

REQUEST FOR EXPRESSIONS OF INTEREST

CONSULTING SERVICES – FIRMS SELECTION

Republic of Serbia

The Western Balkan Trade and Transport Facilitation Project (WBTF)

Project ID No. P162043

Assignment Title:

CONSULTANCY FOR DESIGN AND SUPERVISION OF PROVISION, INSTALLATION AND COMMISSION OF ELECTRONIC DATA INTERCHANGE (EDI) SYSTEMS AT RAIL BORDER CROSSING POINTS (RBCPS) IN SERBIA,

Reference No. SER-WBTF-QCBS-CS-20-09-5

The Republic of Serbia has received financing in the amount of EUR 35 million loan from the International Bank for Reconstruction and Development (IBRD) toward the cost of the Western Balkan Trade and Transport Facilitation Project (WBTF), and it intends to apply part of the proceeds to payments for consulting services to be procured under this project.

Scope of Work

The Consultant is required to provide professional inputs, advice and support to the implementation of the Electronic Data Interchange (EDI) Systems at Railway Border Crossing Points (RBCPs) in Serbia through the provision of appropriate and fit for purpose designs and costing estimates. The Consultant will also be required to undertake coordination role, where applicable, and to supervise the construction of the aforementioned works. The Consultant is expected to perform following Tasks as a part of the consultancy service, grouped into 2 phases, as follow:

PHASE 1 – DESIGN AND PROCUREMENT SUPPORT

Task 1: Assessment of the current data transfer systems used in 9 Rail Border Crossings Points in Serbia

Task 2: Draw a design consisting of EDI system architecture, scope and extent of the system, specifications (Bill of Quantities) as well as detailed costing

Task 3: Procurement support

PHASE 2 – COORDINATION AND SUPERVISION SUPPORT

Task 4: Coordinate activities among different RBPCs in Serbia and support and assist to the MCTI and IZS in coordination of activities with representatives of EU (Hungary, Romania, Bulgaria and Croatia) and non-EU countries (North Macedonia, Montenegro and Bosnia and Herzegovina) bordering with Republic of Serbia on specific 9 Rail Border Crossing Points

Task 5: Supervise the installation, testing and commissioning of the completed EDI systems on 9 RBCPs

Task 6: Supervise development of an operation and user-maintenance manual and training of the staff that will be provided by the contractor

Contract duration: 26 months.

The detailed Terms of Reference for the above referenced consulting services is posted on the website of the Ministry of Construction, Transportation and Infrastructure (MCTI)

<https://www.mgsi.gov.rs/en/dokuments/request-expression-interest-consulting-services-firm-selection>

The Central Fiduciary Unit (CFU) of the Ministry of Finance now invites eligible Consultants to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services.

The assignment will require a qualified consulting firm or a joint venture that can demonstrate extensive experience of (i) design of EDI system architecture and (ii) supervision services for installation, testing and commissioning of EDI system, and which will comply with the following criteria:

- (i) The Consulting firm must be a legal entity;
- (ii) The consultant (individual company or joint venture altogether) has implemented and completed, during the last seven years (from the January 2015 up to the deadline for the receipt of applications indicated below), at least one (1) contract related to these Services, respectively, design/ supervision of EDI system (installation, testing and commissioning), and shall demonstrate that it had participation of minimum 60% in the contract brought as reference.

Key Experts' CV are not required and will not be evaluated at the shortlisting stage.

A Consultant will be selected in accordance with the Quality and Cost-Based Selection as set out in the Regulations.

MCTI, as Contracting Authority, intends to shortlist up to eight eligible firms to whom a subsequent Request for Proposals (RFP), both technical and financial, shall be sent. In the event that more than eight firms fulfil all the qualifying criteria above, the MCTI shall use the following criteria to rank the applicants and the top eight shall be invited to submit proposals: (i) The number of contracts in a field related to these Services brought as reference in para (ii) above.

As a proof, the Consultant firm shall prepare a table listing following information: name of the relevant assignments, short scope of work, year of contract's implementation, country/region, contact reference (name, e-mail, phone number).

Consultants may associate with other firms to enhance their qualifications, but should indicate clearly whether the association is in the form of a joint venture and/or a sub-consultancy. In the case of a joint venture, all the partners in the joint venture shall be jointly and severally liable for the entire contract, if selected. Furthermore, Eols of JVs will be evaluated based on composition of JV submitted whereas experience of other firms not included in the JV will not be considered in the evaluation.

The attention of interested Consultants is drawn to paragraphs 3.14, 3.16 and 3.17 of the World Bank's Procurement Regulations for IPF Borrowers – Procurement in Investment Project Financing Goods, Works, Non-Consulting and Consulting Services (July 2016, revised November 2017) ("the Regulations") setting forth the World Bank's policy on conflict of interest.

Further information can be obtained at the address below during office hours 09:00 to 15:00 hours.

Expressions of interest in English language must be delivered in a written form to the email below, **by June 20, 2022, 12:00 hours, noon, local time.**

Contact:	E-mail:	Address:
To:	zorica.petrovic@mfin.gov.rs Ms. Zorica Petrovic Procurement Specialist	Ministry of Finance Central Fiduciary Unit 3-5 Sremska St 11000 Belgrade, Serbia Tel/Fax: (+381 11) 765 2587
Cc:	ljiljana.dzuver@mfin.gov.rs ljiljana.stojic@mgsi.gov.rs	

TERMS OF REFERENCE (TOR)

CONSULTANCY FOR DESIGN AND SUPERVISION OF PROVISION, INSTALLATION AND COMMISSION OF ELECTRONIC DATA INTERCHANGE (EDI) SYSTEMS AT RAIL BORDER CROSSING POINTS (RBCPS) IN SERBIA

Background

Within the European Union (EU), rail transport is currently the least integrated transport mode. This leads to delays, extra costs, and insufficient use of rail freight, especially for time-sensitive cargo. This also represents a missed opportunity in terms of moving towards a greener transport modal split within the EU. Rail freight, for which international activity represents 50 percent of total activities, will not be able to develop fully if border crossing rail operations do not deliver a better service for shippers and freight operators who require seamless trans-national transport as is possible by road, air and sea. Observing that the modal split of rail in the EU is stagnating at around 18 percent after years of decline, the European Commission proposed a regulation on a European rail network for competitive freight—to be based on a number of rail freight corridors—which entered into force on November 9, 2010. Regulation No 913/2010 makes it mandatory to create a European rail network for competitive freight based on international freight corridors, recognizing that the need to strengthen the competitiveness of rail freight requires a corridor approach, involving corridors that cross national borders. The EU's adoption in 2010 of a corridor approach focusing on international rail freight has important implications for EU member states, accession and candidate countries, in terms of approaching rail freight investments and performance from an international corridor perspective with enhanced cross-border coordination, with the ultimate aim of increasing the attractiveness of rail to potential freight customers. In addition, considering Regulation No 913/2010, Republic of Serbia is one of the founders of the Alpine-Western Balkans corridor and participate in its work. Also, Serbia actively participate in consideration of other similar corridors.

The International Bank for Reconstruction and Development (IBRD) launched the Multiphase Programmatic Approach to facilitate the achievement of the Western Balkans Governments' goal of reducing trade costs and increasing transport efficiency. The Program includes two phases: i) phase 1 includes Albania, North Macedonia and Serbia, and ii) phase 2 other beneficiaries in the Western Balkan. For the purpose of financing of the *Western Balkan Trade and Transport Facilitation Project (WBTF Project)*, part of Phase 1 of the Program, IBRD has granted to the Republic of Serbia (RoS) EUR 35 million loan to support a combination of investments, technical assistance and regulatory and institutional reforms. At the regional level, the Secretariat for Transport Community Treaty (TCT) will play the role of the regional coordination and liaison office for the Western Balkans Six, for all the transport related dimensions of the project. The CEFTA Secretariat will play the same role for the trade elements of the proposed project. At the national level, Project Implementation Unit (PIU), within the Ministry of Construction, Transport and Infrastructure of Republic of Serbia (MCTI), has primary responsibility for Project execution ensuring that the Project development objectives are met.

The Project consists of 4 Components whereas the Service described under this Terms of Reference is expected to be carried out as a part of the 'Component 1: Facilitate cross-border movement of goods' with special focus on Installation of Electronic Data Interchange (EDI) systems at Railway Border Crossing Points (RBCPs) in Serbia. Final Beneficiary for subject services is Serbian Railways Infrastructure (Infrastruktura železnica Srbije - IZS).

Automated exchange of data or electronic data interchange (EDI) is defined as automated exchange of

structured electronic messages for use in another system or organization. By using a defined protocol both sender and receiver can verify that the message is formally correct and can be used for further processing. EDI communication is characterized as an exchange of information between two server applications and usually between two organizations and parties. EDI between two parties must be initiated by some kind of event or information—for example, this can be a train passing a certain position or information within a document pointing out the next Border Crossing Point (BCP) or a lead railway undertaking (RU; having the assignment from the customer) transferring a consignment note to an RU and a pre-arrival declaration to customs.

EU regulations currently in force require EDI between RUs, infrastructure managers (IM), Customs authorities as well as with other government agencies. Since 2006 the Telematics Applications for Freight–Technical Specifications for Interoperability (TAF TSI), Regulation EC 62/2006 has been in force dealing with definitions of the interoperable data exchange between infrastructure managers (IMs) and RUs; the regulation is law for all EU member states. The Regulation was amended by Commission Regulation (EU) No 328/2012 of April 17, 2012, published in the Official Journal of the European Union on April 18, 2012. The TAF TSI contains technical specifications for information services at the border crossings within the EU and the EU borders with non-EU states if the non-EU state accepts the regulation.

As an EU candidate country, Serbia needs to devise solutions for improving rail BCP performance that are in line with the EU acquis. Advanced state-of-the-art rail EDI requires a high level of trust and the readiness to align national legislation and regulatory frameworks to the EU acquis. International integration is a major target for a rail corridor, with full corridor level integration developed between data centers of involved actors and cannot be achieved at one BCP. However, there are intermediate steps possible, in particular in the realm of electronic exchange of data that render feasible a significant reduction in border processing time, even without legal and regulatory changes. Its application would increase the competitiveness of rail in the Western Balkan region. If the operational environment in the region would reach EU average levels, the order of magnitude of possible savings is about 1 percent of the region GDP or about US\$ 1,1 billion per year.

The main potential of introducing EDI at rail border crossings in Serbia is in the reduction of dispatching times. This would allow pre-approval messages in an electronic format to be generated automatically when a train is on route. It would apply to requests for locomotives and handover trains, and electronic transmission of all necessary commercial and train documents. It would minimize the paperwork that would need to be physically carried and whose losses often lead to delays.

The Ministry of Construction, Transport and Infrastructure of Republic of Serbia (the Client), IZS (Beneficiary) intend to engage Consultant firm (the Consultant) for design and supervision of provision, installation and commission of Electronic Data Interchange Systems at 9 RBCPs in Serbia. The Consultant will work closely with the Client, the Beneficiary, Railway Engineer of the Project Implementation Unit (PIU), the Transport Community Treaty Secretariat (TCT) officials and other relevant national and regional stakeholders to ensure that the EDI systems activities of the Project are managed efficiently both technically and in compliance with the objectives of the Project documents.

Project location

The project will be implemented on following 9 Rail Border Crossing Points in Serbia:

Name of Rail Border Crossing Point	Country	Bordering with
Dimitrovgrad	Serbia	Bulgaria
Ristovac	Serbia	North Macedonia
Sid	Serbia	Croatia
Bogojevo	Serbia	Croatia
Subotica	Serbia	Hungary
Vrsac	Serbia	Romania
Kikinda	Serbia	Romania
Prijepolje	Serbia	Montenegro
Brasina	Serbia	Bosnia and Herzegovina

The Consultant should note that it is possible that during Contract duration some of the above listed RBCPs may be excluded from the scope of the Contract due to implementation of Republic of Serbia obligations coming from the Transport Community Action Plans; respectively establishment of joint border crossing station with other neighboring country.

Objective

The overall objective of 'Component 1: Facilitate cross-border movement of goods' is to improve border crossing performance by increasing predictability of border crossing times in Serbia and in the Western Balkan region. The objective will be supported by implementation of EDI system on 9 rail border crossings in Serbia as an evolving technology that is helping companies and government agencies (customs documentation) cope with an increasingly complex global transport system. Through EDI, the aim is to make accessible data handling, processing and distribution systems that are essential to ensure the safe, reliable and cost-effective control of freight movements being transported by rail.

The first objective of this consultancy is to draw a design consisting of EDI system architecture (current condition, process mapping, proposed equipment as well as software and hardware solutions, human resource capacity building, user manuals and any other related ancillary scope), scope and extent of the system, specifications (Bill of Quantities) as well as detailed costing.

Second objective of the consultancy is to provide a proposal for the supervision of the installation, commissioning and user acceptance testing for the successful Implementation of a EDI Systems on 9 Rail Border Crossing Points in Serbia.

Additionally, throughout the whole implementation period the Consultant is expected to coordinate activities among different RBPCs in Serbia and to support and assist the MCTI and IZS in coordination of the activities with representatives of EU (Hungary, Romania, Bulgaria and Croatia) and non-EU countries (North Macedonia, Montenegro and Bosnia and Herzegovina) bordering with Republic of Serbia on specific 9 Rail Border Crossing Points.

Scope of work

The Consultant is required to provide professional inputs, advice and support to the implementation of

the EDI Systems on RBCPs in Serbia through the provision of appropriate and fit for purpose designs and costing estimates. The Consultant will also be required to undertake coordination role, where applicable, and to supervise execution of the aforementioned works. The Consultant is expected to perform following Tasks as a part of the consultancy service, grouped into 2 phases, as follow:

PHASE 1 – DESIGN AND PROCUREMENT SUPPORT

Task 1: Assessment of the current data transfer systems used in 9 Rail Border Crossings Points in Serbia

- Gather data and information from the main stakeholders including but not limited to Infrastructure Managers (IM), Railway Undertakings (RU), Customs, Border police, other border authorities such as phyto-sanitary, sanitary, radiology authorities, shippers or freight forwarders, traders (importer, exporter, or owner of transit goods), etc. on the current data exchange models used,
- Review of procedures and documents required at 9 RBCPs and the respective duration,
- Review of current ways of Information and Data Exchange for Railways, Customs and Border Police on 9 RBCPs and their level of compatibility with the EDI systems,
- Review of current EU Border Crossing Practice including analysis of existing legal frameworks and protocols. Review level of alignment of national practice with the EU Border Crossing Practice.

Deliverable: Gap analysis of 9 Rail Border Crossings Points in Serbia

Task 2: Draw a design consisting of EDI system architecture, scope and extent of the system, specifications (Bill of Quantities) as well as detailed costing

- Design of EDI system architecture including current condition, process mapping, proposed equipment as well as software and hardware solutions, human resource capacity building, user manuals and any other related ancillary scope,
- Review of existing legal framework and identify potential gaps, needs for revision/preparation and adoption of legal documents relevant for implementation of EDI Systems with a special emphasis on a specific Information Exchange Requirements. If needed, propose and draft new Legal Agreements to be signed among two neighboring countries, laws, by-laws, etc.
- Define specifications (including Bill of Quantities) for the development and installation of the EDI systems including a list of equipment and EDI related hardware and software systems needed,
- The Consultant shall develop Cost Estimates prepared according to real market prices. The Consultant shall not disclose these estimates to others, particularly to potential contractors and/or suppliers,
- Define Requirements for Electronic Data Interchange in Rail for each stakeholder (Infrastructure Managers, Railway Undertakings, Customs, Border police and other border authorities),
- Provide technical guidance to the Beneficiary for the procurement of the EDI equipment and software/hardware systems,

The following deliverables produced and developed to the applicable standards constitute Final Design. The purpose of the Final design is to provide detailed and complete outputs for the preparation of complete tender documents for Works and Detailed Bill of Quantities to support a fixed price and measured works contract:

- *Legal framework for implementation of EDI systems,*
- *Concepts for all engineering systems, processes and schedule of drawings,*
- *Final to-scale schemes for all systems,*
- *Installation and operating cost estimates, schedules and work breakdown structure (WBS) as necessary,*

- *Material and equipment checklists,*
- *Final engineering design calculations.*

Task 3: Procurement support

- Following approval of Final Design, the Consultant will prepare full technical and functional requirements/specification, for the EDI system, both equipment and services and will assist PIU/CFU on preparation of Bidding Documents (BDs). BDs shall include all required technical specifications, financing requirements, target performance, monitoring mechanisms, etc.;
- The Consultant will assist and provide all necessary support to the Evaluation Committee to be nominated by the Client during the selection process to ensure compliance with requirements;
- Upon completion of evaluation and obtaining required approvals, the Consultant will support the Client in negotiations and contract signature, if needed.

PHASE 2 – COORDINATION AND SUPERVISION SUPPORT

Task 4: Coordinate activities among different RBPCs in Serbia and support and assist to the MCTI and IZS in coordination of activities with representatives of EU (Hungary, Romania, Bulgaria and Croatia) and non-EU countries (North Macedonia, Montenegro and Bosnia and Herzegovina) bordering with Republic of Serbia on specific 9 Rail Border Crossing Points

- Ensure cooperation and harmonization of activities among Infrastructure Managers, Railway Undertakings, Customs, Border police, other border authorities from 9 RBCPs in Serbia concerning the implementation of EDI Systems,
- Support the MCTI and IZS and assist in cooperation among Serbian Infrastructure Managers, Railway Undertakings, Customs, Border police, other border authorities and their respective counterparts from the neighboring EU and non-EU countries concerning the implementation of EDI Systems.

Task 5: Supervise the installation, testing and commissioning of the completed EDI systems on 9 RBCPs

- Where the Consultant is engaged for the Supervision, the Consultant shall be the Project Manager, designate referred to in all the Contract Documents and shall provide full supervision services throughout the duration of the works, and in accordance with the terms of Consultant's contract
- The consultant will supervise the installation, testing and commissioning of all EDI equipment as well as software and hardware systems, as carried out by any appointed contractor(s) to ensure adherence to all requirements and specifications in the Terms of References,
- Following successful installation, commissioning and testing of the EDI Systems, a User Acceptance Test (UAT) is to be carried out (either as part of the commissioning or after) and a UAT report submitted for review and approval by the Beneficiary.

The following outputs produced and developed to the applicable standards constitute deliverables under the Supervision portion of the contract - Monthly Progress Reports to include as minimum information on:

- *Progress of Works,*
- *Identified problems and possible risks, with proposed mitigation measures,*
- *Test results,*
- *Cost assessment/analysis and Recommendations,*
- *Time assessment/analysis and Recommendations,*
- *Activities planned for the next month (reporting period)*
- *Minutes of Site Meetings.*

Task 6: Supervise development of an operation and user-maintenance manual and training of the staff that will be provided by the contractor

- The Consultant will supervise submission of a comprehensive Operation and User - Maintenance Manual, Training/Capacity Building for the staff on the manual and EDI systems, followed by handing over of the completed EDI Systems by any appointed sub-contractor.

Deliverables and timeline

The consultancy will commence in September 2022 and it is expected that the period over which the Consultant shall provide the Services will be 26 months, or any other period as may be subsequently agreed by the parties in writing¹. Detailed design and technical assistance for procurement for the required works shall be a first priority task and the consultant will be tasked to complete this design on time so as to progress to implementation on the ground, during which time the supervision task will be aligned with project roll-out and contractor organization.

Deliverables	Due date
Phase 1 – Design and Procurement Support (11 months)	
Inception report. Present an overall approach and detailed program work plan and completion schedule for the services. It should discuss constraints and challenges identified by the Consultant and ways to address them in order to timely and effectively deliver the assignment.	1 month
Gap analysis of 9 Rail Border Crossings Points in Serbia The report should provide technical and regulatory assessment of the current systems used in Rail Border Crossings Points in Serbia	4 months
Final Design for EDI Systems on 9 RBCP in Serbia The Final design should provide detailed and complete outputs to allow for inter alia submission and approval of designs to the applicable regulatory agency, the preparation of complete tender documents for Works and Detailed Bill of Quantities to support a fixed price and measured works contract.	6 months
Procurement support Technical and functional specifications/sections of the BD, including BoQ and financial requirements	8 months
Phase 2 – Coordination and Supervision Support (15 months)	
Supervision Monthly/quarterly Progress Reports The report should include as minimum information on Progress of Works, identified problems and Possible Risks, with proposed mitigation measures, Test results, Cost assessment/analysis and Recommendations, Time assessment/analysis and Recommendations, Activities planned for the next month (reporting period), Minutes of Site Meetings. During software development period, with duration estimated as 9 months, the Consultant will report on quarterly basis. During installation, testing and commissioning period, monthly progress report will be prepared.	Every month/quarter from beginning of implementation of works

¹ Due to travel restrictions stemming from the COVID-19 pandemic, some activities that require in-country presence may not be able to be performed as long as travel restrictions stay in place. In these cases, the consultant will carry out these tasks virtually in close coordination with the relevant stakeholders in Serbia

Deliverables	Due date
<p>Final Report The Report should include short description of achievements, expert utilization, deliverables provided, problems encountered, and recommendations for future actions to ensure results' sustainability. The report must consist of a narrative/technical and a financial section.</p>	<p>No later than 1 month before completion of the contract</p>

Management and reporting

The Consultant shall work under the direct supervision of the identified project manager from Serbian Railway Infrastructure, Ministry of Construction, Transport and Infrastructure of Republic of Serbia and in consultation with the Railway Engineer of the PIU and World Bank Task Team Leaders. The Consultant will report directly to the project manager and submit reports as required in the agreed upon plan and time schedule. In addition to above listed reports, the Consultant shall prepare ad-hoc reports on any major project issues raised during Project implementation.

The Beneficiary will provide logistical support for the work carried out in the field and preparation of the field visits. More precisely, they are responsible for provision of fully equipped office space, with access to Internet, printing, and document binding.

If and when necessary, the project manager, the Bank Task Team and the Consultant may agree to make adjustments to the task descriptions or the time frame for deliverables. The Consultant shall submit all deliverables in English and Serbian language and seek the Manager's approval. All data collected should be in standard open, ideally machine readable, formats. All data collected shall be in the format to be easily electronically transmitted to the client and will be considered public unless the client explicitly asks otherwise.

Selection of the Consultant firm

The Consultant firm will be selected in accordance with QCBS (Quality and Cost Based Selection) method as set out in the World Bank's Procurement Regulations for IPF Borrowers (July 2016, revised November 2017).

The assignment will require a qualified consulting firm or a joint venture that can demonstrate extensive experience of (i) design of EDI system architecture and (ii) supervision services for installation, testing and commissioning of EDI system, and which will comply with the following criteria:

- (i) The Consulting firm must be a legal entity;
- (ii) The consultant (individual company or joint venture altogether) has implemented and completed, during the last seven years (from the January 2015 up to the deadline for the receipt of applications indicated below), at least one (1) contract related to these Services, respectively, design/supervision of EDI system (installation, testing and commissioning), and shall demonstrate that it had participation of minimum 60% in the contract brought as reference.

Consultants may associate with other firms to enhance their qualifications, but should indicate clearly whether the association is in the form of a joint venture (JV) and/or a sub-consultancy. In the case of a joint venture, all the partners in the joint venture shall be jointly and severally liable for the entire contract, if selected. Furthermore, Expressions of interest of JVs will be evaluated based on the composition of JV submitted, whereas the experience of other firms not included in the JV will not be considered in the evaluation. The experience of any proposed sub-consultancy shall not be included in the evaluation.

Key Experts' CV are not required and will not be evaluated at the shortlisting stage.

MCTI, as Contracting Authority, intends to shortlist up to eight eligible firms to whom a subsequent Request for Proposals (RFP), both technical and financial, shall be sent. In the event that more than eight firms fulfil all the qualifying criteria above, the MCTI shall use the following criteria to rank the applicants and the top eight shall be invited to submit proposals: (i) The number of contracts in a field related to these Services brought as reference in para (ii) above.

As a proof, the Consultant firm shall prepare a table listing following information: name of the relevant assignments, short scope of work, year of contract's implementation, country/region, contact reference (name, e-mail, phone number).

Requirements - Staff

The Consultant shall establish his Team in accordance with the needs and requirements of this ToR. The Team shall include Key experts with the qualifications and skills as described below and non-key experts, as needed. The Team, as a whole, shall include experts familiar with RoS regulations. CVs for non-key experts should not be submitted in the bid but the bidder shall have to demonstrate in his offer that they have access to those experts with the required profiles to perform the contract services.

Engagement of the Key experts will be as such as to cover both phases, respectively whole Contract. Non-key experts will be engaged according to the needs identified by the Consultant in his proposed methodology and work plan.

Team Leader will have overall responsibility for the direction, technical excellence and successful completion of the project. It is expected that the specialists among the team of consultants who will undertake this study will include:

Team leader - Senior Railway Engineer

- Experience: at least 10 years' relevant experience in Railway Engineering/Supervision, knowledge of cross-border procedures at railways, knowledge of TAF TSI/EDI Systems, experience in project management, project planning, resource planning, role and responsibility definition and coordination across multiple teams.
- Education: Post graduate degree in Railway Engineering, Law or any other related field, with specialization in Railway Interoperability/ information and communication technologies in railway operations. Specializations in EDI Systems, and/or Project Management, will be an advantage.
- Skills and competencies: Strong leadership and planning skills. Strong coordination skills. Strong analytical skills.
- Language: Excellent written and spoken English is required. Report writing skills is a must. Knowledge of Serbian language is advantage.

Key Expert - EDI Systems Programmer

- Experience: at least 5 years of relevant work experience with programming EDI Systems in a high-volume data processing environment and experience in implementing EDI systems; 5 years' experience in analyzing business problems and translating business requirements into technology solutions that consider system performance, usability, quality, cross-system interdependencies, and scalability.
- Education: BS in Computer Science or other analytical discipline or equivalent experience.
- Skills and competencies: Technical expert with strong analytical, design, development, planning and problem-solving skills as well as strong writing, presentation, and interpersonal communication skills.
- Language: Excellent written and spoken English is required. Knowledge of Serbian language is

advantage.

Key Expert - Legal expert

- Experience: at least 5 years 'of general experience. Experience in legal support for transport projects, preparation and revision of international agreements and agreements on data exchange in Serbia.
- Education: Advanced university degree or equivalent in Law.
- Skills and competencies: Excellent knowledge of the railway/transport regulatory framework in Serbia; analytical thinking and strategic planning skills, ability to facilitate, consult and negotiate with a broad range of government and non-government partners; good inter-personal and communication (oral and written) skills, efficiency in a multi-tasking and multi-cultural environment.
- Language: Excellent written and spoken Serbian and English is required.

Estimated Key Staff Requirement

A	Position	Design Stage (Estimated Requirement)	Supervision Stage (Minimum Requirement)	Total Projected Key Staff Requirement
		Person/months	Person/months	Person /Months
K-1	Team leader - Senior Railway Engineer	9	9	18
K-2	EDI Systems Programmer	11	9	20
K-3	Legal expert	8	5	13
Total Key Staff Input		28	23	51

Terms of Payment

The Consultant should note that the proposed contract for this assignment will be as follows:

- For **Phase 1 - Design and Procurement Support** – Lump Sum payments with milestones against submission of deliverables
- For **Phase 2 - Coordination and Supervision Support** – Time Based with periodic payments against time actually spent on the services

Conflict of Interest

The engaged Consultant firm must not be involved in any other related activity to this Project.