Standard Summary Project Fiche – IPA centralised programmes
Project number 13: Removal of Unexploded ordinances (UXO) from the Danube River

1. Basic information

1.1 CRIS Number: 2009/021-765

1.2 Title: Removal of Unexploded ordinances (UXO) from the Danube River

1.3 ELARG Statistical code: 02.21

1.4 Location: The Republic of Serbia, Prahovo (Danube, Chainage km 858 to 859.2) and other areas that might be selected.

Implementing arrangements:

1.5 Contracting Authority: EU Delegation to the Republic of Serbia

1.6 Implementing Agency: EU Delegation to the Republic of Serbia

1.7 Beneficiary (including details of project manager):
Ministry of Infrastructure (MoI) of the Republic of Serbia.

Contact details:
Ministry of Infrastructure, 22-24 Nemanjina street, Belgrade; Project manager: Mrs. Zorica Djeric – Stojcic; tel: +381 11 361 93 98; fax: +381 11 361 7486 email:djeric@mi.gov.rs

Mining Action Centre: 11 000 Belgrade, Vojvode Toze 31, tel: +381 11 3045.280

The project steering committee will consist of representatives from the aforementioned beneficiaries along with representatives from ECD. It will be co-chaired by the Assistant Minister, or his/her representative, and a representative from the ECD. It will convene on a quarterly basis to review project progress and reports from the Contractor and Consultants.

Financing:

1.8 Overall cost (VAT excluded): 3,800,000 EUR

1.9 EU contribution: 3,800,000 EUR

1.10 Final date for contracting: 2 years after signature of the FA

1.11 Final date for execution of contracts: 4 years after signature of the FA

1.12 Final date for disbursements: 5 years after signature of the FA

2. Overall Objective and Project Purpose
2.1 Overall Objective:

Develop the full potential and the competitiveness of Serbia's inland waterway transport sector for socio-economic development, in particular in the Danube basin.

2.2 Project purpose:

To remove identified UXOs within the most priority areas¹ and conduct an efficient and effective supervision of their removal from the navigation fairway in accordance with international regulations and standards.

2.3 Link with AP/NPAA / EP/ SAA

The Council Decision of February 2008 on the European Partnership (EP) for the transport sector has short and medium term priorities pertinent to this project; The European Partnership document (Transport policy) emphasizes the importance of the implementation of the MoU on the Development of the South East Europe Core Regional Transport Network and strengthen cooperation with the South East Europe Transport Observatory. In the short term the national strategy should be prepared, with the railway sector being restructured and the inland waterway sector developed further. For the mid-term priorities the Serbian authorities need to take on more investment and maintenance.

Stabilisation and Association Agreement (SAA, Protocol 4, Infrastructure, Article 4, General Provision- "The Parties hereby agree to adopt mutually coordinated measures to develop a multimodal transport infrastructure network as a vital means of solving the problems affecting the carriage of goods through Serbia in particular on the Pan-European Corridors VII and X and the rail connection from Belgrade to Vrbnica (border with Montenegro) which form part of the Core Regional Transport Network.") This emphasises the need to restructure and modernize the transport sector so that it operates to standards comparable to those in the Community, whilst conforming to the relevant acquis and improving environmental performance in the transport field.

(SAA, Protocol 4, Article 5, Planning) "The development of a multimodal regional transport network on the territory of Serbia which serves the needs of Serbia and the South-Eastern European region covering the main road and rail routes, inland waterways, inland ports, ports, airports and other relevant modes of the network is of particular interest to the Community and Serbia. This network was defined in the Memorandum of Understanding for developing a Core Transport Infrastructure Network for South East Europe which was signed by ministers from the region, and the European Commission, in June 2004."

National Programme for Integration with the European Union-NPI


¹ Areas will be selected by the Mine Action Centre, Plovput and the Ministry of Infrastructure. Those locations will be verified by the Project.
navigation on Serbian inland waterways (waterways, port authorities, navigation and piloting, ports and docks, ships, ship registers and documents, boats and floating devices, ...). It is planned that the Draft Law on Inland Waterway Navigation should fully conform to the following EU directives: Directive 96/50/EEC on the harmonization of the conditions for obtaining ... When the new Law on Inland Waterways Navigation is passed, it is necessary to pass the ensuing sublegal acts to enable its implementation. ... The Directorate for Inland Waterways "Plovput" was formed according to Article 40 of the Law on Ministries ("RS Official Gazette", No. 43/2007) and it performs expert activities and state supervision for maintaining waterways; positioning and maintaining the objects for safe navigation in good condition.... (3.14.2.3. Middle-term priorities (2010-2012), p#432) The Draft Maritime Navigation Law and the Draft Law on Legal Property Relationships on Ships are planned. The responsible institution for preparing both Draft Laws is the Ministry of Infrastructure.

(3.21.1.2. Short-term Priorities, p#582) Strategy for Development of the Railway, Road, Water, Air and Intermodal Transport in the Republic of Serbia 2008-2015 determines the current status in these areas of transport, establishes the concept of development of infrastructure and transport ... based on the principles of safety, intermodality, application of modern technologies, complementary usage of all types of traffic and rational utilisation of the available capacities and resources...

Serbia 2008 Progress Report², 4.2.4. Transport policy

In the field of inland waterways, there is moderate progress to report. The Law on inland waterway transport has not yet been adopted and Serbia still needs to ratify relevant European Agreements in this field. The development of infrastructure, namely the Danube and the Sava River, as well as the development of inland ports as intermodal terminals, requires specific focus and earmarked resources.

Overall, Serbia is relatively advanced in the area of transport, but needs to update and align its legislation to the acquis. The transport strategy needs to be followed up by a master plan and sectoral measures. Furthermore, the relevant services are still to be reorganised and strengthened.

2.4 Link with MIPD

The MIPD 2009-2011 under the Socio-economic criteria emphasises that improvement of socio-economic situation of the country should be done also through progress in the inland waterway transport (Page 4).

The MIPD 2009-2011, Socio-economic criteria, section 2.3.1.2, Article 9 stipulates:

"Develop the full potential and the competitiveness of Serbia's transport sector for socio-economic development, in particular in the Corridor X (road and railways) and Corridor VII (Danube basin)."

The MIPD 2009-2011, Socio-economic criteria, section 2.3.1.2. Paragraph 10:

"Improving infrastructures in order to promote business related activities and public services and to facilitate economic and cultural links within Europe. The areas of energy, transport, tourism, environment, health, information and communication technology, education, etc. have to be developed as cornerstones of future economic growth”

The MIPD 2009-2011, Ability to assume obligation of memberships, section 2.3.1.3, Article 5, Paragraph 4 stipulates:

**Transport:** Support transport authorities to meet requirements of the EU relevant 'acquis'; Implement commitments taken under the Memorandum of Understanding on Development of the South East Europe Core Regional Transport Network and the Addendum for a South East European Railway Transport Area, and support regional infrastructure investments (SEETO Multi-annual Plan 2008-2012), multi-modal transport network and transhipment facilities; facilitation of IFI investment through project preparation/implementation in the Core Regional transport Network.

### 2.5 Link with National Development Plan (where applicable)

N/A

### 2.6 Link with national/sectoral investment plans

**The National Strategy of Serbia for the Accession to the EU** emphasizes the development of transport infrastructure as being strategic important for Serbia, and that future improvement of infrastructure should be more focused on the inland waterway transport.

The project proposal is harmonized with the **Action plan of the Republic of Serbia** for implementation of priorities from the European partnership.

**The National Strategy of railway, road, inland waterway, air and intermodal transport in the Republic of Serbia 2008-2015** identifies the condition in the transport sector, puts forward a concept of the development of infrastructure and transport, defines goals and objectives of transport system development and Action Plan for their implementation, bearing in mind a need for a sustainable development of the transport in the Republic of Serbia. One of the main priorities anticipated in the Strategy is the rehabilitation and improvement of the Inland Waterway transport network in accordance with the Danube River Commission standards.

**The Needs Assessment Document 2008-2010, Transport section,** (Page 251), stipulates following:

"...priority of the Government is to, with financial support from the EU, continue construction of road and railway infrastructure in the Republic of Serbia, as well as to establish necessary conditions for unhindered sales in internal navigation routes, and especially on Danube and Sava...“
3. Description of project

3.1 Background and justification:

Serbia has nearly 2,000 km of inland waterways comprising of three international rivers (the rivers Danube, Sava and Tisa) and a canal network. The Serbian reaches of the Danube River (588 km of the Trans-European Network Corridor VII, from Bezdan to Timok) are considered to be one of the most important components of transport infrastructure in the entire region as it is the main inland transport corridor linking Eastern and Western Europe. It flows through Germany, Austria, Slovakia, Hungary, Croatia, Serbia, Romania, Bulgaria, Moldova and Ukraine and connects the North Sea with the Black Sea through the Rhine-Main-Danube Canal. All of these countries are part of the Danube Commission and are signatories to the 1948 Belgrade Convention under which they undertake to maintain their sections of the Danube in a navigable condition for river-going and, on the appropriate sections, for sea-going vessels and to carry out the works necessary for the maintenance and improvement of navigation conditions and not to obstruct or hinder navigation on the navigable channels of the Danube.

According to the Danube River Commission standards in Serbian part of the Danube River is divided into two sections. Along the first, from Bezdan to Belgrade, the Danube fulfils class VI criteria of the technical and operational characteristics of inland waterways of international importance. For the second, from Belgrade to Timok, the Danube has been identified as a Class VII river. In practice that means that Republic of Serbia is obliged to maintain Danube River according to the exact requirements stated in the aforementioned document in order to ensure safe and interrupted traffic along Serbia fairway.

Due to those facts the potential (rivers and canals) is significant, but the condition of the infrastructure is not satisfactory. After 1990, there was a significant maintenance backlog of IWW and related infrastructure. In 2000, the overall turnover of the ports was only about 40% of the turnover from 1989. The massive decline in turnover was the result of a decrease in domestic transport. In 2004, the freight transport in ports increased slightly and reached 8.7 million tons.

It is expected that, due to the restoration and increase of production in large industrial plants in the Republic of Serbia (steel works, chemical industry, cement and oil), the demand for inland waterway transport will substantially rise because of its comparative advantages over other forms of freight transport.

Especially, after the 1999 air bombing campaign, the capacity of Transport Corridor VII was reduced. Various bridges across the Danube River and structures and ports facilities along the river and its river banks were targeted and have been hit, damaged and/or destroyed. As a result of these bombings the riverbed and the river banks contain UXO that are a threat to safe navigation and to the environment. The hazard and risks caused by the presence of UXO in the rivers are high, since the UXO might accidentally explode. Such an unintended explosion might be caused by a boat or vehicle passing by, contact with an anchor or an anchor chain, during the execution of actions in and under the water, explosions of other bombs that may occur nearby, exposure of the UXO to electromagnetic flux, sound pressure, radio

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3 Technical and operational characteristics of inland waterways of international importance –Annex III
communication or seismic activities. Therefore, UXOs represent a serious long term threat to humans, infrastructure, utilities, industrial and production plants, and risk to environment.

The removal of UXO from the fairway will mitigate these hazards and risks.

Until all the UXO have been removed from the rivers, river banks and port areas and port basins, UXO locations cannot be considered safe for navigation and environment. Inland waterway operations have therefore to be considered dangerous and highly risky. Due to the presence of UXO and observing and implementing the Danube Convention and other regulations dealing with safe navigation, the part of the River Danube should be proclaimed dangerous zones from the aspect of safe navigation. Full and safe navigation will not be possible until the UXOs are removed.

It is estimated that about EUR 290 million is needed for the rehabilitation and maintenance of the inland waterways system in the next ten years. An additional EUR 220 million is necessary for the development of intermodal transport.

A project for the Survey and search for the presences of ferromagnetic objects suspicious to be UXO in Danube and Sava Rivers has started. First results show that objects that might be UXOs have been noticed at 8 locations along the Danube River. Land survey and water Multibeam scanning have been carried out on all locations, while Water magnetometer survey has been carried out on 3 locations.

Preparations for the removal of UXO from the river bottom needs accurate information regarding the depth, dimensions and position of the targets; this data is needed to calculate the size and construction of the building pit (sheet pile box, rings etc.). Further data about the soil properties around the target locations is also necessary; the method used is CPT (cone penetration testing) measurement, using a specially adapted and non-magnetic CPT cone, which may be combined with a magnetometer.

With such magnetic field measurements and subsequent modelling a rough calculation of the dimensions of the target is possible. In the case of expensive deep building activities it is necessary to get a clear measurement of the dimensions of the target in order to be sure that only UXO are recovered rather than other objects such as scrap metal. Usually the dimensions of the targets can be calculated with the results of borehole-georadar.

In support of this project the Regional Balkans Infrastructure Study (REBIS) states that the region’s inland navigation system is dominated by the Danube, which constitutes the Pan-European Corridor VII and is also part of the Core Network. It emphasizes that the restoration of the damaged sections of the Danube should gradually allow serving the increasing trade between Western and South-eastern Europe, which in turn will generate significant flows of traffic.

Therefore, the aim of this proposed project is to precisely detect and remove UXO from the port and refinery in Prahovo (Danube, Chainage km 858 to 859.2) and from other selected areas along Corridor VII.
3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact (where applicable)

This project will improve navigation along the Serbian reaches of the Danube; in particular it will contribute to opening up of the Prahovo port. The Danube is an international waterway and the successful completion of the project should increase use of the waterway and reduce transit times. However, this project will not complete the removal of UXO in Serbian waters, but definitely the removal of UXO will contribute to a safe and efficient navigation and maintenance of the navigation channel areas around Prahovo.

Impact: the river traffic on the Serbian part of the Danube is mainly in transit from the Black sea to Hungary, Austria and Germany. Therefore, the implementation of the project will have a positive impact on the cost level of transport, resulting in improvement of the economic development, also hazardous and pollution treats will be reduced.

Catalytic effects: the implementation of this project is a clear signal that will demonstrate to river users the intention of the Serbian Government to make the IWT network safe and efficient for navigation, allowing a shift from other transport modes by about 14-20% by 2025.

Sustainability: further improvements to the IWT in Serbia will be continued through the activities of the state administration responsible for maintaining of navigability of inland waterways. The sustainability of the project will reflect establishing uninterrupted navigation conditions on the Danube in Serbia and providing increased transport capacity and reducing transport time and river accidents, which should reduce costs.

The Republic of Serbia wants to become a reliable and recognized partner within the EU. Further, there is potentially a large benefit to the EU in assisting in keeping this corridor functional as a guarantee for safe and efficient shipping.

"Plovput", the Directorate for Inland Waterways, is a public institution and legal entity constituted by the Law on Ministries in 2007 as special organization. Plovput performs professional works and activities of state administration dealing with maintaining of navigability and marking of inland waterways, research and production of design documentation in the field of safety of navigation and regulation works on river courses, survey of construction works on inland waterways, establishing and development of river information services, location of winter quarters for ships, shelters and anchorages on international and interstate waterways, as well as other activities in accordance to the Law.

3.3 Results and measurable indicators:

1. Navigation conditions in the Prahovo port and in other selected areas along Corridor VII in lined with Danube Commission’s requirements and international standards.

2. Supervision of UXO removal activities in accordance with national and professional standards have been carried out successfully
Output Indicators:

1.1 Gradual increase of Waterway Transport traffic volume up to 20% in 2025
1.2 UXO critical locations in the fairway are cleaned between 80-100%
1.3 Decreased water pollution level in the areas tackled with the project.
1.4 Improved IWT transport conditions and transport savings

2.1 Survey and Supervision time schedule adhered to work carried out according to technical specifications

2.2 Number of ordnance, including a number of suspected tomahawks, collected and disposed of safely according to best engineering and environmental practice

3.4 Activities:

Activities related to result 1:

1.1 Conduct comprehensive assessment of the preliminary results achieved by the running survey in order to get all necessary information by magnetic borehole detection accompanied by Geo-radar and CPT-measurements in preparation of a safe and effective recovery process.

1.2. Identification of the concept of a safe recovery, defusing and disposal of UXO.

Activities related to result 2:

2.1. Supervision of safe disposal of UXO and any contaminated material in line with good engineering & environmental practice

2.2. Quality assessment of the work performed with additional survey in order to certify the absence of UXO on all suspicious areas.

2.3. Coordination with other Serbian authorities (Mine Action Centre of the Republic of Serbia - MAC, Directorate for Inland Waterways - Plovput, Ministry of Environment & Spatial Planning)

3.5 Conditionality and sequencing:

Completion of the ongoing project for the survey of the objects that might be UXOs is precondition for efficient removal of the UXOs from the fairway along Republic of Serbia.

The competent authorities like the Ministry of Infrastructure, the Mine Action Centre will be responsible for the approval of the necessary administrative documents, such as permits and Health & Safety working practices, prepared by all parties involved in the project.

The project will be implemented through two service contracts. Service contract for the removal of UXOs and service contract for supervision of UXO removal in order to ensure that contractor will execute their task according to the contract conditions and good engineering practice. The two contracts will be implemented in parallel.
The sequencing is determined by health and safety considerations associated with the removal and disposal of UXO. Environmental Impact Assessment might be required incorporating trans-boundary cooperation, which could limit the scope and boundaries of the project. Also, before the project begins it all work's permissions and permits have to be provided (e.g. from the Ministry of Defence). The Service and Supply contract has to be signed in order to deliver the project most effectively.

3.6 Linked activities

The project proposal especially is linked with the following projects:

- «Reconstruction of the Sloboda Bridge in Novi Sad. (€41 million) » This traffic bridge damaged during the 1999 bombardments has been reconstructed together with the access tunnels and contracts for the implementation of the project were signed in July 2002. Bridge was opened in 2005. Consequently, the pontoon bridge across the Danube could be removed, resulting in a uninterrupted navigation in the Serbian part of the Danube. Project was financed by the EAR.

- «Serbian Inland Waterways Transport Network Master Plan» - This project had been financed through CARDS 2003 program and implemented by the EAR; it consisted of the preparation of the Master Plan for Inland water transport up to the year 2025 and the execution of three Feasibility Studies: (1) for restoring unhindered navigation, (2) rehabilitating the Serbian waterway transport network, and (3) Port Development Plan of the Serbian inland ports. The objective of these studies was to set up an appropriate economic, institutional and legal framework in order to enhance public and private investment in the inland waterway sector, on the basis of satisfactory economic and financial analyses. The present situation of the waterway transport system in Serbia requires urgent action in order to rapidly restore past levels of traffic, which were affected by the economic sanctions, the breakup of former Yugoslavia and the 1999 NATO bombings. An “assessment of unhindered navigation on the Serbian IWT network” led to a detailed Survey and Search Project in the IWW in Serbia and the Supervision of the Survey and Search in April 2008. The purpose is to assess whether and what type of UXOs may be present at the identified locations. As a second step the located UXOs do need to be removed using the international standards. This was funded by the EU CARDS 2005 programme was completed in 2009. Priorities regarding the IWW transport will be defined also in the General Transport Master Plan for Republic of Serbia which will determinate priorities for further development of transport infrastructure. Preparation of General Transport Master Plan has been financed trough CARDS 2005 program and will be finalized by the end of 2009.

- The EC/CARDS financed project’s “An integrated socio-economic development plan based on the rehabilitation of the Middle Danube River Basin and Inland Waterway System of Serbia” main objective is to create and develop innovative approaches to economic and social development related to the Inland Waterways in Serbia that become the driver to attract, support and exploit economic development and investment opportunities that lead to the direct and indirect creation of job opportunities.

- The project «Capacity Building – Transport sector» financed through the EC/CARDS deals with the reform of the Ministry for Capital Investments as a whole. However, it
does not include sufficient emphasis on strengthening the capacities regarding the inter-modal transport workforce in Serbia.

- The Twinning for the first alignment (financed by the EC/CARDS) to the *Acquis Communitaire*, within the Ministry of Capital Investment started in 2006 and is presently ongoing.

- The RIS pilot projects in the Danube riparian states have been executed during the past years with the assistance of Via Donau of Austria. The detailed design study and preparation of tender documentation for the implementation of the RIS network in Serbia is ongoing (financed under the CARDS programme). Actions to implement the RIS along the entire Danube are being discussed at various levels, inclusive of the Danube Commission in Budapest and in Brussels at the EU.

- The Facilitating Intermodal Transport in Serbia project from IPA2008, (2 M€) financed from EU funds

- “Danube River Enterprise Pollution Reduction Project” - this project, 23 million USD, is being executed/financed/supported by the World Bank, GEF, SIDA, EC DEL and the Ministry of Agriculture, Forestry and Water Management. The project has been prepared by the Ministry of Science and is being implemented by the Ministry of Agriculture, Forestry and Water Management and started in March 2006 and will last 4 year.

- "The European Agency for Reconstruction engaged Consortium to commence with works on Surveying, Data Collection, Preliminary Design, Main Design, BoQ, Technical Specifications, Environmental Impact Assessment and Tender Documents in frame of the Project Capital Overhaul and replacement of equipment and installations of the navigation locks at HEPS Djerdap 1 (km D 942) and HEPS Djerdap 2 (km D 863).

- The EC represented by the European Agency for Reconstruction, as the Contracting Authority, engaged the Consultant SO.GE.L.M.A.Srl from Italy to do “Survey and Search Services for UXO removal in the Inland Waterway Transport System” (Contract No.05SER01/04/011-“the services”). The project is financed by the EC/CARDS (2.302 M€). The European Agency for Reconstruction, also engaged Consultant MULL & PARTNER from the Germany for the “Supervision of Survey and Search Services for UXO removal in the Inland Waterway Transport System” (Contract No.05SER01/04/010). The Contract shall be extended until August 2009. The final beneficiary of this contract is the Mine Action Centre of Serbia, (Ministry of the Infrastructure of the Republic of Serbia).

### 3.7 Lessons learned

The Survey and Search for UXO removal in the Inland Waterway Transport System contract No.05SER01/04/011-“the services”2008/2009 provides an overview of the dimensions and the necessity of further activities due to the remaining threat by UXO has been achieved. The activities needed to remove UXO from the wars of the past and particularly from the NATO attack 1999 must be improved and accelerated.
The “Transport Policy White Paper” sets out the framework for the - Trans European Transport Network (2020). It places a high priority on achieving a shift of modal split from the current emphasis on road transport. It notes that the inland waterways “network is reliable and economic, produces little noise or pollution, takes up little room and has spare capacity”.

The Master Plan for Inland Waterway Transports for Serbia (2005), The Feasibility Studies for the Serbian IWT Network and for the IWT ports funded by the EAR sets out all these issues in detail. The estimated total cost of bringing the Serbian IWT system up to international standards is €290 Million (excluding investments in the IWT ports). The Master Plan proposes that such investment is justified on the basis of its median strategy scenario – growth of traffic to 50M tons by 2025. This project is also linked to the Danube Serbia Socio-Economic Strategy where the role of transport is positioned as a key competitive advantage of the region.
4. **Indicative Budget (amounts in EUR)**

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>IB (1)</th>
<th>INV (1)</th>
<th>SOURCES OF FUNDING</th>
<th>NATIONAL CONTRIBUTION</th>
<th>PRIVATE CONTRIBUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL EXP.</td>
<td>EUR (a) = (b) + (c) + (d)</td>
<td>EUR (b)</td>
<td>% (2)</td>
<td>Total EUR (c) = (x) + (y) + (z)</td>
</tr>
<tr>
<td>Activity 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>contract 1.1</td>
<td>X</td>
<td></td>
<td>3,000,000</td>
<td>3,000,000</td>
<td>100%</td>
</tr>
<tr>
<td>contract 1.2</td>
<td>X</td>
<td></td>
<td>800,000</td>
<td>800,000</td>
<td>100%</td>
</tr>
<tr>
<td>TOTAL IB</td>
<td></td>
<td></td>
<td>3,800,000</td>
<td>3,800,000</td>
<td>100%</td>
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<tr>
<td>TOTAL INV</td>
<td></td>
<td></td>
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<tr>
<td>TOTAL PROJECT</td>
<td>3,800,000</td>
<td>3,800,000</td>
<td>100%</td>
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</tbody>
</table>

Amounts net of VAT

(1) In the Activity row use "X" to identify whether IB or INV; (2) Expressed in % of the **Total** Expenditure (column (a))
5. **Indicative Implementation Schedule (periods broken down per quarter)**

<table>
<thead>
<tr>
<th>Contracts</th>
<th>Start of Tendering</th>
<th>Signature of Contract</th>
<th>Project Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Contract</td>
<td>N + 1Q</td>
<td>N + 3Q</td>
<td>N + 10Q</td>
</tr>
<tr>
<td>Service Contract</td>
<td>N + 1Q</td>
<td>N + 3Q</td>
<td>N + 10Q</td>
</tr>
</tbody>
</table>

All projects should in principle be ready for tendering in the 1\textsuperscript{st} Quarter following the signature of the FA.

The project duration for the implementation of the works is estimated at 15 months including a preparation period of 3 months in order to fulfil all requirements of the Serbian law implemented for projects of that kind and to ship the necessary equipment to the work place.

This requiring supervision services for also 15 months. The works will be executed continuously according to an Inception Report which has to be delivered at the beginning of the project with the offer.

The breakdown of the budget during the project duration is part the offer and has to be delivered with the tender.

6. **Cross cutting issues (where applicable)**

6.1 **Equal Opportunity**

This project does not target women specifically, but any employment opportunities associated with this project will be open to all citizens, including minority groups and women. Further, the transport benefits accruing from this project will enhance opportunities across all genders.

6.2 **Environment**

The prevailing EU environmental standards and the ICPDR guidelines as well as the IMAS Standards (International Mine Action Standards) will be applied for the performance of survey and recovery work.

The Danube connects various Danube riparian countries and as such any pollution resulting from the work performed has to be dealt with in professional matter to satisfy the required and applicable environmental standards.

6.3 **Minorities**

All minorities and vulnerable groups will benefit from this project, as its impact will help ensure a cleaner, safer and quicker transport links along the Danube. Vulnerable groups tend to suffer disproportionately from poor mobility, and will thus benefit directly from their improvement.
14

ANNEX I: Logical framework matrix in standard format

<table>
<thead>
<tr>
<th>LOGFRAME PLANNING MATRIX FOR Project Fiche</th>
<th>Programme name and number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROJECT NAME: SEARCH AND RECOVERY OF UXO FROM THE DANUBE RIVER BED OF THE NAVIGATION FAIRWAY AND SUPERVISION OF THE PROJECT</td>
<td>Contracting period expires 2 years after signing of Financing Agreement</td>
</tr>
<tr>
<td></td>
<td>Disbursement period expires 5 years after signing of Financing Agreement</td>
</tr>
<tr>
<td></td>
<td>Total budget: 3,800,000 €</td>
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<td></td>
<td>IPA budget: 3,800,000 €</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall objective</th>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop the full potential and the competitiveness of Serbia's inland waterway transport sector for socio-economic development, in particular in the Danube basin</td>
<td>Number of cargo &amp; passengers vessels recorded using Serbian reaches of the Danube</td>
<td>Danube river Commission reports</td>
</tr>
<tr>
<td></td>
<td>Vessels and convoys passage time through this river stretch decreased as well as risk of accidents.</td>
<td></td>
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</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>To remove identified UXOs within the most priority areas and conduct an efficient and effective supervision of their removal from the fairway in accordance with international regulations and standards.</td>
<td>Impact indicator: Navigational safety improved along the Serbian reaches of the Danube</td>
<td>Annual reports prepared by the Plovput on the basis of data extracted from the River Information System.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Risk of accidental explosion of UXO removed from tackled areas.</td>
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</tr>
</tbody>
</table>

4 Areas will be selected by Mine Action Centre, Plovput and Ministry of Infrastructure. Those locations will be verified by the Project.
<table>
<thead>
<tr>
<th>Results</th>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Navigation conditions in the Prahovo port and in other selected areas along Corridor VII in lined with Danube Commission’s requirements and international standards.</td>
<td>1.1 Gradual increase of Waterway Transport traffic volume up to 20% in 2025&lt;br&gt;1.2 UXO critical locations in the fairway are cleaned between 80-100%&lt;br&gt;1.3 Decreased water pollution level in the areas tackled with the project.&lt;br&gt;1.4 Improved IWT transport conditions and transport savings&lt;br&gt;2.1 Survey and Supervision time schedule adhered to work carried out according to technical specifications&lt;br&gt;2.2 Number of ordnance, including a number of suspected tomahawks, collected and disposed of safely according to best engineering and environmental practice</td>
<td>Contractor reports, ECD reports on project results&lt;br&gt;Reports prepared by the Serbian Environmental Protection Agency on water pollution.</td>
<td></td>
</tr>
</tbody>
</table>
### Activities

<table>
<thead>
<tr>
<th>Activities related to result 1:</th>
<th>Means &amp; Costs</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 To conduct comprehensive assessment of the preliminary results achieved by the running survey in order to get all necessary information by magnetic borehole detection accompanied by Geo-radar and CPT-measurements in preparation of a safe and effective recovery process.</td>
<td>Service contract for removal of UXO: 3,000,000€</td>
<td></td>
</tr>
<tr>
<td>1.2. Identification of the concept of a safe recovery, defusing and disposal of UXO.</td>
<td>Service contract for supervision of removal: 800,000€</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activities related to result 2:</th>
<th>Means &amp; Costs</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1. Supervision of safe disposal of UXO and any contaminated material in line with good engineering &amp; environmental practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2. Quality assessment of the work performed with additional survey in order to certify the absence of UXO on all suspicious areas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3. Coordination with other Serbian authorities (Mine Action Centre of the Republic of Serbia - MAC, Directorate for Inland Waterways - Plovput, Ministry of Environment &amp; Spatial Planning)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pre-conditions: Completion of UXO survey.
ANNEX II: amounts (in €) Contracted and disbursed by quarter for the project

<table>
<thead>
<tr>
<th>Contracted</th>
<th>N+3Q</th>
<th>N+4Q</th>
<th>N+5Q</th>
<th>N+6Q</th>
<th>N+7Q</th>
<th>N+8Q</th>
<th>N+9Q</th>
<th>N+10Q</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service contract</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.00</td>
</tr>
<tr>
<td>Service Contract</td>
<td>0.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.80</td>
</tr>
<tr>
<td><strong>Cumulated</strong></td>
<td><strong>3.80</strong></td>
<td><strong>3.80</strong></td>
<td><strong>3.80</strong></td>
<td><strong>3.80</strong></td>
<td><strong>3.80</strong></td>
<td><strong>3.80</strong></td>
<td><strong>3.80</strong></td>
<td><strong>3.80</strong></td>
<td><strong>3.80</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disbursed</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Contract</td>
<td>0.30</td>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
<td>0.30</td>
<td>3.00</td>
</tr>
<tr>
<td>Service Contract</td>
<td>0.24</td>
<td>0.16</td>
<td>0.16</td>
<td>0.16</td>
<td>0.08</td>
<td>0.80</td>
<td></td>
<td></td>
<td>0.80</td>
</tr>
<tr>
<td><strong>Cumulated</strong></td>
<td><strong>0.54</strong></td>
<td><strong>1.10</strong></td>
<td><strong>1.50</strong></td>
<td><strong>2.06</strong></td>
<td><strong>2.46</strong></td>
<td><strong>3.02</strong></td>
<td><strong>3.42</strong></td>
<td><strong>3.80</strong></td>
<td><strong>3.80</strong></td>
</tr>
</tbody>
</table>
ANNEX III  Description of Institutional Framework

The transport sector is administered by the Ministry of Infrastructure (MoI) itself and through Directorates that deal with the relevant sector as road, railways, including intermodality, inland waterway transport and air. MoI performs public administration duties in these spheres, which includes:

MoI performs public administration duties in these spheres, which includes:

- obligation and ownership rights relations;
- monitoring;
- safety and technical-technological system structure;
- status of foreign carriers in transport of goods and passengers on the territory of the Republic of Serbia;
- navigable waterways where international and multinational navigation regime is valid;
- development strategy of transport system;
- development plans and other plans in relation to structure, system organization, and relations in transport of passengers and goods;
- approval of construction and usage of transport infrastructure and equipment, and capacities which are in the function of utilization of traffic infrastructure;
- financial and technical control organization.

MoI also performs the public administration activities referring to: spatial and urban planning; setting out conditions for the construction of the facilities; sets out the housing relations and residential business; construction; construction land; geodesy engineering surveying; and other activities stipulated by law.

MoI consists of the following organizational units:

1. Sector for Road Transport
2. Sector for Roads and Road Safety
3. Sector for Railways and Intermodal Transport
4. Sector for Air Traffic
5. Sector for Waterborne Transport and Safety of Navigation
6. EU Integration Sector

---

5 Following the general elections in January 2007 the new Government was installed on 15 May 2007; the Ministry of Capital Investments was restructured: the Sector for Telecommunication was rearranged into a new Ministry, and the residual was renamed as Ministry of Infrastructure.
At this moment there are the following Directorates:

- The former Road Directorate of the Republic of Serbia now called Public Enterprise "Roads of Serbia"
- Directorate for Railways
- Directorate of Civil Aviation.
- In the field of inland waterway and maritime navigation there is a public institution - “Jugoregistar” and the Directorate for Inland Waterways “Plovput”

Meanwhile amendments to the Law on Ministries in the National Assembly procedure stipulate the renaming of the public institution “Plovput” to the Directorate for Inland Waterways.

MoI is responsible for the public administration affairs in the area of railway, road, water and air traffic; specifically these pertain to:

- the organisation and establishment of the traffic system; realisation of the traffic infrastructure construction projects;
- inner and international transport and intermodal transport; organisation and safety of the technical and technological traffic system;
- obligations and proprietary legal relations; inspection control; strategy for traffic development, development plans and plans related to the organisation of the traffic system and organisation of transport;
- issuance of the certificate to use traffic facility or infrastructure;
- certification of approval to use vehicles, equipment and vehicle parts; organisation of financial and technical control;
- international affairs in the area of traffic;
- incentive measures for research and development in the area of traffic, as well as other affairs specified by the law.

TECHNICAL AND OPERATIONAL CHARACTERISTICS OF INLAND WATERWAYS OF INTERNATIONAL IMPORTANCE

(a) Technical characteristics of E waterways

The main technical characteristics of E waterways shall generally be in conformity with the classification of European inland waterways set out in Table 1. For the evaluation of different E waterways, the characteristics of classes IV - VII are to be used, taking account of the following principles:

(i) The class of a waterway shall be determined by the horizontal dimensions of motor vessels, barges and pushed convoys, and primarily by the main standardized dimension, namely their beam or width;
(ii) Only waterways meeting at least the basic requirements of class IV (minimum dimensions of vessels 80 m x 9.5 m) can be considered as E waterways. Restrictions of draught (less than 2.50 m) and of minimum height under bridges (less than 5.25 m) can be accepted only for existing waterways and as an exception;

(iii) When modernizing waterways of class IV (as well as smaller regional waterways), it is recommended that the parameters of at least class Va should be met;

(iv) New E waterways should, however, meet the requirements of class Vb as a minimum. In this regard, a minimum draught of 2.80 m should be ensured;

(v) When modernizing existing waterways and/or building new ones, vessels and convoys of greater dimensions should always be taken into account;

(vi) In order to ensure more efficient container transport, the highest possible bridge clearance value should be ensured in accordance with footnote 4 of Table 1; 2/

(vii) Inland waterways expected to carry a significant volume of container and ro-ro traffic should meet, as a minimum, the requirements of class Vb. An increase of 7% to 10% in the beam value of 11.4 m of specific vessels navigating on inland waterways of class Va and higher classes may also be envisaged in order to allow for future developments in container dimensions and easy transport of trailers; Annex III as amended in accordance with TRANS/SC.3/168/Add.1, entered into force on 29 November 2006 pursuant C.N.671.2006.TREATIES-4. 2/ If, however, the proportion of empty containers exceeds 50%, observance of a value for the minimum height under bridges which is higher than that indicated in footnote 4 should be considered. ECE/TRANS/120/Rev.2

(viii) On waterways with fluctuating water levels, the value of the recommended draught should correspond to the draught reached or exceeded for 240 days on average per year (or for 60% of the navigation period). 3/ The value of the recommended height under bridges (5.25, 7.00 or 9.10 m) should be ensured over the highest navigation level, where possible and economically reasonable;

(ix) A uniform class, draught and height under bridges should be ensured either for the whole waterway or at least for substantial sections thereof;

(x) Where possible, the parameters of adjacent inland waterways should be the same or similar;

(xi) The highest draught (4.50 m) and minimum bridge clearance (9.10 m) values should be ensured on all parts of the network that are directly connected with coastal routes;

(xii) A minimum bridge clearance of 7.00 m should be ensured on waterways that connect important sea ports with the hinterland and are suitable for efficient container and river-sea traffic;

(xiii) Coastal routes listed in annex I above are intended to ensure the integrity of the E waterways network throughout Europe and are meant to be used, within the meaning of this Agreement, by river-sea vessels whose dimensions should, where possible and economically viable, meet the requirements for self-propelled units suitable for navigating on inland waterways of classes Va and VIb.
The following minimum requirements are considered necessary in order to make a waterway suitable for container transport: inland navigation vessels with a width of 11.4 m and a length of approximately 110 m must be able to operate with three or more layers of containers; otherwise a permissible length of pushed convoys of 185 m should be ensured, in which case they could operate with two layers of containers.

3/ However, for upstream sections of natural rivers characterized by frequently fluctuating water levels due to strong direct dependence of weather conditions, it is recommended to refer to a period of at least 300 days on average per year.

Footnotes to Table 1

1/ The first figure takes into account the existing situations, whereas the second one represents both future developments and, in some cases, existing situations.

2/ Allows for a safety clearance of about 0.30 m between the uppermost point of the vessel's structure or its load and a bridge.

3/ Allows for expected future developments in ro-ro, container and river-sea navigation.

4/ Checked for container transport:

   5.25 m for vessels transporting 2 layers of containers;

![Table 1: Classification of European Inland Waterways of International Importance](image)
7.00 m for vessels transporting 3 layers of containers;

9.10 m for vessels transporting 4 layers of containers.

50% of the containers may be empty or ballast should be used.

5/ Some existing waterways can be considered as class IV by virtue of the maximum permissible length for vessels and convoys, even though the maximum beam is 11.4 m and the maximum draught 4.00 m.

6/ The draught value for a particular inland waterway to be determined according to the local conditions.

7/ Convoys consisting of a larger number of barges can also be used on some sections of waterways of class VII. In this case, the horizontal dimensions may exceed the values shown in the table.

(b) Operational criteria for E waterways

E waterways should meet the following essential operational criteria in order to be able to ensure reliable international traffic:

(i) Through traffic should be ensured throughout the navigation period, with the exception of the breaks mentioned below;

(ii) The navigation period may be shorter than 365 days only in regions with severe climatic conditions, where the maintaining of channels free of ice in the winter season is not possible and a winter break is therefore necessary. In these cases, dates should be fixed for the opening and closure of navigation. The duration of breaks in the navigation period caused by natural phenomena such as ice, floods, etc. should be kept to a minimum by appropriate technical and organizational measures;

(iii) The duration of breaks in the navigation period for regular maintenance of locks and other hydraulic works should be kept to a minimum. Users of a waterway where maintenance work is planned should be kept informed of the dates and duration of the envisaged break in navigation. In cases of unforeseen failure of locks or other hydraulic facilities, or other force majeure, the duration of breaks should be kept as limited as possible using all appropriate measures to remedy the situation;

(iv) No breaks shall be admissible during low water periods. A reasonable limitation of admissible draught may nevertheless be allowed on waterways with fluctuating water levels. However, a minimum draught of 1.20 m should be ensured at all times, with the recommended or characteristic draught being ensured or exceeded for 240 days per year. In regions referred to in subparagraph (ii) above, the minimum draught of 1.20 m should be ensured for 60% of the navigation period on average;

(v) Operating hours of locks, movable bridges and other infrastructure works shall be such that round-the-clock (24-hour) navigation can be ensured on working days, if economically feasible. In specific cases, exceptions may be allowed due to organizational and/or technical reasons. Reasonable hours of navigation should also be ensured during public holidays and at weekends.
(c) Technical and operational characteristics of E ports

The network of E waterways shall be complemented by a system of inland navigation ports of international importance. Each E port should meet the following technical and operational criteria:

(i) It should be situated on an E waterway;

(ii) It should be capable of accommodating vessels or pushed convoys used on the relevant E waterway in conformity with its class;

(iii) It should be connected with main roads and railway lines (preferably belonging to the network of international roads and railway lines established by the European Agreement on Main International Traffic Arteries (AGR), the European Agreement on Main International Railway Lines (AGC) and the European Agreement on Important International Combined Transport Lines and Related Installations (AGTC));

(iv) Its aggregate cargo handling capacity should be at least 0.5 million tonnes a year;

(v) It should offer suitable conditions for the development of a port industrial zone;

(vi) It should provide for the handling of standardized containers (with the exception of ports specialized in bulk cargo handling);

(vii) All the facilities necessary for usual operations in international traffic should be available;

(viii) With a view to ensuring the protection of the environment, reception facilities for the disposal of waste generated on board ships should be available in ports of international importance.
ANNEX IV Reference to laws, regulations and strategic documents:

Legislation requiring further alignment of Serbian legislation with EU directives.

Inland waterway navigation

"Directive 87/540/EEC on the access to the occupation of carrier of goods by waterway in national and international transport and on the mutual recognition of diplomas, certificates and other evidence of formal qualifications for this occupation (OJ L 322/20)


- Law on maritime and inland waterways transportation (Official Herald FRY, No 12/99, last amendment 101/2005)

- Regulation on occupation titles, requirements for obtaining occupation title and authorities of member of inland waterways vessel crew (Official Gazette FRY, No 32/82, last amendment 25/96)

- Regulation on professional examination programme and method of examination for obtaining occupational title for member of inland waterways vessel crew (Official Herald RS, No 29/83)

- Recommendations on requirements for obtaining certificates for boat masters of Danube vessels the (Decision of Danube Commission from 12 April 1995 (Doc. DC/CEC 53/32)


- Decree on carriage of dangerous goods by road and railroad (“Official Journal of RS”, no. 53/02)

- Regulation on professional education of drivers driving vehicles transporting dangerous goods and other persons involved in transportation of dangerous goods(“Official Gazette” of SFRY, no. 17/91)


- Decree on Carriage of Dangerous Goods by Road and Railroad (“Official Journal of RS”, no. 53/02)


- Regulation on Professional Education of Drivers Driving Vehicles Transporting Dangerous Goods and other Persons Involved in Transportation of Dangerous Goods ("Official Gazette” of SFRY, no. 17/91)
Strategic documents - international:

The Council Decision of February 2008 on the European Partnership (EP) for the transport sector has short and medium term priorities pertinent to this project; The European Partnership document (Transport policy) emphasizes the importance of the implementation of the MoU on the Development of the South East Europe Core Regional Transport Network and strengthen cooperation with the South East Europe Transport Observatory. In the short term the national strategy should be prepared, with the railway sector being restructured and the inland waterway sector developed further. For the mid-term priorities the Serbia authorities need to take on more investment and maintenance.

Stabilisation and Association Agreement (SAA, Protocol 4, Infrastructure, Article 4, General Provision- "The Parties hereby agree to adopt mutually coordinated measures to develop a multimodal transport infrastructure network as a vital means of solving the problems affecting the carriage of goods through Serbia in particular on the Pan-European Corridors VII and X and the rail connection from Belgrade to Vrbnica (border with Montenegro) which form part of the Core Regiona Transport Network.") This emphasises the need to restructure and modernize the transport sector so that it operates to standards comparable to those in the Community, whilst conforming to the relevant acquis and improving environmental performance in the transport field.

(SAA, Protocol 4, Article 5, Planning) "The development of a multimodal regional transport network on the territory of Serbia which serves the needs of Serbia and the South-Eastern European region covering the main road and rail routes, inland waterways, inland ports, ports, airports and other relevant modes of the network is of particular interest to the Community and Serbia. This network was defined in the Memorandum of Understanding for developing a Core Transport Infrastructure Network for South East Europe which was signed by ministers from the region, and the European Commission, in June 2004.

National Programme for Integration with the European Union-NPI (3.14.2. Water transport, p#429), 3.14.2.1. Current situation, 3.14.2.1.1. Legal framework, "...The Law on Inland Waterways Navigation regulates the transport, safety, conditions and method of use, maintenance, designation and protection of inland waterways, ports, winter shelters... The Maritime and Inland Navigation Law and the Law on Inland Waterways Navigation do not conform to EU regulations.... In 2008 and 2009, a Draft Law on Inland Waterway Navigation is planned. The Draft Law ought to regulate the safety of navigation on Serbian inland waterways (waterways, port authorities, navigation and piloting, ports and docks, ships, ship registers and documents, boats and floating devices,... It is planned that the Draft Law on Inland Waterway Navigation should fully conform to the following EU directives: Directive 96/50/EEC on the harmonization of the conditions for obtaining.... When the new Law on Inland Waterways Navigation is passed, it is necessary to pass the ensuing sublegal acts to enable its implementation. ...The Directorate for Inland Waterways "Plovput" was formed according to Article 40 of the Law on Ministries ("RS Official Gazette", No. 43/2007) and it performs expert activities and state supervision for maintaining waterways; positioning and maintaining the objects for safe navigation in good condition..... (3.14.2.3. Middle-term priorities (2010-2012), p#432) The Draft Maritime Navigation Law and the Draft Law on Legal Property Relationships on Ships are planned. The responsible institution for preparing both Draft Laws is the Ministry of Infrastructure....
Corridor VII (the river Danube) is the backbone of the European internal routes, connecting the Central Europe via the Republic of Serbia with the Black Sea, and it is a part of the South-eastern multimodal axis. Current state of play of water transportation in Serbia requires urgent measures aimed at renewal of adequate transportation level. Accordingly, on basis of Master Plan and Feasibility Study for inland waterways in Serbia, the Sector for water transportation and safety of navigation with the Ministry for Infrastructure developed a concept for three water transportation development programmes:

1. Programme for realization of Master Plan for Inland Waterways (…)
2. Programme for improvement of services in waterway transportation (…)
3. Programme for improvement of infrastructure of inland waterways (…)

The HLG Final Report, dated November 2005, defined the priority European projects for the Pan-European Corridors VII and X, in terms of expanding the trans-European network to the neighbouring countries and regions. The Report also reflected on the so-called "horizontal issues": intermodality, interoperability, security and safety in transport and infrastructure, removal of non-physical barriers and traffic management.

The document "Memorandum of Understanding on the Development of the South East Europe Core Regional Transport Network" identifies the principles and modalities of cooperation in the regional transport, includes the development of the Core Regional Transport Network (hereinafter: the Core Network) and the South East Europe Transport Observatory

(3.21.1.2. Short-term Priorities, p#582) Strategy for Development of the Railway, Road, Water, Air and Intermodal Transport in the Republic of Serbia 2008-2015 determines the current status in these areas of transport, establishes the concept of development of infrastructure and transport …based on the principles of safety, intermodality, application of modern technologies, complementary usage of all types of traffic and rational utilisation of the available capacities and resources.

The National Strategy of Serbia for the Accession to the EU emphasizes the development of transport infrastructure as being strategic important for Serbia, and that future improvement of infrastructure should be more focused on the inland waterway transport.

The project proposal is harmonized with the Action plan of the Republic of Serbia for implementation of priorities from the European partnership, which anticipates adoption and implementation of national Strategy of railway, road, inland waterway, air and intermodal transport development in the Republic of Serbia 2008-2015, in order to achieve an economic feasibility of the sector. The Strategy identifies the condition in the transport sector, puts forward a concept of the development of infrastructure and transport, defines goals and objectives of transport system development and Action Plan for their implementation, bearing in mind a need for a sustainable development of the transport in the Republic of Serbia. The Republic of Serbia has favourable economic and geographic features for cargo inland waterway transport (IWT). The potential (rivers and canals) is significant, but the infrastructure condition is not satisfactory. After 1990, there was a significant maintenance backlog of IWW and related infrastructure. In 2000, the overall turnover of the ports was only about 40% of the turnover from 1989. The massive decline in turnover was the result of domestic transport decrease. In 2004, the freight transport in ports increased slightly and
reached 8.7 million tons. It is estimated that about EUR 290 million is needed for the rehabilitation and maintenance of the inland waterways system in the next ten years. The additional EUR 220 million is necessary for the development of intermodal transport.

It is expected that, due to the restoration and increase of production in large industrial plants in the Republic of Serbia (steel works, chemical industry, cement and oil), the inland waterway transport demand will substantially rise because of its comparative advantages.

**Needs Assessment Document 2008-2010, Transport section, (Page 251),** stipulates following: "Starting from European Transport Policy and Strategy of Transport Development in the Republic of Serbia from 2008-2015 (hereinafter the Strategy), priority of the Government is to, with financial support from the EU, continue construction of road and railway infrastructure in the Republic of Serbia, as well as to establish necessary conditions for unhindered sales in internal navigation routes, and especially on Danube and Sava."

**MIPD 2009-2011** under the Socio-economic criteria emphasises that improvement of socio-economic situation of the country should be done also through progress in the inland waterway transport (Page 4).

The MIPD 2009-2011, Socio-economic criteria, section 2.3.1.2, Article 9 stipulates:

"Develop the full potential and the competitiveness of Serbia's transport sector for socio-economic development, in particular in the Corridor X (road and railways) and Corridor VII (Danube basin)."

The MIPD 2009-2011, Socio-economic criteria, section 2.3.1.2. Paragraph 10:

"Improving infrastructures in order to promote business related activities and public services and to facilitate economic and cultural links within Europe. The areas of energy, transport, tourism, environment, health, information and communication technology, education, etc. have to be developed as cornerstones of future economic growth"

The MIPD 2009-2011, Ability to assume obligation of memberships, section 2.3.1.3, Article 5, Paragraph 4 stipulates:

**Transport:** Support transport authorities to meet requirements of the EU relevant 'acquis'; Implement commitments taken under the Memorandum of Understanding on Development of the South East Europe Core Regional Transport Network and the Addendum for a South East European Railway Transport Area, and support regional infrastructure investments (SEETO Multi-annual Plan 2008-2012), multi-modal transport network and transhipment facilities; facilitation of IFI investment through project preparation/implementation in the Core Regional transport Network.

**Serbia 2008 Progress Report - 4.2.4. Transport policy**

In the field of **inland waterways**, there is moderate progress to report. The Law on inland waterway transport has not yet been adopted and Serbia still needs to ratify relevant European Agreements in this field. The development of infrastructure, namely the Danube and the Sava River, as well as the development of inland ports as intermodal terminals, requires specific focus and earmarked resources.
Overall, Serbia is relatively advanced in the area of transport, but needs to update and align its legislation to the *acquis*. The transport strategy needs to be followed up by a master plan and sectoral measures. Furthermore, the relevant services are still to be reorganised and strengthened.

**Strategic documents - national:**

- The National Strategy of Serbia for the Accession to the EU
- Needs Assessment Document 2008-2010,
- National Plan for Integration of the Republic of Serbia into the European Union
ANNEX V Details per EU funded contract (*) where applicable:

Service contract 1:

The first service contract will assess the preliminary results achieved by the current survey; this will be followed by the removal of UXO.

Service contract 2:

The second service contract will supervise the removal of the UXO, in line with engineering and environmental standards.
Organisation chart
(based on data from NPI October 2008, with staff predictions for 2009)

Directorate for civil aviation
(110 current staff, 110 planned)

MINISTRY OF INFRASTRUCTURE
(440 staff)

Directorate for inland waterways
(145 current staff, 145 planned)

Sector for air transport
(2 current staff, 7 planned)

Department for Roads & Traffic Safety
(25 current staff, 30 planned)

Department for Road Traffic
(34-31 staff)

Department for Railways & Intermodal Transport
(15 current staff, 15 planned)

Sector for water transport & navigation safety
(55 current staff, 56 planned)

Sector for European Integrations
(9 current staff, 13 planned)

Agency for Traffic Safety
(0 current staff, 20 planned)

Agency for Road Traffic
(No data available)