FRAME

LOGFRAME PLANNING MATRIX FOR		**Programme name and number**	**PHARE 2006/018-147.03.10**
Improvement of safety and quality services in transport sector		**Contracting period expires:** November 2008	**Disbursement period expires:** November 2009
		Total budget: 10.58 MEURO	Phare Budget: 8.04 MEURO
Overall objective	**Objectively verifiable indicators**	**Sources of verifications**	
Implementation of the acquis communitaire and of the EU policies in the transport sector of Romania.	Chapter 9. Accession Partnership 2003 NPA 2002 EC White Paper	- RO0107.11.02 "Safety Audit System"; - RO0107.11.03 "Traffic and Accidents Database"; - RO2001/IB/TR/01 "Twinning to further harmonise the road safety legislation and strengthen the related institutions in order to comply with EU requirement"; - RO01.07.12 "Improvement of the maritime safety and inland waterway safety" - RO9910.03 "Technical assistance for restructuring of the Romanian railways"; - Phare 2002 – Purchase of equipment for enforcement of road traffic safety provision"; - Phare 2003 – Procurement of road laboratory test equipment to enable the enforcement of European standards" - Phare 2004 – "Road safety measures";	

Purpose	Objectively Verifiable Indicators	Sources of Verification	Assumptions
To continue the transposition of the current transport acquis	Degree to which Directives and Regulations are transposed and implemented.	Compliance with Chapter 9.	Commitment by Government to transpose and implement the acquis.
Tasks	**Objectively Verifiable Indicators**	**Sources of Verification**	**Assumptions**
Task 1: To improve the safety and the quality of services as well as strengthen the institutions in the field of road transport through:			
1.1 The implementation of the new safety aspects of the EU legislation in the field of road safety	Reduced number of accidents, fatalities and injuries; Black spots eliminated	RNCMNR-CESTRIN, Road Traffic Police reports; Road accident database statistics	Good co-operation between all the relevant stakeholders; (RNCMNR, Traffic Police, Inter-Ministerial Council for Road Safety (SCISR) Other road safety related activities continue as planned, including setting up of the Road Safety Council. Database of black spots updated and priorities identified.
1.2 The establishment of a national Road safety Institute.	Establishment of a National Road Safety Research Institute	Reports of MTCT, including documents from the ARR and its Interministerial Council for Road Safety (SCISR) regarding the establishment of the organisation	Commitment of the Romanian Authorities to create this institute and to utilise its research.
1.3 the development of an efficient and modern accident's management system in Bucharest	Reduction in average time needed to investigate and solve crash accidents; Reduction in waiting time for 'customers'.	Traffic and Accidents National database; Bucharest Traffic Police Brigade statistics; Tests among road users in Bucharest	Office space available at Traffic Police Continuous collaboration between police and representatives of the public

1.4 strenghten the increasing of the programming capacity and the quality of construction/rehabilitation works for bridges	Quality of construction and rehabilitation improved. Level of compliance with EU Directives.	RNCMNR laboratories and CESTRIN reports.	Adequate implementation of the related legislation.
Task 2: To improve the safety and the quality of services as well as strengthen the institutions in the field of naval transport, through			
2.1. the establishment of a reference system for hydrographical measurements on the Danube River to maintain minimal navigable depths	Advanced and accurate information for inland navigation and notices to skippers; Database of the fixed based points. Maintenance of navigable depths.	MTCT, AFDJ reports	Agreements with the landowners or rental agreements for the base points. Coherence with systems in neighbouring countries.
2.2 the increasing of the locational accuracy of vessels and direct emergency control for the Western Black Sea region, Romanian sea ports and Danube-Black Sea Canal	Number of accurately identified vessels; Intervention time in case of emergencies.	RNA reports	Ships are equipped with VHF DSC and DGPS equipment on board; The inter-correlation with the AIS system is ensured
2.3 the development of an Automatic Identification System for ships operating in the Romanian waters	Number of people rescued at sea; Accuracy and quantity of information related to the maritime traffic	RNA reports	All SOLAS ships and SAR units will be fitted with AIS transponders by the end of 2005
Task 3:. To remediate the soil and groundwater at the CFR Calatori fuelling station and oil storage centre; and establish a modern fuelling station and oil storage centre equipped with	Improvement in soil quality. Decontamination of the groundwater from petroleum product Recovered free phase of	Regional and County Environmental Protection Agencies reports. R.N. Apele Romane (Water Institute) reports.	The soil and groundwater as well as effluent wastewater standards will not become more stringent. The CFR commit themselves to

spill prevention measures and wastewater management system.	petroleum product. Quality of effluent wastewater. Modern fuelling station meeting technical, safety, fire protection and environmental requirements. Modern oil products storage and distribution centre meeting technical, safety, fire protection and environmental requirements. New wastewater management system, including pretreatment units for fuelling station and oil storage and distribution centre. Efficient and environmental friendly fuel and oil management system. Improved working environment for the operations of fuelling station and oil storage centre.	Local Water and Sewage Company statistics and reports. CFR's state of environmental records. CFR's fuel management records.	undertaking soil and groundwater investigations in advance of the project to confirm that the extent of soil and groundwater contamination is delimited to the area of fuelling station and oil storage and distribution centre. The selected remedial techniques and technical solutions are well proven and in compliance with the EU environmental regulatory requirements.
Task 4:. To modernise and expand the MTCT's computer system to enable it to cope with the increasing demands of accession.	Speed of access to the internal and external network by users. Full access to the network for all MTCT staff in the light of future needs. Reduction in number of incidents on the network. Improvements in operational efficiency of the Ministry.	Statistics on incident reports; Direct measurement of the network traffic; Evaluation of the user satisfaction by interviews. Ministry reports on operational efficiency.	Users possess basic IT operational knowledge.

Results	Objectively Verifiable indicators	Sources of Verification	Assumptions
1.1 Improved safety standards (less accidents) on the roads through safety infrastructure improvement works in high-risk locations on the national roads network (black-spots) and public awareness campaign.	Decrease in the number of serious accidents; Decrease in number of death cases and serious injuries; Decrease in the number of black spots. Less material damages; Developed safety culture and initiative at local level; Improved living conditions in affected areas Cost savings in the health care system and socio-economic benefits	RNCMNR-CESTRIN, ARR and Road Traffic Police Reports	Involvement of the local authorities; Adequate relevant road legislation enforced; Adequate staff involved in traffic control is recruited and regularly trained. Public commitment to safety measures.
1.2. A fully operational National Road Safety Research Institute established with a clear mandate and public support.	Quality of research undertaken. Safety programmes developed and implemented. Quality of Safety Audits produced.	Reports of MTCT, including documents from the ARR and its Interministerial Council for Road Safety (SCISR) regarding the establishment of the organisation	Commitment of the Romanian Authorities to create this institute and to implement its recommendations.
1.3. Rehabilitation of 4-5 police stations in Bucharest to accelerate the processing of road traffic accidents and substantially reduce delays.	Reduction in average time needed to investigate and solve crash accidents; Reduction in waiting time for 'customers.	Investigation Units within Bucharest Traffic Police Brigade; Traffic and Accidents National database; Bucharest Traffic Police Brigade statistics	Timely implementation of the project and efficient use of the funds available
1.4 Standardised equipment for bridge testing in order to comply with international Bridge Management System requirements; Standardised equipment available for quality control of road construction works dedicated to the central and local	Equipment delivered, installed, tested and functional;	Acceptance certificates	High quality equipment purchased; Adequate enforcement of the relevant legislation/standards.

Results	Objectively Verifiable indicators	Sources of Verification	Assumptions
laboratories of RNCMNR.			
2.1 An established monitoring/referencing system on the Danube for topo-hydrographical measurements to facilitate dredging operations and improve navigation; personnel trained in managing and operating the system.	Procedures regarding the maintenance and signalisation of the inland waterway infrastructure; Number of topographical base points; Number of trained personnel.	AFDJ reports; National Topographic Institute report	Cooperation between all involved partners; Personnel able to perform properly the measurements. Cooperation with neighbouring countries.
2.2 Improved locational accuracy, traffic surveillance and search and rescue facilities along the Romanian section of the Black Sea Coast through the provision of a DGPS base station, 2 A1 VHF –DSC base stations and one receiving station.	Equipment delivered, installed and functional; Number of retrained staff	Acceptance certificates	High quality equipment purchased in place; Personnel able to use properly the equipment.
2.3 An Automatic Identification System (AIS) developed for ships on the Romanian Black Sea Shore to provide for the more accurate monitoring of ships in Romanian waters.	AIS delivered, installed and functional; Number of trained personnel	Acceptance certificates	High quality equipment purchased; Personnel able to maintain and operate the system
3. Soil remediation and decontamination of the groundwater from petroleum product at the CFR Calatori fuelling station and oil storage centre site; Modern fuelling station and oil storage centre established and equipped with spill prevention measures and wastewater	Soil and groundwater remediation project accepted by the relevant environmental authorities. Soil quality in compliance with the environmental regulatory requirements. Detailed design approved by the CFR Calatori and the relevant authorities. Works carried out in conformity with	Soil and groundwater remediation completion report demonstrating improvement of soil and groundwater quality approved by the relevant environmental authorities. Commissioning Certificate for Soil and groundwater remediation project and Taking-	Sources of soil and groundwater contamination originating from old fuelling station and oil storage centre have to be removed. The soil and groundwater as well as effluent wastewater quality standards will not become more stringent and remain as provided in the regulations (NTPA 001, NTPA002, Ord. 756/1997).

Results	Objectively Verifiable indicators	Sources of Verification	Assumptions
management system. A "pilot" project implemented demonstrating good examples for soil remediation techniques and technical solutions for modernisation of remaining (approx. 30) rolling stock maintenance units at CFR Calatori.	the detailed design.	over Certificate "As build" design approved by CFR Calatori and the relevant authorities. Commissioning Certificate and Taking-over Certificate.	
4. Upgraded IT data communication infrastructure established at the MTCT together with a modern Document Management System (DMS) introduced and staff trained in its use.	Improved IT network; Functional DMS; Number of trained DMS users	Acceptance documents; List of tests Document flow	IT network up-to-date (hardware & software ready to be exploited); DMS users possess basic IT operation knowledge.

Activities	Means	Assumptions
1.1 Selection of locations (villages and rural locations) based on accident statistics; Development and implementation of local awareness campaigns; Preparation of tender documents. Selection of contractors which will carry out works Works Works supervision	 Service contract Works Contract	Availability in due time of the information and documents needed the by the contractor team Road legislation harmonized with the acquis communautaire; Appropriate communication and collaboration between project stakeholders. All activities are carried out in line with the time schedule.
1.2 Twinning arrangement for the establishment of the Road Safety Institute. Supply contract for rehabilitation and refurbishment of offices.	Twinning Covenant Supply Contract	Availability in due time of the information and documents needed by the twinning partner's team; Availability of logistic facilities for the twinning partner's team All activities are carried out in line with the time schedule.

Activities	Means	Assumptions
1.3 Modernisation of the premises of each dedicated unit of Bucharest Traffic Police Brigade	Works contract, including a supply component Service contract	Availability in due time of the information and documents needed by the contractor team. All activities are carried out in line with the time schedule.
1.4 Procurement of testing equipment.	Supply contract	Availability in due time of the information and documents needed by the contractor's team. All activities are carried out in line with the time schedule.
2.1. Installation of the base points network	Works contract	Availability in due time of the information and documents needed by the contractor's team. All activities are carried out in line with the time schedule.
2.2. Equipment supply and installation.	Supply contract	Availability in due time of the information and documents needed by the contractor's team. All activities are carried out in line with the time schedule.
2.3. Equipment supply	Supply contract	Availability in due time of the information and documents needed by the contractor's team All activities are carried out in line with the time schedule.
3. Detailed design of soil and groundwater remediation system in the area of a fuelling station and oil storage centre. Installation of modern fuelling station and oil storage centre, equipped with spill prevention measures and wastewater management system.	Works (Design and Build contracts	Availability in due time of the information and documents needed by the contractor's team. All activities are carried out in line with the time schedule.
Assistance in the design of a new computer network infrastructure and the Document Management System; Supply and installation of the IT equipment and Software.	Service contract, including a supply component	Availability in due time of the information and documents needed by the contractor's team All activities are carried out in line with the time schedule.

ANNEX 2 - DETAILED IMPLEMENTATION CHART

	2006												2007												2008												2009				
Calendar months	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**
Activities																																									
1.1: Works black spots/linear villages TA				D	D	D	C	C	C	C	C	C	I	I	I	CI	CI	CI	CI	CI	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II
1. 2: Twinning Supply						D	D	D	D	C	C	C	I	IC	IC	IC	IC	II	II	II	II	II	II	II	II	II	II	II	II													
1.3: Works&supply Service							DD	DD	DD	CC	CC	CC	CI	CI	CI	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II								
1.4:				D	D	D	C	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I				
2.1:				D	D	D	C	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I	I																	
2.2:				D	D	D	C	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I																			
2.3:				D	D	D	C	C	C	C	C	C	I	I	I	I	I	I	I	I	I																			
3:				D	D	D	C	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
4:						D	D	C	C	C	C	C	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I									
	D = Design **C = Contracting** **I = Implementation**																																								

ANNEX 3 - CONTRACTING AND DISBURSEMENT SCHEDULE

(MEURO)												
	30/09/06	**31/12/06**	**31/03/07**	**30/06/07**	**30/09/07**	**31/12/07**	**31/03/08**	**30/06/08**	**30/09/08**	**31/12/08**	**31/03/09**	**30/06/09**
Contracted 1.1	0.3	0.3	0.3	3								
Disbursed 1.1			0.18	0.45	0.75	1.05	1.35	1.65	1.95	2.25	2.55	3
Contracted 1.2			0.625	0.625	0.85							
Disbursed 1. 2			0.208	0.288	0.503	0.583	0.663	0.85				
Contracted 1.3			0.1	0.75								
Disbursed 1.3			0.06	0.125	0.255	0.385	0.515	0.645	0.75			
Contracted 1.4			1									
Disbursed 1.4			0.6	0.6	0.6	0.6	1					
Contracted 2.1			0.52									
Disbursed 2.1			0.05	0.15	0.26	0.36	0.47	0.52				
Contracted 2.2			0.41									
Disbursed 2.2			0.24	0.24	0.24	0.41						
Contracted 2.3			0.37									
Disbursed 2.3			0.22	0.22	0.37							
Contracted 3			0.37									
Disbursed 3			0.04	0.07	0.1	0.13	0.16	0.19	0.22	0.25	0.28	0.37
Contracted 4			0.75									
Disbursed 4			0.45	0.45	0.45	0.45	0.45	0.45	0.75			

ANNEX 4 - REFERENCE FOR THE PROJECTS

A Feasibility Study for the AIS was prepared under 2001 Phare Programme, project RO 0107.12.01.03 - “Feasibility study for an Automatic Identification System (AIS)”.

ANNEX 5 - RELEVANT LAWS AND REGULATIONS

The SOLAS (Safety of Lives at Sea) Convention, Chapter V (Safety of Navigation), Regulation 19,

The Belgrade Convention on Navigation on the Danube from 1948;

Complementary Position Paper II;

ANNEX 6 - STRATEGIC PLANS

Not applicable

ANNEX 7 - LESSONS LEARNT

Identified gaps or Recommended courses of intervention	Action for covering the Gap or implement the recommended intervention	Phare Programming (Project reference)		
		2004	2005	2006
Enforcement of social and technical legislation has clearly improved and the training of personnel should continue. Romania's administrative structures, and in particular those bodies supervising area such as safety, needed to be rapidly and substantially reinforced Particular attention should be paid to the implementation of the legislation and the strengthening of administrative capacity. Some implementing legislation especially in the technical field remains to be adopted, most notably as regards registration documents for vehicles and digital tachographs. Public administration needs further strengthening for all transport modes and legislative alignment has to be completed in rail, road and inland waterway	1. Strengthening (assistance and equipment procurement) of the National Road Safety Institute 2. Assistance for renovation/modernisation of the premises of four dedicated units of Bucharest Traffic Police Brigade		Sub-project 1: To improve road safety by combating drug abuse when driving and to improve the quality of accident investigation. Sub-project 3: To improve the capacity and the mobility of the ARR to undertake traffic control.	1. Assistance for establishing a National Road Safety Institute (Twinning, Supply) 2. Development of an efficient and modern accident management system in Bucharest (TA, Works, Supply)

Identified gaps or Recommended courses of intervention	Action for covering the Gap or implement the recommended intervention	Phare Programming (Project reference)		
		2004	2005	2006
sectors.				
Romania must address the issue of how to maintain and ensure the quality of its (main) road network in order to be able to meet the obligations upon its accession. Public administration needs further strengthening for all transport modes and legislative alignment has to be completed in rail, road and inland waterway sectors.	1. Works in linear villages and in black spots outside localities in order to improve the road safety 2. Procurement of testing equipment for roads and bridges	1. Subproject 2: Road Safety measures (Works&supervision)	Sub-project 10: Implementation of Road Safety (Works&supervision) Sub-project 6: Review and improvement of the Romanian road standards up to the best international practices	1.Assistance in the implementation of the new road safety regulations compliant with EU Directives (Works&supervision) 2. Acquisition of bridge testing inspection and investigation equipment for CESTRIN and road laboratory test equipment for RNCMNR local laboratory (supply)
Transposition and implementation of the acquis in the maritime sector needs to be ensured Romania also needs to improve administrative capacity Public administration needs further strengthening for all transport modes and legislative alignment has to be completed in rail, road and inland waterway sectors.	1. Supply and inhalation of an AIS system 2. Acquisition and installation of Differential Global Positioning system and A1 VHF DCS Base Stations 3. Development of a hydrographical measurement system		Sub-project 7: System for collecting and processing topohydrographical data and for the production of the electronic navigation charts (ENC) in inland ECDIS format	1. Improvement of maritime safety through the development of an Automatic Ship Identification system and training of operational staff (Supply) 2. Acquisition and installation of Differential Global Positioning system and A1 VHF DCS Base Stations for the Romanian Black Sea Coast 3. Strengthening the capacity of

Identified gaps or Recommended courses of intervention	Action for covering the Gap or implement the recommended intervention	Phare Programming (Project reference)		
		2004	2005	2006
				the institutions responsible for maintenance and development of signalling stations of the inland waterways infrastructure (Works)
Romania also needs to improve administrative capacity Public administration needs further strengthening for all transport modes and legislative alignment has to be completed in rail, road and inland waterway sectors.	Upgrading the MTCT computer network infrastructure and development of a document management system			Improvement of MTCT's administrative capacity in the areas of IT data communication infrastructure and document management.
Transposition and implementation of the acquis in the railway transport sector needs to be ensured Public administration needs further strengthening for all transport modes and legislative alignment has to be completed in rail, road and inland waterway sectors.	1. Rehabilitation of railway stations 3. Remedial actions for improving the environmental conditions at CFR Calatori rolling stock maintenance unit	1. Railway rehabilitation (TA)		1.Technical assistance for railway stations rehabilitation (TA) 2.Implementation of environmentally sound operations at CFR Calatori rolling stock maintenance unit (Works)