

**Standard Summary Project Fiche – IPA centralised programmes**  
**(Regional / Horizontal programmes ; centralised National programmes)**

**1. Basic information**

- 1.1 CRIS Number: 2007/19322**  
**1.2 Title: Danube River Information System (RIS)**  
**1.3 ELARG Statistical code: 02.14**  
**1.4 Location: Serbia**

**Implementing arrangements:**

- 1.5 Contracting Authority** European Commission  
**1.6 Implementing Agency:** N/A  
**1.7 Beneficiary (including details of project manager):** Ministry of Infrastructure  
**1.8 Overall cost:** €1 million  
**1.9 EU contribution:** €1 million  
**1.10 Final date for contracting:** 3 years after the signature of the Financing Agreement  
**1.11 Final date for execution of contracts:** 5 years after the signature of the Financing Agreement  
**1.12 Final date for disbursements:** 6 years after the signature of the Financing Agreement

**2. Overall Objective and Project Purpose**

**2.1 Overall Objective:**

To improve the inland water way transport system on Euro Corridor VII (Danube) in Serbia.

**2.2 Project purpose:**

The purpose of the project is to:

- Enhance the traffic safety by monitoring and managing the traffic on the Danube waterway;
- Optimize utilization of the Danube waterway (esp. at bottlenecks like locks, shallow water / narrow passages and similar);
- Establish manageability of the traffic on the Danube by providing the possibility of giving navigational / directional aids to the traffic;
- Enable the authorities to manage and plan the traffic operation and strategy;
- Enable quick and timely response in the event of an accident or similar;
- Improve safety, manageability and esp. timely response in any incident which involves hazardous cargo;
- Enable the authorities to distribute information to other operators and organizations to integrate the information in logistic chains and enable seamless transport operations.
- Ensure compliance with the International Border Management Strategy and other existing RIS in the region

**2.3 Link with AP/NPAA / EP/ SAA**

‘The **White Paper** on EU Transport Policy’ sets out the approach for the development of the Trans European Transport Network to 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”<sup>1</sup>.

**The SAA (Chapter III Art 59 Supply of Services)** demands that Serbia adapts legislation, including administrative, technical and other rules, to that of the Community existing at any time in the field of air, maritime, inland waterway and land transport insofar as it serves liberalisation purposes and mutual access to markets of the Parties and facilitates the movement of passengers and of goods.

European Union has issued an action programme called “**NAIADES**” which is intended for the period 2006–2013 and focuses on five strategic areas for a comprehensive Inland Waterway Transport (IWT) policy: Market, Fleet, Jobs and skills, Image and Infrastructure for inland waterway transport in the EU.

The Regional Balkans Infrastructure Study (**REBIS**) states that 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.

The **European Partnership** document emphasizes the importance of the implementation of the MoU on the Development of the South East Europe Core Regional Transport Network. The realization of short-term priority from the European Partnership - to adopt and implement national transport strategy - is under way and the Serbian Master Plan for IWT has been completed, inclusive of the Feasibility Studies for the Serbian IWT Network and for the Serbian IWT ports..

The High Level Group **Networks for peace and development - Extension of the major trans-European transport axes to the neighbouring countries and regions** underlined that inland waterway transport can strengthen its competitive position if logistics processes are improved. Special attention should be paid to traffic information management infrastructure and recommends that implementation of traffic information systems should be pursued and their compatibility ensured, including with the RIS of the EU.

## **2.4 Link with MIPD**

The **Multi-annual Indicative Planning Document (MIPD)** 2007–2009 highlights the importance of developing the full potential and the competitiveness of Serbia's inland waterway transport sector for socio-economic development, in particular in the Danube basin.

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

N/A

## **2.6 Link with national/ sectoral investment plans (where applicable)**

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.

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<sup>1</sup> EC Directorate-General for Energy and Transport: White Paper Presentation September 2001

### **3. Description of project**

#### **3.1 Background and justification:**

Serbia has an extensive inland waterway network comprising of three international rivers and a channel network of almost 2,000 km of inland waterways. The Danube River (Trans-European Network Corridor VII) with its 588 km passing through Serbia is considered to be one of the most important components of transport infrastructure in the entire region. The Danube also represents the main inland transport corridor linking Eastern and Western Europe. It crosses Germany, Austria, Slovakia, Hungary, Croatia, Serbia, Romania, Bulgaria, Moldova and Ukraine and connects the North Sea with the Black Sea as well as the Rhine-Main-Danube Canal. All of these countries presently undertake measures to comply with the *Acquis Communautaire*.

River transport is by far the most economic for goods for which speed is not of primary importance. River transportation is safe, reliable and environmentally clean. The availability of efficient transport infrastructure alongside the Pan European Transport Corridor VII (Danube) is also of importance for the economic growth in Europe. In comparison to land transport infrastructure, the Danube waterway has sufficient and significant capacity with the potential to become the backbone of a sustainable transport system by connecting the Danube countries to the European markets.

Like the entire infrastructure network in Serbia, the Danube suffered from lack of investment over the past decade and has been severely affected by war damage, which led to an increase of safety risks for inland navigation. While other countries have been upgrading their inland waterway infrastructure by means of modern and advanced solutions, Serbia was not able to cope with these challenges. This resulted in a decline of Inland Waterway Transport in Serbia. In 2000 cargo transported by IWT decreased to 8,000,000 tons (7 % of the total transported cargo), while 22,000,000 tons had been transported (14%) in 1990.

Restoration of the infrastructure network is one of the priorities of the Serbian government and extensive IFI investments have been made to support and finance this restoration.

For the development of an efficient and sustainable transport system in the whole region, River Information Services (RIS) have to be developed on the Serbian section of the Danube. The RIS should be integrated in a seamless chain from the North Sea to the Black Sea.

#### **3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact (where applicable)**

This project to implement the River Information System along the Danube within Serbia will contribute to efficient and safe navigation.

This fully complies with European efforts to improve safety on inland waterways, as well as with EU RIS Directive (published September 30th, 2005) which is a tool for EU transport policy development to create the infrastructure of the trans-European transport network (TEN-T), as required by the European Parliament and the Council.

Moreover, the European strategy on RIS is additionally strengthened by means of preparation and execution of the IRIS Master plan which is dedicated to the harmonized implementation

of RIS in entire Europe. This has affected the Danube countries which are currently conducting RIS implementation (e.g. in Austria - DoRIS, Hungary-DaTRaM, Croatia – CRORIS, Romania – RoRIS). Recognizing the importance of the RIS, two river commissions, the Danube Commission and the Rhine Commission (CCNR), have acquired the RIS concept. As one of the measures, Danube Commission has set-up the group of experts from all Danube countries (except Moldova) under the auspices of GIS Forum Danube, to create the platform for adoption of relevant RIS standards by the Commission.

So far, the RIS related activities which took place in Serbia are:

- A first version of electronic navigational charts (ENC) is already available.
- Serbian authorities also made some steps towards setting-up AIS coverage on the Danube between Belgrade and Novi Sad.
- There are also two governmental vessels equipped with transponders to support the system and a test centre has been in operation since 2004.

For the full deployment of the EU RIS, the riparian Danube countries should develop actions and activities in a harmonized way, especially in terms of fulfilling the EU RIS Directive.

The implementation of this project will enhance the IWT development and its environmentally friendly transport and will indicate to river users the intention of the Serbian Government to make the IWT network safe and efficient for navigation.

The RIS will cover the entire stretch of the Danube related to Serbia, including the borders which will form a crucial part of the system. The project will ensure that RIS is compatible with other RIS in Hungary, Romania and Bulgaria. The design preparation will focus on the existing and planned systems, to avoid any overlapping versa. The European RIS Platform which was set up for participation by all European countries involved in the development and implementation of RIS with the interlinked Rhine-Danube inland waterway network will be consulted to ensure compatibility with cross border RIS systems. The platform's objectives are to extend mutual knowledge on RIS by exchanging the available, experiences and expertise. It also aims to foster RIS harmonisation by developing an overview of all RIS-relevant activities and by giving guidance and advice on the further development of RIS in research and development, standardisation, and implementation. The platform has relationships with other bodies involved in the development of RIS, such as the platform of European Waterway Authorities, the European Commission, CCNR, Danube Commission, PIANC, IALA and the European thematic network consortia.

### **3.3 Results and measurable indicators:**

#### **Expected outcomes**

This project will implement a dedicated RIS, conforming to the requirements of the EU RIS Directive. The project will introduce a telematics based information services to support traffic and transport management. This will improve the information provision to users of the inland waterway transport system. The deployment of RIS on the European inland waterway network will improve safety, efficiency and environmental friendliness of inland navigation and in this way contribute towards modal shift.

The specific outcomes of the project fiche are

- Fairway Information Service (FIS) by means of Electronic Navigational Charts (ENCs) as a Display Standard for the entire Danube in Serbia and in addition a Display standard that includes depth information on the ENC for the critical Danube sections.
- Fairway Information Service by means of Notices to Skippers (NtS);
- Fairway Information Service by means of voice based VHF radio communication;
- Vessel Tracking & Tracing Service (VTTS) by means of shore based Inland Automatic Identification System (Inland AIS);
- Traffic Information Service by means of Electronic Ship Reporting (ESR) system;
- Calamity Abatement Service on a basis of Traffic Information Services and using voice based VHF radio communication ;
- Service for storage of hull data and technical inspection data of inland vessels;
- Data exchange with other administrations on the Danube;
- Exchange of the traffic information collected by vessel tracking and tracing system to non-governmental users such as other commercial organizations with relation to the Project;
- Fairway Information Services by provision of the differential signal for global positioning system by means of IALA beacons, based on recommendations of the Danube Commission.

### 3.4 Activities:

The project refers to the Serbian stretch of the Danube from km. 1435 (Serbian-Hungarian border) to the km. 845 (Serbian – Bulgarian – Romanian border). The critical navigation stretches along the Danube that require specific attention within the preparation and implementation phase are listed in Table 1.

**Table 1: critical Danube navigation stretches**

km 1428.0 – 1425.2	km 1309.9 – 1309.1
km 1417.9 - 1414.7	km 1285.5 – 1284.1
km 1405.6 – 1401.7	km 1263.4 – 1262.0
km 1396.8 – 1392.1	km 1254.2
km 1391.0 – 1389.6	km 1253.3 – 1252.9
km 1383.2 – 1381.7	km 1254.0 – 1240.0
km 1375.9 – 1372.3	km 1236.5 – 1236.2
km 1365.8 – 1363.5	km 1229.7 – 1227.9
km 1355.0 – 1354.1	km 1199.0 – 1197.7
km 1323.3 – 1320.7	

This project will construct the RIS communication towers in locations conforming to the RIS technical design prepared under the CARDS programme and to the requirements of the EU RIS Directive. A service contract will supervise the construction of these towers and train the staff in the use of the equipment in line with the following:-

- the technical design of the RIS system;
- the proposed network system configuration of the AIS base stations;

- concept conformity for the proposed RIS system;
- Confirmation with the Environmental Impact Assessment (EIA) for the implementation and operation of the proposed RIS system implementation.

The project will be implemented by one service contract of 1.5 Million Euros and one works/supply contract of 9.5 Million.

### **3.5 Conditionality and sequencing:**

- The Serbian administration is committed to making the RIS system operational before 2010;
- Continued commitment of the Serbian Authorities towards the development of the Corridor VII, as part of the European integration process and transport modernization policy;
- Serbia will continue to meet the IFI's requirements for granted loans.
- Full allocation of operation and maintenance budget with the authority assigned and managing the RIS
- The Serbian authorities ensure cooperation with riparian Danube Countries at those sections in Serbia where the Danube is a border river.
- The Serbian authorities move quickly to harmonize the Serbian legislation in the sector with EU regulations,

### **3.6 Linked activities**

Development and Assistance Coordination Unit (DACU) at the Ministry of Finance, as National Coordinator of Donor Activities, is competent for donor activities coordination, organizes, participates at the meetings with representatives of international organizations and bilateral donors, participates in neighbourhood and trans-national EU programmes and participates actively in the negotiations regarding the infrastructural projects financed either through EBRD, EIB and/or World Bank.

Various projects have to be implemented to ensure that Serbia complies with the Danube Commission requirements and to create safe, efficient and reliable and uninterrupted navigation on the Danube. In this respect the revitalisation of the navigation locks at Djerdap I and II, the removal of about 200 sunken vessels from WWII downstream of the HEPS Djerdap II on the border with Romania and Serbia, as well as the need to raise the bridge clearance of the temporary Novi Sad railway bridge, the implementation of river training works at various locations along the Danube and the implementation of River Information Services are required.

The RIS pilot projects in the Danube riparian states have been executed during the past years with the assistance of Via Donau of Austria. 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.

### **3.7 Lessons learned**

The availability of efficient transport infrastructure alongside the Pan European Transport Corridor VII is of particular importance for the economic growth in Europe and particularly in

SEE. In general, growth of transport will continue causing congestion of trucks and trailers on roads resulting in high rates of accidents, high levels of pollution and noise, reduce mobility of goods and people, decrease utilization of infrastructure. In comparison to land transport infrastructure, inland navigation is more reliable, economical, and environment friendly mode of transport.

The EU recognizes this opportunity. 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 Danube River provides the unique opportunity for transport solutions which easily cope with the future demands and release the existing obstacles within relatively low and hence most desirable financial time margin. The Danube has the potential to become the backbone of a sustainable transport system connecting the Danube countries to the European markets. It could contribute considerably to solving the traffic problems of the Danube corridor with comparably moderate investment. The EU is also aware of the strategic importance of the Danube and has integrated the river as Corridor VII in the planning of the trans-European transport network.

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 Million €)

Activities	TOTAL COST	SOURCES OF FUNDING										
		EU CONTRIBUTION				NATIONAL PUBLIC CONTRIBUTION					PRIVATE	
		Total	% *	IB	INV	Total	% *	Central	Regional	IFIs	Total	% *
Activity 1	1.5			1.5								
contract 1.1	1.5			1.5								
contract 1.2												
Activity 2	9.5				9.5							
contract 2.1	9.5				9.5							
contract 2.2												
.....												
<b>TOTAL</b>	<b>11</b>											

\* expressed in % of the Total Cost

## 5. Indicative Implementation Schedule

Contracts	Start of Tendering	Signature of contract	Project Completion
Contract 1.1	T+Q1	T+Q2	T+Q10
Contract 1.2	T+Q1	T+Q4	T+Q10

All projects should in principle be ready for tendering in the 1<sup>ST</sup> Quarter following the signature of the FA

## 6. Cross cutting issues (where applicable)

### Gender

The Development Policy Joint Statement by the Council and the European Commission of 10 November 2000 establishes that a number of Cross-cutting Issues shall be mainstreamed into EC development co-operation and assistance.

Cross-cutting issues will be addressed in the project so as to comply with the best EU standards and practice in that area and in a way which demonstrates how they will be dealt with within the project's framework, its activities and outputs.

Cross-cutting issues will be addressed in a proactive manner, and will present a specific component of projects (at all levels of projects' development, starting from the project identification stage). Synergies between the projects and the objectives of will be identified and developed. Also, the projects' objectives and activities need to be screened in order to ensure they won't impact negatively on gender equality, minorities' inclusion and environment.

The beneficiary will make sure its objectives, policies and interventions have a positive impact on and are in line with the main principles of gender equality, minorities' inclusion and environment.

### 6.1 Equal Opportunity

The service industry provides significant opportunities to increase female participation in the Serbian economy. Transport and logistics as a growth sector of the service industry is specifically important in this regard. The Serbian authorities are committed to operate the RIS with equal opportunities offered to female labour.

### 6.2 Environment

RIS leads to a reduction of fuel consumption as a consequence of better voyage planning and more reliable time scheduling. In addition RIS contributes to a modal shift of cargo from road to waterway, leading to a reduction of exhaust fumes and noise. As such RIS supports the reduction of emissions caused by transport activities in a direct and indirect way.

In the implementation of the works and subsequently in the operation of the infrastructure and facilities, due consideration will be given to the environmental factors, all in compliance with Serbian legislation and with environmental standards comparable with EU standards. The EIA

recommendations carried out before project launch will be respected throughout the operation and construction should not be in an ecologically sensitive area or prone to flooding

### **6.3 Minorities**

Transport is one of the priority areas which do not primarily impact minority issues. At the same time, they might have long-term repercussions on minorities. Thus, project needs to consider whether minorities are also beneficiaries of some of the measures, or whether, due to geographical disbursement (or other regions), only majority communities benefit from these measures.<sup>1</sup>

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<sup>1</sup> Taken from “EAR Practical Guide on Minority Issues Mainstreaming”

<b>ANNEX I</b> <b>LOGFRAME PLANNING MATRIX FOR Project Fiche</b>	<b>Programme name and number</b>	
<b>River Information System</b>	Contracting period expires 5 years after the signature of the Financing Agreement	Disbursement period: expires 6 years after the signature of the Financing Agreement
	<b>Total budget : €11 million</b>	<b>IPA budget: €11 million</b>

<b>Overall objective</b>	<b>Objectively verifiable indicators</b>	<b>Sources of Verification</b>	
Improve transport on Corridor VII (Danube) in Serbia	Operational River Information System to support traffic and transport management	Ministry of Infrastructure	
<b>Project purpose</b>	<b>Objectively verifiable indicators</b>	<b>Sources of Verification</b>	<b>Assumptions</b>
Enhance Traffic Safety Optimise utilisation of Danube Waterway Improve navigation Improve traffic management Increase accident response time Improve logistics support Reduce environmental accidents	Construction of telecommunication Towers Fairway Information Service introduced by Electronic Navigational Charts, notices to Skippers via VHF radio communication, global positioning system Vessel tracking and Tracing service Electronic Ship reporting System Calamity Abatement Service Storage of vessel hull data Data exchange with other Danube authorities Operation of all elements of RIS Staff trained Improvement of Traffic flows on Danube	Ministry of Infrastructure	Continued commitment of the Serbian Authorities towards the development of the Corridor VII, as part of the European integration process and transport modernization policy;  Allocation of operation and maintenance budget with the authority assigned and managing the RIS
<b>Results</b>	<b>Objectively verifiable indicators</b>	<b>Sources of Verification</b>	<b>Assumptions</b>
Dedicated River Information System Towers constructed Staff operating RIS equipment RIS fully operational Traffic flows and safety Improved	Towers constructed and operational (tested) Staff trained and assessed Full testing of RIS system by service contractor Assessment of traffic flows before and after RIS operational	Ministry of Infrastructure	Continued commitment of the Serbian Authorities towards the development of the Corridor VII, as part of the European integration process and transport modernization policy;
<b>Activities</b>	<b>Means</b>	<b>Costs</b>	<b>Assumptions</b>
Construction of Communication Towers Supervision of Works Training of RIS operational Staff	One Works Contract One Service Contract	<b>11 Million Euro (100% IPA contribution)</b>	Continued commitment of the Serbian Authorities towards the development of the Corridor VII, as part of the European integration process and transport modernization policy;

**ANNEX II: amounts (in €) Contracted and disbursed by quarter for the project**

<b>Contracted</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
Contract 1.1 1,500,000		1.5								
Contract 1.2 9, 500, 000				9.5						
Contract 1.3										
Contract 1.4										
.....										
<b>Cumulated</b>		<b>1.5</b>		<b>11.0</b>						
<b>Disbursed</b>										
Contract 1.1 1,500,000		450,000	180,000	180,000	180,000	180,000	150,000			
Contract 1.2 9, 500, 000				2,850,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000	1,140,000
Contract 1.3										
Contract 1.4										
.....										
<b>Cumulated</b>		<b>450000</b>	<b>630000</b>	<b>3,660,000</b>	<b>4,980,000</b>	<b>6,300,000</b>	<b>7,590,000</b>	<b>8,730,000</b>	<b>9,870,000</b>	<b>11,000,000</b>

## **ANNEX III**

### **Description of Institutional Framework**

The Ministry of Infrastructure (former Ministry of Capital Investments) is in charge of implementation and monitoring of this project. The work, mandate and authorisations of the Ministry are regulated by the Law on Ministries (adopted on May 15, 2007 (Official Gazette of Republic of Serbia no. 48/07)) – i.e. Article 12.

The Ministry consists of the two main sectors – Transport sector and Construction and Urbanism sector.

## **ANNEX IV**

### **Reference to laws, regulations and strategic documents:**

- Institutional Development of the Inland Waterway Transport
- Master Plan for Inland Waterway Transport in Serbia
- Strategy and Policy of Transport Sector Development in Serbia until 2015
- Road Safety Organisation and Management
- Harmonisation of Road Transport Legislation
- Harmonisation of Inland Waterways Transport Legislation
- Organisational Development of the Serbian Railway Company

### **Reference to AP /NPAA / EP / SAA**

The **European Partnership** document emphasizes the importance of the implementation of the MoU on the Development of the South East Europe Core Regional Transport Network. The realization of short-term priority from the European Partnership - to adopt and implement national transport strategy - is under way and the Serbian Master Plan for IWT has been completed, inclusive of the Feasibility Studies for the Serbian IWT Network and for the Serbian IWT ports.

The **SAA (Chapter III art 59 Supply of Services)** demands that Serbia adapts legislation, including administrative, technical and other rules, to that of the Community existing at any time in the field of air, maritime, inland waterway and land transport insofar as it serves liberalisation purposes and mutual access to markets of the Parties and facilitates the movement of passengers and of goods.

### **Reference to MIPD**

Develop the full potential and the competitiveness of **Serbia's inland waterway** transport sector for socio-economic development, in particular in the Danube basin. (Page 17)

Promote exploitation of inland waterways as socio-economic development comparative advantage. Support implementation of Serbia's innovation, SME, FDI, inland waterway strategies and Flood prevention action plans. (Page 21)

## **Reference to National Development Plan**

N/A

## **Reference to 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.

## **ANNEX V**

### **Details per EU funded contract (\*) where applicable:**

For *TA contracts*: account of tasks expected from the contractor

- Full implementation and operation of RIS system as per EU RIS directive
- RIS staff training to operate RIS system to EU RIS standards