

Standard Summary Project Fiche – IPA centralised programmes

Project number 14: Preparation of the necessary documentation for river training and dredging works on selected locations along the Danube River

1. Basic information

1.1 CRIS Number: 2009/021-765

1.2 Title: Preparation of the necessary documentation for river training and dredging works on selected locations along the Danube River.

1.3 ELARG Statistical code: 02.21

1.4 Location: Serbian reaches of the Danube

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):

The project beneficiary will be the Ministry of Infrastructure and the Directorate for Inland Waterways, "PLOVPUT".

Contact details:

Ministry of Infrastructure: Assistant minister Mrs. Zorica Djeric – Stojcic (contact details: Nemanjina 22-24, 11000 Beograd, tel: +381 11 361 93 98, fax: +381 11 361 7486; email: djeric@mi.gov.rs)

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Project Steering Committee (SC) will be responsible for the overall quality of project implementation and provide strategic direction. The SC will ensure that the project outputs and goals are met in a timely fashion, approve work plans and reports, offer guidance and advise on project activities. The SC will meet on quarterly basis and will consist of representatives from the aforementioned beneficiaries along with representatives from ECD.

Financing:

1.8 Overall cost (VAT excluded): 2.000.000 EUR

1.9 EU contribution: 2.000.000 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:

To contribute to the restoration and creation of safe and swift navigation on the Danube River (Corridor VII) in full accordance with the Danube Commission requirements, EU standards and legislation of the Republic of Serbia.

2.2 Project purpose:

Preparation of project documentation for dredging and river training works on selected critical navigational sections of the Danube River identified in Inland Water Transport (IWT) Master Plan.

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; 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.

This project falls within the compass of the **Stabilization and Association Agreement** (SAA transport, Article 108, see extract in Annex 4) 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.

This project addresses three of the objectives highlighted in the Serbian National Transport Strategy 2008-2015 as short term; these are reiterated in the **National Programme for Integration with the European Union – NPI** (2008, chapter 3.21 transport trans-European networks).

Serbia 2008 Progress Report¹, 4.2.4. Transport policy (see extract in Annex 4).

2.4 Link with MIPD

The MIPD 2009-2011 under the Socio-economic criteria emphasizes that improvement of the socio-economic situation of the country should be done also through progress in the inland waterway transport (Page 5).

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) “

¹ec.europa.eu/enlargement/pdf/press_corner/key-documents/reports_nov_2008/serbia_progress_report_en.pdf

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“

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 transshipment 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 (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.

The National strategy for development of the rail, road, water, air and intermodal transport in the Republic of Serbia 2008-2015. One of the main priorities anticipated in the Strategy is the rehabilitation and improvement of the Inland waterway transport network in accordance with the standards of the Danube River Commission.

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. “

The National Sustainable Development Strategy emphasizes under the Transport section that one of the major priorities in the Transport are:

- Increase the quality of transport services and services by transport infrastructure by 25% in comparison to 2005;
- Increase the share of intra-modal transport in the total transport of goods by increased use of inland waterways and railroad transport by 25% in comparison to 2005;

3. Description of project

3.1 Background and justification:

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

A critical component in the accession process is the modernization of transport infrastructure in compliance with international design standards combined with the legal framework that is consistent and compliant with the Directives and Regulations laid down in the transport acquis. The Government of the Republic of Serbia recognized the importance of the transport sector as one of the key components in process of transition and economic growth. As a result the Government adopted The National strategy for development of the rail, road, water, air and intermodal transport in the Republic of Serbia 2008-2015 which gives special attention to the improvement of the Inland waterway system.

The geographical position of the Republic of Serbia provides natural advantages for intensive river transportation, especially on the Danube River which is one of the major transport axes in Europe (Corridor VII).

The Serbian segment of the Danube River, from Bezdán to Timok has total length of 588km. The border section with Croatia, between the Hungarian border and Backa Palanka is 137.6 km long. Comprehensive river training works along Danube were done in 1960's and 1970's to secure navigation in line with the Danube Commission's recommendations. But since then there has been no significant investment in dredging and training along the Serbian reaches of the Danube.

The European Community, through major transport related conferences in Crete (1994) and Helsinki (1997) designated the major transport corridors, comprising road, rail and Inland waterway transport. The Danube River is identified as Corridor VII and represents a vital connection between Western Europe and the counties of the Central and Eastern Europe. As such the river and its associated transport corridor offers the potential as a catalyst for economic development of the region. The Danube River is classed as an international waterway though the Belgrade Convention and the Danube Commission based in Budapest deals with this river directly. According to the Technical and Operational Characteristics of Inland Waterways of International Importance² along Serbia Danube river is qualified as class VI river from Bezdán to Belgrade and from Belgrade to Timok the Danube meets class VII requirements.

In order to respect those requirements Republic of Serbia is obliged to maintain fairway along Serbian part of Corridor VII. Build up of silt requires a regular programme of dredging; this programme is in severe arrears due to lack of investment in river maintenance. All these factors impose safety restrictions during navigation through Serbian reaches of the Danube. Serbia has not able to cope with these challenges because it requires significant investment in modern technology to maintain navigation. The result is that inland waterway transport has

²Technical and Operational Characteristics of Inland Waterways of International Importance-Annex III

declined: by 2000 it was estimated that cargo transported along the inland waterways had decreased to 8,000,000 tons (7 % of the total transported cargo) from a high of 22,000,000 tons (14%) in 1990.

Like the entire infrastructure network in Serbia, the Danube River has suffered from lack of investments and maintenance over the past decades, which lead to an increase of risks and safety reduction for inland navigation.

The implementation of this project will enhance the IWT development and its environmentally friendly transport and it will increase the reliability and efficiency of the river traffic on the important Pan European Transport Corridor VII. Also project will indicate to river users the intention of the Serbian Government to make the IWT network safe and efficient for navigation

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. The Danube is an international waterway and inevitably the successful completion of the project should increase use of the waterway and reduce transit times.

Impact: the river traffic on the Serbian part of the Danube is mainly transit from the Black sea to Hungary, Austria and Germany; therefore, the implementation of this project will have a positive impact on the cost level of transport, which should contribute to economic development. Waterway transport on the Danube might have numerous effects on river ecosystems and potential accidents may have Trans boundary impacts.

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 her IWT network safe and efficient for navigation, shifting from other transport modes by about 14-20% by 2025.

Sustainability: There is a large potential benefit for the EU from keeping this corridor functional as a guarantee for safe and efficient shipping. The Directorate for Inland Waterways - "Plovput" is a public institution and legal entity constituted by the Law on Ministries in 2007 as a special organization of the government of the Republic of Serbia. 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 with the Law.

3.3 Results and measurable indicators:

Technical and administrative documentation for tendering the dredging works on selected locations along the Danube River prepared for implementation in accordance with EU standards and best practice in that field.

Necessary technical and administrative documentation for tendering the Danube River training structures formulated and prepared.

Output Indicators

Draft technical documents for the dredging and training works prepared.

Tender procedures for the dredging and training works launched.

3.4 Activities:

1. Identify & verify locations of build-up of silt (desk study & field surveys / investigations to determine exact locations & extent of sand bars, river hydrology, morphology, flow & sediment transport) in close cooperation with Inland Waterways & Water Directorates, Ministry of Environment & Spatial Planning, Plovput enterprise.
2. Design of operations and conduct hydraulic surveys, according to international agreed standards, leading to EIA, operational permits and work plan.
3. Preparation of necessary documentation for dredging works on the selected critical navigational sections of Danube River identified in IWT Master Plan.
4. Preparation of the river training program in line with EU best practice in that field, along with associated technical documentation.

This project will be delivered through one service contract.
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3.5 Conditionality and sequencing:

Conditionality

The MoI has a series of reports and feasibility studies that need bringing up-to-date before this project can start. These must be made available to the contractor.

River training structures and dredging shall be in line with urban, technical and other conditions issued by the relevant institutions in Serbia. The most important requirements besides river waterway conditions and water management conditions are the conditions for nature protection and conditions for protection of historical heritage.

3.6 Linked activities

Various projects have to be implemented to ensure that Serbia complies with the Danube Commission requirements and to create safe, efficient, reliable and uninterrupted navigation on the Danube.

The Serbian Inland Waterways Transport Network Master Plan, was financed by the EC - CARDS 2003 programme. This Master Plan has a time frame up to 2025 and includes three Feasibility Studies: (1) for restoring unhindered navigation, (2) rehabilitating of the Serbian waterway transport network, (3) Port Development Plan. The Master Plan's objective is to set up of an appropriate economic, institutional and legal framework that will enhance public and private investment in the sector through detailed economic and financial analyses.

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 (2.3 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 Infrastructure of the Republic of Serbia).

An “assessment of unhindered navigation on the Serbian IWT network” led to a detailed Survey and Search Project in the IWT in Serbia and the Supervision of the Survey and Search in April 2008. The purpose was to assess whether and what type of UXOs may be present at the identified locations. As a second step the located UXOs need to be removed in accordance with international procedures and standards. This was funded by the EU CARDS 2005 programme was completed in 2009.

"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).

An IPA 2007 project - The Danube River Information System (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. Its full implementation of RIS along the entire Danube is still being discussed both at European Commission and the Danube Commission in Budapest.

3.7 Lessons learned

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.

The Survey and Search for UXO removal in the IWT System project, contract No.05SER01/04/011, provided an overview of the dimensions and the necessity of further activities due to the remaining threat by UXO has been achieved during 2008/9. One of their recommendations was that the removal of UXO left after wars of the past, and particularly from the NATO attack 1999, must be improved and accelerated.

4. Indicative Budget (amounts in EUR)

Preparation of the necessary documentation for river training and dredging works on selected locations along the Danube River			TOTAL EXP.RE	SOURCES OF FUNDING								
				IPA COMMUNITY CONTRIBUTION		NATIONAL CONTRIBUTION					PRIVATE CONTRIBUTION	
ACTIVITIES	IB (1)	INV (1)	EUR (a) = (b) + (c) + (d)	EUR (b)	% (2)	Total EUR (c) = (x) + (y) + (z)	% (2)	Central EUR (x)	Regional/ Local EUR (y)	IFIs EUR (z)	EUR (d)	% (2)
Activity 1												
contract 1.1	x	-	2.000.000	2.000.000	100							-
TOTAL IB			2.000.000	2.000.000	100							
TOTAL INV												
TOTAL PROJECT			2.000.000	2.000.000	100							

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)

Contracts	Start of Tendering	Signature of contract	Project Completion
Contract 1.1	T +1Q	T+4Q	T+11Q

All projects will be ready for tendering in the 1ST Quarter following the signature of the FA

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

This project, directly relates to environmental issues in Serbia, will lead to further protection of the environment by reducing the risks of accidents at the various Danube bottlenecks and ease navigation congestion

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.

ANNEX I: Logical framework matrix in standard format

LOGFRAME PLANNING MATRIX FOR Project Fiche		Programme name and number	
Preparation of the necessary documentation for river training and dredging works		Contracting period expires 2 years after signing of Financing Agreement	Disbursement period expires 5 years after signing of Financing Agreement
		Total budget :2,000,000 €	IPA budget: 2,000,000 €
Overall objective	Objectively verifiable indicators	Sources of Verification	
To contribute to restoration and creation of safe and swift navigation on the Danube River (Corridor VII) in full accordance with the Danube Commission requirements, EU standards and legislation of Republic of Serbia.	Vessels and convoys passage time through this river stretch decreased as well as risk of running aground / accidents. Positive reports of the Danube Commission	Plovput reports, Danube commission reports	
Project purpose	Objectively verifiable indicators	Sources of Verification	Assumptions
Preparation of project documentation for dredging and training works on selected critical navigational sections of Danube River identified in IWT Master Plan.	Tender documents presented to the ECD	ECD reports TED - Tenders Electronic Daily Supplement to the Official Journal of the European Union	

Results	Objectively verifiable indicators	Sources of Verification	Assumptions
<p>1. Technical and administrative documentation for tendering the dredging works on selected locations along the Danube River prepared for implementation in accordance with EU standards and best practice in that field.</p> <p>2. Necessary technical and administrative documentation for tendering River training structures formulated and operational</p>	<p>Draft technical documents for the dredging and training works prepared.</p> <p>Tender procedures for the dredging and training works launched.</p>	<p>ECD records</p> <p>TED - Tenders Electronic Daily Supplement to the Official Journal of the European Union</p> <p>Plovput records</p> <p>Serbian official press releases of tender launch for river training works</p>	<p>Information from earlier Serbian studies made available to the consultant</p> <p>Capacity within Plovput to work with the consultants delivering the TA</p> <p>Equipment necessary for the survey of the river available for the duration of the project</p> <p>Free access to all areas of the Danube assured during the duration of the project</p>
Activities		Means & Costs	
<p>Identify & verify locations of build up of silt (desk study & field surveys / investigations to determine exact locations & extent of sand bars, river hydrology, morphology, flow & sediment transport) in close cooperation with Inland Waterways & Water Directorates, Ministry of Environment & Spatial Planning, Plovput enterprise</p> <p>Design of operations and conduct hydraulic surveys, according to international agreed standards, leading to EIA, operational permits and work plan</p> <p>Preparation of necessary documentation for dredging works on the selected critical navigational sections of Danube River identified in IWT Master Plan.</p> <p>Preparation of the river training program in line with EU best practice in that field, along with associated technical documentation</p>		<p>Service contract: 2,000,000 €</p>	

Pre-conditions

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

Contracted	N+4Q	N+5Q	N+6Q	N+7Q	N+8Q	N+9Q	N+10Q	N+11Q	TOTAL
Contract 1.1	2.0								2.0
Cumulated	2.0	2.0	2.0						
Disbursed									
Contract 1.1	0.6		0.4		0.4		0.4	0.2	2.0
Cumulated	0.6	0.6	1.0	1.0	1.4	1.4	1.8	2.0	2.0

ANNEX III Description of Institutional Framework

According to the Article 11 of the Law on Ministries (Official Gazette of Republic of Serbia no. 65/08) 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:

- 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

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.

A PMU will be established using IPA 2008 funding to supervise and oversee this project.

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;

² 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.

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(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.

Table 1

CLASSIFICATION OF EUROPEAN INLAND WATERWAYS OF INTERNATIONAL IMPORTANCE^{5/}

Type of inland waterway	Classes of navigable waterway(s)	Motor vessels and barges					Pushed convoys					Minimum height under bridges #	Graphical symbols on maps
		Type of vessel: General characteristics					Type of convoy: General characteristics						
		Designation	Maximum length L (m)	Maximum beam B (m)	Draught # d (m)	Tonnage T (t)		Length L (m)	Beam B (m)	Draught # d (m)	Tonnage T (t)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
OF INTERNATIONAL IMPORTANCE	IV	Johann Welter	80-85	9.5	2.50	1,000-1,500		85	9.5 #	2.50-2.80	1,250-1,450	5.25 or 7.00 #	
	Va	Large Rhine vessels	95-110	11.4	2.50-2.80	1,500-3,000		95-110 #	11.4	2.50-4.50	1,600-3,000	5.25 or 7.00 or 9.10 #	
	Vb							172-185 #	11.4	2.50-4.50	3,200-6,000		
	Via							95-110 #	22.8	2.50-4.50	3,200-6,000	7.00 or 9.10 #	
	Vib	#	140	15.0	3.90			185-195 #	22.8	2.50-4.50	6,400-12,000	7.00 or 9.10 #	
	Vic							270-280 #	23.8	2.50-4.50	9,600-18,000	9.10 #	
	Vii							275-285 #	33.0-34.2 #	2.50-4.50	14,500-27,000	9.10 #	

^{5/} Classes I - III are not mentioned in this table, being of regional importance.

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;

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)

"Directive 2006/87/EC laying down technical requirements for inland waterway vessels and repealing Council Directive 82/714/EEC (OJ L 389/1), as amended by directive 2006/137/EC (OJ L 389/261)

- 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)*)

- Law on carriage of dangerous goods ("*Official Gazette*" of SFRY, no. 27/90, 45/90, "*Official Gazette*" of FRY 24/94, 28/96, 21/99,44/99,28/02)

- 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)

- Law on Carriage of Dangerous Goods ("*Official Gazette*" of SFRY, no. 27/90, 45/90, "*Official Gazette*" of FRY 24/94, 28/96, 21/99,44/99,28/02)

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

- Convention on Protection of Human Life At Sea ("*Official Gazette of SFRY – International Contracts*", No. 2/81)

- 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 Region 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 transportbased 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."

The MIPD 2009-2011 under the Socio-economic criteria emphasizes that improvement of the socio-economic situation of the country should be done also through progress in the inland waterway transport (Page 5).

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) “

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“

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 transshipment 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**
- **The National strategy for development of the rail, road, water, air and intermodal transport in the Republic of Serbia 2008-2015.**
- **Needs Assessment Document 2008-2010,**
- **National Plan for Integration of the Republic of Serbia into the European Union**
- **National Sustainable Development Strategy**

ANNEX V:

Service contract will be awarded for the implementation of following project activities:

- Identify & verify locations of build up of silt (desk study & field surveys / investigations to determine exact locations & extent of sand bars, river hydrology, morphology, flow & sediment transport) in close cooperation with Inland Waterways & Water Directorates, Ministry of Environment & Spatial Planning, Plovput enterprise
- Design of operations and conduct hydraulic surveys, according to international agreed standards, leading to EIA, operational permits and work plan
- Preparation of necessary documentation for dredging works on the selected critical navigational sections of Danube River identified in IWT Master Plan.
- Preparation of the river training program in line with EU best practice in that field, along with associated technical documentation