

**Serbia Railway Sector Modernization Project**  
**TERMS OF REFERENCE**  
**for**  
**Railway Asset Management Specialist**

## **Background**

The International Bank for Reconstruction and Development (IBRD) launched the Multiphase Programmatic Approach (MPA) to support the Government of Serbia in the continuation of institutional, physical and operational modernisation of the railway sector in an integrated manner by providing financial support to Serbia Railway Sector Modernization Project as part of the Multiphase Programmatic Approach to be implemented in three overlapping phases over the ten years.

For financing Serbia Railway Sector Modernization Project, Phase 1 of the MPA, IBRD and the Agence Francaise de Développement (AFD) jointly granted to the Republic of Serbia EUR 102 million loan to support enhancing the efficiency and safety of existing railway assets and improve governance and institutional capacity of the railway sector.

The Project includes the following components:

- Component 1: Infrastructure Investments and Asset Management: Sub-Component 1.1: Reliable and Safe Railway Infrastructure (track rehabilitation, level crossings, railway station “Prokop”, Bogojevo station bypass, measurement stations), Sub-Component 1.2: Technical Documentation for the Phase 2, Sub-Component 1.3: Asset Management
- Component 2: Institutional Strengthening and Project Management: Sub-Component 2.1: Sectoral Governance, Sub-Component 2.2: Human capital, Sub-Component 2.3: Project Management and Citizen Engagement
- Component 3: Railway Modernization Enablers: Sub-Component 3.1: Intelligent Railway Systems (ITS) and Safety Management System (SMS), Sub-Component 3.2: Integrated Territorial Development and Sub-Component 3.3: Modal Shift

The Project will be managed by the Ministry of Construction, Transport and Infrastructure (MoCTI) through the Project Implementation Unit (PIU) supplemented by the Project Implementation Teams (PITs) in Railway Directorate (RD) and railway companies, respectively, Serbian Railway Infrastructure (IZS), Serbia Voz (SV) and Serbia Cargo (SC). PITs will act as subordinate implementing agencies and provide technical support for specific Project subcomponents or activities of the MPA that pertain to their area of expertise. Primary responsibility for Project execution lies on PIU, which will ensure that the Project development objectives are met.

The Ministry of Construction, Transport and Infrastructure (the Client) intends to engage a highly qualified consultant (individual expert) to provide the required services more closely described below. The successful candidate will work closely with the Serbian Railway Infrastructure (IZS), the Client and other relevant stakeholders to ensure that the investments in railway infrastructure within the Project are managed efficiently, both technically and in compliance with the objectives of the Project Appraisal Document

(PAD), the Loan Agreement, Credit Facility Agreement and the Project Operations Manual. The consultant, always aligned with the Head of the PIU and in collaboration with the other PIT and PIU staff, shall interact and liaise with contractors, consultants, World Bank, AFD, and others relevant for the successful completion of the tasks. He/she will closely monitor the implementation of the activities to coordinate the inputs from the different actors, ensure excellent technical execution, quickly address design challenges and efficiently react to unexpected developments. The main challenge is ensuring that works, goods and services are satisfactorily completed on time, within budget, aligned with the contractual requirements and coherently across components.

## **General information**

Individual Consultant Title: **Railway Asset Management Specialist** of the PIT to support railway infrastructure investments in the Republic of Serbia, Serbia Railway Sector Modernization Project. The Consultant shall report to the Head of the PIU, linked to the MoCTI of the Republic of Serbia.

## **Position in organisation**

Immediate superior: Head of the Project Implementation Unit

## **Main position objective**

Generally, the Consultant will support IZS to implement investments and activities specified as part the Component 1: “Infrastructure Investments and Asset Management”, respectively Sub-component 1.3. Asset Management and Component 3: Railway Modernization Enablers related to the Sub-component 3.1 Intelligent Railway System (IRS) and Safety Management System (SMS).

Component 1 focuses on improving the quality and safety of railway infrastructure and enhancing rail asset management practices. The quality of the railway network will be improved through targeted renewal interventions and the preparation of technical documentation for the investments in subsequent phases of the Program. Railway safety will be enhanced through track renewal and upgrading railway crossings throughout Serbia.

Sub-Component 1.3 supports the rollout of a specialised Railway Infrastructure Asset Management System (RI-AMS) as IZS’s standard tool for planning and decision-making related to the maintenance and renewal of railway infrastructure (M&R). This subcomponent includes contracting the firm for Technical Advisory on preparing Technical Specifications for the procurement and implementation of a RI – AMS as well as procurement and customisation of RI-AMS within IZS and procurement of accompanying hardware, if there is a need, and annual maintenance and support fees, which depend on supplier’s licensing policy. The introduction and establishment of RI-AMS will be financed to assist IZS in managing railway infrastructure assets and make tangible savings within the domain of railway infrastructure M&R, as well as raise the overall M&R work performance and management quality to the level of the developed railways.

Component 3, Railway Modernization Enablers, finances measures for strengthening the enabling environment for the railway sector through selected innovations. In Serbia, t

information technologies in railway transport is still in its infancy. The Government of the Republic of Serbia would like to introduce new approaches proven to improve efficiency, effectiveness, and safety.

Subcomponent 3.1 IRS and SMS; This subcomponent will support (i) the initiation of structured planning of IRSs and (ii) the improvements of SMS in the railway sector.

Implementing targeted system initiatives such as Intelligent Railways, Safety Management, and Asset Management goes hand-in-hand with EU standards. It promotes the modernisation of human capacity and organisational change toward a culture of putting customers at the centre of the organisation's activities. The new asset management system will facilitate the efficient maintenance and use of infrastructure, mitigating emissions through longer asset life cycles. The asset management cycle will also be adapted to the requirements of the changing climate, e.g. more frequent tamping of track ballast. The Consultant will be responsible for coordinating the development and implementation of the required system(s), ensuring its compliance with specific standards, laws and Client requirements and that it is within defined timeframes and budgets.

## **Principle responsibilities**

The Railway Asset Management Specialist will be responsible for the following duties:

- Coordination of development and implementation of the all aspects of RI-AMS within the project and required system(s), ensuring its compliance with specific standards, laws and Client requirements;
- Assisting and providing expert advice in the collection, supplementation, systematisation and integration of current and new data basis for rail assets inventory for the optimal use of RI-AMS;
- Providing expert advice on the improvement of current monitoring techniques and providing support in the implementation of investments in upgrading current condition-monitoring vehicles and in the procurement of other suitable condition-monitoring devices and equipment;
- Providing expert advice on the improvement of the current scope of maintenance programs and other planning documents for the maintenance of rail infrastructure assets;
- Participating in drafting and identifying any gaps, incompleteness or failings in technical specification and tender documents for the above-listed subcomponents and recommend remedial actions;
- Assisting in the implementation of Project activities related to IRS and SMS through the introduction/implementation of new technologies, system design development and maintenance;
- Liaise with the Central Fiduciary Unit (CFU) and PIU regarding technical inputs needed to prepare Bidding Documents, Technical Specifications, Requests for Proposals, Terms of Reference, Monitoring Reports etc.
- Active participation and assistance during the tender preparation, processing, evaluation and selection;
- Review and evaluate contractors'/consultants' technical documentation and schedule;

- Ensuring compliance of the projects with relevant national, WB and EU regulations/procedures;
- Assessment of potential risks and proposal of relevant mitigation measures;
- Any other task assigned by the Head of the PIU.

## **Reporting requirements**

The Consultant will provide Monthly Progress Reports within 5 (five) days after the end of the month for which the report is due. The report should contain at least the following:

- List of meetings held with a brief description of objectives and conclusions;
- The status of progress, problems encountered, corrective actions needed, the rationale for actions and
- any further comments relevant to the reporting period.

The Consultant shall prepare ad-hoc reports on any significant issues raised during Project implementation at the Head of the PIU, Client or Bank's request.

## **Knowledge, experience, skills and competencies**

- Advanced degree or minimum 5-year university degree in civil engineering, transport engineering, mechanical engineering or similar;
- Minimum 10 years of general professional experience in the railway sector;
- Minimum 5 years of professional experience in developing and/or implementing railway asset management systems;
- Excellent knowledge and practice of the regulations and technical directives applicable to the maintenance, and renewal of railway infrastructure assets, maintenance machinery and rail track condition monitoring equipment and vehicles;
- Experience working on IFI or EU projects will be an advantage;
- Knowledge of local (regional) language will be an advantage;
- Good knowledge of the English language;
- Computer skills: AutoCAD, Word, Excel, scheduling tools (e.g., MS Project or similar);
- Project Management with multiple stakeholders will be an advantage.

## **Length of the assignment**

The Consultant shall provide full-time services for 30 months or any other period as may be subsequently agreed by the parties in writing.

The assignment is part-time and estimated that the Consultant's total input would be 350 days over the Contract period. The Consultant should be available to commence no later than one month after the contract signature.

## **Facilities to be provided by the Client**

The Client will be responsible for the provision of the following:

- Fully equipped office space, with access to the Internet, local telephone line, printing, photocopying and document binding;
- Access to necessary documents; and
- Where the Consultant is required to travel to the site or elsewhere by the Client's instruction, the Client will bear transportation costs.

## **Confidentiality**

The Consultant undertakes to maintain confidentiality on all information, not in the public domain and shall not be involved in another assignment representing a conflict of interest to the prevailing assignment.

## **Selection of Consultant**

The Consultant will be selected by applying the Open competitive method.

The candidates will be evaluated by applying the following evaluation criteria:

- Qualifications and General experience (30 Points)
- Specific Experience relevant to the Assignment (70 Points)

The Consultant is eligible, and his selection does not create any conflict of interest as provided in the Bank's Procurement Regulations.