REQUEST FOR EXPRESSIONS OF INTEREST

CONSULTING SERVICES – FIRMS SELECTION

Republic of Serbia The Serbia Railway Sector Modernization Project (SRSM) Project ID No. P170868

Assignment Title:

Site Supervision on reconstruction and expansion of the Belgrade Centre railway station

Reference No. SER-SRSM-QCBS-CS-24-66

The Republic of Serbia has received a Loan from the International Bank for Reconstruction and Development (IBRD) in the amount of EURO 51 million and from the Agence Francaise de Développement (AFD) in the amount of EURO 51 million, toward the cost of the Serbia Railway Sector Modernization Project, Phase 1 of the Multiphase Programmatic Approach (MPA) and intends to apply part of the proceeds to payments for consulting services for **Site Supervision on reconstruction and expansion of the Belgrade Centre railway station**

The consulting services ("the Services") include are divided into three activities:

- Activity 1: Inception report;
- Activity 2: Support during tender procedure
- Activity 3: Supervision of works

<u>Activity 1:</u> The Inception Report shall be the specific output of the Inception Period and 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.

<u>Activity 2</u>: The Consultant shall provide technical and operational support to the Client and assist in bidding, bids evaluation, contract finalization to facilitate the timely and effective selection of the Contractor. Within this activity, the Consultant will be involved as an observer in the selection process to ensure compatibility with tender criteria and requirements and achieve agreed project objectives and results.

<u>Activity 3:</u> The Consultant shall provide full supervisory services during construction and installation works by the Contractor, who will be engaged in accordance with WB contract conditions.

Contract duration: 14 months starting from the commencement date, but no later than 31 December 2026, as Project completion date.

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

https://www.mgsi.gov.rs/cir/dokumenti/serbia-railway-sector-modernization-project-srsm-site-supervision-works-belgrade-centre

The Central Fiduciary Unit (CFU) of the Ministry of Finance now invites eligible Consulting firms ("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 Consultant firm will be selected in accordance with QCBS (Quality-and Cost-Based Selection) method set out in the World Bank's Procurement Regulations for IPF Borrowers (July 2016, revised November 2017, August 2018 and November 2020). The Client intends to shortlist up to eight eligible firms to whom a subsequent Request for Proposals (RFP), both technical and financial, shall be sent. 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.

The consulting firms/JV that will submit EoI shall possess the following experience and qualifications:

i) Experience in supervision of works on construction/reconstruction of public facilities

• Minimum one (1) supervision contract for works on construction or reconstruction of the public facility. As public facility is considered facilities like schools, hospital, residential buildings, railway, bus or metro stations, airports etc. The reference supervision contracts must have been completed in the last seven (7) years.

Reference supervision contracts must have been realised in accordance with FIDIC contract terms (red or yellow books).

ii) Experience in supervision of works on railway infrastructure:

• Minimum one (1) supervision of works contracts on public/main railway infrastructure, including civil engineering works (track substructure or superstructure), and electrotechnical works (signalling/interlocking or OCL) where each works contract investment value is a minimum of 15 million euros. The reference supervision contracts must have been completed in the last seven (7) years.

Reference supervision contracts must have been realised in accordance with FIDIC contract terms (red or yellow books).

iii) Technical and managerial capabilities

• Submission of detailed organization chart delineates roles, responsibilities, and hierarchy to clarify management structure and decision-making processes. Detailed information about the workforce must be provided, specifically highlighting the number of staff, their qualifications demonstrating technical capability of the firm/JV. The submission should also describe the firm's core business areas, emphasizing experience in managing similar assignments, with a focus on years in operation and key achievements in related fields.

As proof of experience, the bidder shall prepare reference forms, naming **ten (10) references maximum** for each stated requirement, clearly stating the following:

- Reference #
- Start date and completion date (mm/yy)
- Brief description of the design (10 sentences each maximum)
- Country of assignment with client name and address, and client reference contact
- Contract value
- Role on project

Submitted expressions of interest should be no larger than 30 pages of text, including reference forms.

Shortlisting of firms will be based on the following of points:

- i. Experience in supervision of works on public facilities 40 points
- ii. Experience in supervision of works on railway infrastructure 50 points
- iii. Technical and managerial capabilities 10 points

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

*Information on licensing requirements for firms/JVs

To be considered for a contract award, a firm or joint venture must possess specific licenses, as outlined by Serbian law (Law on Planning and Construction - Article 126). These licenses include:

• P141G2 or I141G2, P141E1 or I141E1, P141E4 or I141E3.

However, possessing these licenses is not a prerequisite for shortlisting. The possession or absence of these licenses will not be considered during the evaluation of the EoI. The list of required licenses is provided as information on what is expected for the firm or JV to obtain as minimum. It is expected from firms or JVs to initiate the process of obtaining these licenses in compliance with the stipulated conditions that can be found on the Ministry of Construction, Transport, and Infrastructure of the Republic of Serbia's website:

https://www.mgsi.gov.rs/lat/dokumenti/pravilnik-o-nacinu-postupku-i-sadrzini-podataka-zautvrdivanje-ispunjenosti-uslova-za

If a firm or JV already possesses these licenses, it should submit the **Decision on fulfilling** conditions for stated licenses, issued by the Ministry in charge, as part of their EoI. Firms or JVs that do not possess these licenses at the time of expression of interest, they must demonstrate their intention to obtain them. Acceptable evidence includes a declaration, issued, and signed by the firm or JV, stating their commitment to secure and provide the necessary licenses on contract signing.

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, August 2018 and November 2020) ("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 24, 2024, 12:00 hours, noon, local time.

Contact:	E–mail:	Address:
То:	<u>zorica.petrovic@mfin.gov.rs</u> Ms. Zorica Petrovic Procurement Specialist	Ministry of Finance Central Fiduciary Unit Balkanska 53
Cc:	ljiljana.dzuver@mfin.gov.rs larisa.puzovic@mgsi.gov.rs	11000 Belgrade, Serbia Tel/Fax: (+381 11) 765 2587

The Serbia Railway Sector Modernization (SRSM) Project Phase 1 of the Multi-Phase Programmatic Approach

TERMS OF REFERENCE

for Site Supervision

on reconstruction and expansion of the Belgrade Centre railway station

June, 2024

Abbreviation	Meaning
AFD	Agence Francaise de Développement
EIA	Environmental Impact Assessment Study
GIIP	Good International Industry Practice
FIDIC	International Federation of Consulting Engineers
IBRD	International Bank for Reconstruction and Development
IZS	Serbian Railways Infrastructure
MoCTI	Ministry of Construction, Transport, and Infrastructure
PIU	Project Implementation Unit
PIT	Project Implementation Teams
Project	Serbia Railway Sector Modernization (SRSM) Project
RAMS	Reliability, availability, maintainability and safety
ToR	Terms of Reference
WB	World Bank
WB ESIA	World Bank Environmental and Social Impact Assessment
WB EHSG	World Bank Environmental, Health, and Safety Guidelines
WB ESMF	World Bank Environmental and Social Management Framework
WB ESF	World Bank Environmental and Social Framework
WB LMP	World Bank Labour Management Procedure
WB OHS	World Bank Occupational Health and Safety

1. Background information

1.1 Beneficiary country: Republic of Serbia

Client: Ministry of Construction, Transport, and Infrastructure of the Republic of Serbia (MoCTI)

1.2 Project Information

The World Bank launched the Multiphase Programmatic Approach (MPA) to support the Government of Serbia in the continuation of institutional, physical, and operational modernization of the railway sector in an integrated manner by providing financial support to Serbia Railway Sector Modernization Project as part of the MPA to be implemented in three overlapping phases over the ten-year period.

For the purpose of financing the Serbia Railway Sector Modernization Project, Phase 1 of the MPA (the Project), the International Bank for Reconstruction and Development (IBRD), as part of the World Bank Group, 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 improving governance and institutional capacity of the railway sector. The Project includes the following Components:

- Component 1: Infrastructure Investments and Asset Management. This component focuses on improving the quality and safety of railway infrastructure and enhancing rail asset management practices. This assignment is part of the Sub-Component 1.1 Reliable and Safe Railway Infrastructure.
- Component 2: Institutional Strengthening and Project Management. This component focuses on strengthening rail policies and institutions to deepen and sustain recent reforms.
- Component 3: Railway Modernization Enablers. This component will finance measures to protect the vulnerable and poor and strengthen sectoral enablers for sustainable business growth and job creation.

The Project is managed by the MCTI through the Project Implementation Unit (PIU) supplemented by the Project Implementation Teams (PITs) in Railway Directorate (RD) and in railway companies, respectively IZS, SV, and SC. PITs 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. The Central Fiduciary Unit (CFU) in the Ministry of Finance provides procurement and financial services for the project. Primary responsibility for Project execution lies on PIU which will ensure that the Project development objectives are met.

1.3 General Railways Sector Information

Serbia's position in the European railway network is such that it forms an integral part of the shortest traffic line between West and South-East Europe, earning it the nickname "gateway of Europe." The total railway line length is 3.348 km. There are 3.079 km of single-track railway lines and 289 km of double-track lines. That means the total track length of the open track and main station passing tracks is 3.637 km. The total length of the electrified line is 1274 km.

Construction of the Belgrade Centre, or Prokop, railway station commenced in the 1970s. Throughout the protracted construction period, the previous central railway station in Belgrade, situated in the Sava Amphitheatre area, was shuttered, and operations were transferred to the partially constructed new railway station in Belgrade Centre.

The fundamental concept for the railway station was established in accordance with one of the design solutions presented from 1996 to 1999. Based on this, the core section of the station building was partially constructed, specifically the slab at an elevation of 105, covering an area of approximately 50,000 square meters. This slab covers the tracks and platforms, serving as the foundation for the construction of a station building and accompanying commercial facilities.

After a prolonged construction period marked by several interruptions, from 2015 to 2017, the Traffic Institute CIP (hereinafter: TI-CIP) prepared new technical documentation that included the Preliminary Design with Feasibility Study, Environmental Impact Assessment Study, Building Permit Design, and Performing Design. The technical documentation aimed to align with market reforms that Serbian Railways had commenced implementing, and optimize investment by separating commercial functions of the station complex and enabling private investments and public-private partnerships. The works were divided into three phases, with Phase I completed during the preceding period, consisting of electrified station tracks, traffic management systems, platforms with underpasses, basic (temporary) service station services for the reception and dispatch of passengers, with the primary road vehicles and pedestrian accesses to the station. By carrying out these works, the conditions were created for the establishment of the operational function of the new station.

Phase II comprises the construction of a station complex of roughly 10,000 square meters beneath the slab at elevation 105, which will be utilized for receiving and dispatching passengers from the lower station square. Within this station complex, the complete station staff that should manage and maintain the station will be accommodated, as well as technical capacities and devices. This station component extends along the first platform, and the lowest level is at elevation 85, with four floors up to elevation 105 at elevations 85, 90, 93.60, and 98.15.

Phase III includes the construction of a station building on the slab with a central hall and commercial facilities encompassing roughly 25,000 square meters. These works will be performed by a strategic partner with whom the Republic of Serbia signed the Framework Agreement on Joint Construction and Transfer of Real Estate Rights in May 2020, after a public call for letters of interest for joint construction of the Belgrade Centre railway station building, parking, and accompanying commercial facilities published by the Republic Directorate for Property in July 2019. Under this contract, the entire space on the slab at elevation 105 was allocated to the Partner to construct a station building with a central hall for the railway sector's needs and commercial facilities tailored to the Partner's requirements.

Upon completion of the new, central railway station in Belgrade, passenger reception/dispatch functions will be enhanced by the introduction of new passenger services intended to elevate railway passenger traffic to the level of quality of European transport services. The essential prerequisites for efficient and rational technological procedures in the domain of traffic organization at the node of all categories of trains and reception/dispatch of international long-distance, internal long-distance, regional, suburban, and city passengers will be fulfilled.

In light of the necessity to effect alterations in the current technical documentation for the reconstruction and expansion of the Belgrade Center railway station with the aim of aligning the two proposed solutions, namely the station building above the altitude of 105, which is to be financed by a strategic partner, and the station buildings below the same altitude, which will be funded under this project, a contract was concluded in October with the TI-CIP to scrutinise the existing technical documentation and provide revised Feasibility Study accompanied by a Preliminary Design, Environmental Impact Assessment Study and Building Permit Design.

2. Objective, purpose, and expected results

2.1 Definitions

The term "Belgrade Centre" refers to a railway station that needs to be reconstructed and expanded.

The term "**Phase 2**" refers to the second phase of the construction of the Belgrade Centre railway station, which includes works on the construction of a station complex of roughly 10,000 square meters beneath the slab at elevation 105, which will be utilized for receiving and dispatching passengers from the lower station square. Within this station complex, the complete station staff that should manage and maintain the station will be accommodated, as well as technical capacities and devices.

The term **"Works Contract**" refers to the design and build contract to be signed with the selected contractor(s).

The "**Contractor**" refers to the firm/joint-venture to be selected for undertaking the Works Contract. The responsibility of the Contractor, to be selected, will be to prepare Performing designs (srb.- Projekat za izvođenje) necessary for works execution.

The "**Building Permit**" refers to the Decision on Building Permit issued by the MoCTI as approval for works execution on reconstruction and expansion of Belgrade Centre according to articles 135 - 142 of the Law on Planning and Construction of the Republic of Serbia. Building Permit is issued based on the Building Permit design that covers the planned works, which must comply with the previously issued location conditions and adopted Preliminary Design.

The "**Consultant**" refers to the consulting firm/joint-venture to be selected through the present procurement process to undertake the Services.

2.2Objectives of the Services

The consultant shall perform site Supervision services on reconstruction and expansion works in Belgrade Centre railway station in accordance with all applicable laws and bylaws in RoS, WB standards and regulations, as well as Works Contract administration.

3. Scope of the work

The Scope of work for the Consultant is to provide support during Contractor's selection and supervision of works on reconstruction, and expansion works in Belgrade Centre railway station and Works Contract administration.

Supervisory services shall be provided for full scope of works, which are to be executed per designed technical documentation, consisting of the following books:

0	Main Volume	606-19/22
1/1	Architecture Design of the Station Building – current condition	606-19/22-ARH-1/1
1/2	Architecture Design of the Station Building – designed condition	606-19/22-ARH-1/2

2/1-1	Structural Design of the Station Building – Concrete	606-19/22-KON-2/1-1
2/1-2	Structural Design of the Station Building - Steel	606-19/22-KON-2/1-2
2/2-1	Access Roads, Tracks, and Building - Civil Part	606-19/22-SAO-2/2-1
2/2-2	Access Roads, Tracks, and Building - Road Structure	606-19/22-SAO-2/2-2
2/3	Design for Station Track 1 and 2	606-19/22-SAO-2/3
2/4	Telecommunication Infrastructure Design Civil Part	606-19/22-SAO-2/4
3/1	Hydrotechnical Installations Design - Rainwater Drainage	606-19/22-HID-3/1
3/2	Hydrotechnical Installations Design - Internal Systems	606-19/22-HID-3/2
4/1	Design of Electrical Installations of the Facility	606-19/22-ELE-4/1
4/2	External Electrical Installations Design	606-19/22-ELE-4/2
4/3	Design for Overhead Contact Line – Station Tracks 1 and 2	606-19/22-ELE-4/3
5/1	TelecommunicationandSignalingInstallationsDesign - TelecomSystems	606-19/22-ELE-5/1
5/2	TelecommunicationandSignalingInstallationsDesign - TechnicalProtectionSystemsSystemsSystems	606-19/22-ELE-5/2
5/3	TelecommunicationandSignalingInstallationsDesign - SignalingSystems	606-19/22-ELE-5/3
5/4	Telecommunication and Signaling Installations - Relocation and Protection of Cable Network	606-19/22-ELE-5/4
6/1	Mechanical Installations Design - Thermotechnical Installations	606-19/22-MAŠ-6/1
6/2	Mechanical Installations Design - Automatic Fire Suppression Systems with Gas	606-19/22-MAŠ-6/2

6/3-1	Mechanical Installations Design - Elevator L1	606-19/22-MAŠ-6/3-1
6/3-2	Mechanical Installations Design - Elevator L2	606-19/22-MAŠ-6/3-2
6/3-3	Mechanical Installations Design - Elevators L5, L6	606-19/22-MAŠ-6/3-3
6/3-4	Mechanical Installations Design - Movable Walkways K13, K14, K15, K16, K17, K18, K19, K20	606-19/22-MAŠ-6/3-4
6/3-5	Mechanical Installations Design - Movable Stairs E1, E2, E3, E4, E5	606-19/22-MAŠ-6/3-5
7	Traffic and Operation Design	606-19/22-ETS-7
8/1	Information and Directional Equipment Design for Passenger and User Guidance	606-19/22-ETS-8/1
8/2	Traffic and Traffic Signage Design	606-19/22-ETS-8/2
8/3	Traffic and Traffic Signage Design during Works Execution	606-19/22-ETS-8/3
9/1	Exterior Decoration Design	606-19/22-ARH-9/1
9/2	Landscaping Design	606-19/22-ARH-9/2
E1	Geotechnical Report	606-19/22-GEO-E1
E2	Fire Protection Report	606-19/22-MAŠ-E2

Activity 1: Inception period

Following the Kick-off Meeting to be held with the Client representative(s), The Client will supply the Consultant with background documentation and data if available. The supplied documents shall be included in the Inception Report, with a detailed description and assessment of the current situation.

The Consultant shall propose the outline of the Inception Report. The Inception Report shall be the specific output of the Inception Period and present an overall approach and a program work plan with a timeline for the completion of the services. It should discuss constraints and challenges identified by the Consultant and how to address them to timely and effectively deliver the assignment.

Within the Inception period, the Consultant will appoint a qualified person for the role of the Project Manager who will be in charge of performing all delegated duties by the Works Contract.

Activity 2: Support during tender procedure

The Consultant shall provide technical and operational support to the Client and assist in bidding, bids evaluation, contract finalization to facilitate the timely and effective selection of the Contractor.

Within this activity, the Consultant will be involved as an observer in the selection process to ensure compatibility with tender criteria and requirements and achieve agreed project objectives and results.

Activity 3: Supervision of works

The Consultant shall provide full supervisory services during construction and installation works by the Contractor, who will be engaged in accordance with WB contract conditions.

For this purpose, the Consultant shall set up an adequate organization, including monitoring systems, to meet requirements for efficient construction supervision and administration. In the performance of duties, the Consultant shall ensure that the works contract brings the construction and installation works to completion within the approved time, quality and budget in accordance with the Client's requirements the project and design implementation. The Consultant shall provide services to the Client with respect to the scope of this Contract and shall establish, with the consent of the Client, the implementation program for the facilities and be generally responsible for the coordination and administration of all Works Contract issues.

The Consultant shall be required to establish and follow detailed supervision procedures based on sound international practice to monitor the completion of the works contract within the agreed program, budget, quality standards, and environmental provisions stipulated in the works contract.

Wherever appropriate and not in conflict with the works contract, the Consultant shall exercise every reasonable care to protect the interests of the Client

The Consultant will comply with his activities with the provisions of both the Law on Planning and Construction (Official Gazette of RS No. 72/221A9, 81/221A9 - corrigendum, 64/2010 - decision US, 24/2011, 121/2012, 42/2013 - decision US 50/2013 - decision US, 98/2013-US, 132/2014, 145 / 2014, 83/2018, 31/2019, 37/2019, 9/2020, 52/2021 and 62/2023) as well as with provisions of the WB contract conditions and Environmental and Social Standards provisions. Taking that into account, the Consultant should have a license indicating the eligibility to act as a Supervisor in RoS for civil, mechanical, electrotechnical and other applicable works.

Generally, the scope of services shall include, but should not be limited to, the following:

- Supervision of all activities of the Contractor in all aspects of the fulfilment of its obligations, responsibilities, and actions taken in relation to the performance of contractual obligations and timely completion of the contract;
- Issuing of Commencement Order for works;
- Daily supervision of works with checking the performance of works according to technical documentation, all specifications and applicable standards. The control includes monitoring the Contractor's activities on and off the construction site, as well as work environmental impacts which may happen during the contractor's activities. Also, the obligations include supervision of the applicability of contractor's equipment for the performance of works, the safety of works, property, personnel and third parties;

- Supervision, control and pre-approval of material and work quantities done by the Contractor;
- Supervision and control of the Contractor regarding the implementation of environmental protection measures, occupational, health and safety measures for Contractors' personnel as well as for third parties, as well as ensuring compliance with recommendations and requirements of traffic safety during the contract implementation;
- Supervision and control of the application of WB environmental and social standards during the execution of works;
- Supervision and control of implementation of environmental protection measures in accordance with the requirements defined by the Building Permit Design and the Performing design;
- Preparation of all documents, especially technical and financial documents, relevant for the execution of this contract or decision-making, for the needs of the Client;
- Preparation and provision of necessary evidence, analysis and testimonies that represent the interests of Client in all disputes that may arise during the term of the Works Contract;
- Pre-approval of the interim payment application and sending it for final approval;
- Verification of compliance of equipment and devices received;
- Review of technical and attest documentation for devices and equipment;
- Attend and supervise the taking over and final taking over committee;
- And other duties delegated to the Consultant in Works Contract.

The Consultant shall obtain the specific approval of the Client in the performance of his duties before taking the following actions:

- 1) Agreeing or determining any matter, which will change the Contract Price of the works contract;
- 2) Giving consent to a Sub-contractor for which a different sub-contractor is named in the works contract;
- 3) Final consent to Performing Design prepared by Contractor;
- 4) Agreeing or determining a time extension for the works contract;
- 5) Instructing an Administrative Order which is expected to change the Contract Price for works contract or in any change in the scope, character or quality of the works. No Administrative Order shall be given by the Consultant without the consent of the Client regardless of whether it will change the price or not (including the change of materials and design);
- 6) Issuing an Administrative Order for the use of the provisional sums/ contingencies/ day works;
- 7) Issuing a Suspension Order.

Under this Contract, the Consultant shall be responsible for:

I. Pre-construction activities

These activities will initiate with the award of the Works Contract and ceases with the commencement of the implementation. Most of the pre-construction activities (reviews, time and activity planning etc.) will be performed in the main office (premises of the Consultant).

a) Supervision of Performing designs preparation

The Contractor may subdivide the Performing design of the structure into design packages in accordance with the type and schedule of works. Every design package or whole Performing

design will be submitted in advance to the Consultant for acceptance. The design packages must relate to the significant and clearly identifiable parts of the Building Permit Design and address the design requirements described herein. The design packages shall facilitate the review and understanding of the Building Permit Design as a whole and shall be produced and submitted in an orderly, sequential and progressive manner. During the Supervision of preparation of Performing designs, the Consultant shall carry out the following but not limited to:

- Monitoring the preparation and control of compliance of the Performing design with the Building Permit, the Building Permit Design, and all relevant laws, standards, regulations, and other documents that define the content and scope of the project;
- Control that all parts of the designs are mutually harmonized and whether designs solutions can be implemented on the site;
- Control whether the project specifies technical measures for environmental protection and prevention of harmful effects on land and facilities in the environment during the implementation of the projected works and later during the exploitation phase;
- Control of the characteristics of the materials proposed within the projects from the aspect of justification and adequacy;
- Control definitions of the technical conditions for the executions of works for each item, specific descriptions of the quality control methods of applied materials and work performed, which clearly and precisely must present the tests to be performed and the criteria to be met;
- Consent on Performing designs in writing and informing the Contractor.

b) Other Pre-construction activities

Within this, the Consultant shall:

- Ensure that all Consultant's Representatives on the sites are prepared to act with a common approach and perform the activities in the same manner and accordance with the rules and procedures of the Project;
- Prepare a detailed time and activity schedule (supervision plan), for easy monthly (minimum) updating throughout the duration of the contract and with reference to reporting requirements;
- Mobilize and set up in the on-site offices at the premises, which will be provided by the Contractor as indicated in the works contract;
- Confirm the responsibilities and duties of the supervisory staff with the MoCTI, IZS, and the contractor;
- Mobilize the supervision staff to the site per the works contract signature and demobilize supervision staff per work completion;
- Ensure/check that all activities/formalities and in particular, all Supervisor's responsibilities are fulfilled before the works are carried out or started up for Works Contract signed or taken over, such as insurance of works, detailed Implementation Program, Notice of Commencement Order, approval of contractors representative and other staff, approval of sub-contractors, suppliers (of Works Contract), supply of documents of contractors, data for setting-out, safety on site, machinery and equipment used in the construction works, approval of means and format of the communication and reporting;
- Hold a kick-off meeting with the IZS, PIU, and the Contractor and keep the minutes of the meeting;
- Agree on the timing and commencement of the works.

II. Construction supervision

The Consultant shall provide full supervision services during the construction works on behalf of the Client.

These services will commence at the Commencement Date of the Works Contract and will continue until the temporary acceptance and issuing of the taking-over certificate.

The Consultant's services will include but not be limited to:

- Overall day-to-day supervision, including, but not limited to, management and planning, cost and quality control, reporting and monitoring physical and financial progress of the works contract(s) and related activities;
- Organization of the bi-weekly site meetings, and ad hoc site meetings, whenever necessary, with the contractor(s) and other related parties (IZS, Client, Municipality, etc.), if any, to monitor the progress of works to ensure sound and timely completion of the works in the desired quality;
- Carry out quantity surveys to verify the progress of the works;
- Checking and approving the quality of executed works, quality of built-in materials and installed equipment, all test runs of completed works along with the tests proving the achievement of guaranteed parameters set out in the Works Contract(s), and all related activities taken by the contractor(s), checking quality certificates, approvals, statement of compliance, certificates, guarantees etc.;
- Prepare post-contract documentation, checking the Contractor's invoice(es), that amounts claimed have actually been incurred in accordance with the requirements of the works contract(s), issuing the certificates of payment, variation orders, take-over certificates, payment certificates, performance certificates etc.;
- Follow-up on cash flows and monthly progress time schedules;
- Control the Contractor's hand-over of completed works, review and approve the as-built drawings and Operation and Maintenance Manuals prepared by the contractor(s) postconstruction activities;
- Review and approve the testing plans, performance test, and commissioning plans in accordance with the conditions of the Works Contract(s);
- Carry out the take-over inspections;
- Control the trial operating periods, performance tests and the handing-over of the works to the Client;
- Engage the supervision side in the settlement of disputes;
- Prepare and submit Progress Reports (weekly, monthly), which include progress reporting, photos, physical and financial progress schedules, and minutes of meetings related to the reporting period;
- Supervise the implementation of environmental, OHS and community safety-related activities as outlined in the ESMF of the Project and further defined in the ESMP, required by the WB Environmental and Social Standards and the relevant national regulation;
- Prepare post-contract documentation, checking the contractor's invoice(es), that amounts claimed have actually been incurred in accordance with the requirements of the works contract(s), issuing the certificates of payment, take-over certificates, payment certificates, performance certificates etc

Site supervision will include supervision of works given in Annex I of this ToR that includes a brief description of work per type of work.

Within this phase, the Consultant's services include a check of the Contractors' methodology proposal of works execution together with the time schedule, which has to be harmonised to the

Contractors' obligations in regard to the contracted time schedule and cost of works. The Consultant will be responsible for controlling if all required elements are executed in accordance with the approved design.

III. Equipment control and testing services

The Consultant's services will include but not be limited to:

- Monitoring and ensuring timely purchase and delivery of the equipment at the specific installation site,
- Acceptance of equipment delivered from the plant to the specific installation site,
- Quality control of installations and performed works on installations,
- Check-up of documents availability,
- Check-up of completeness of equipment in accordance with packing lists,
- Check-up of completeness of spare parts and accessories in accordance with documents,
- Check-up of components, assembly parts and materials,
- Check-up of delivered equipment integrity,
- Compliance with foundations equipment mounting,
- Visual inspection of assembly and check-up of equipment as a whole assembly,
- Applicable testing of the equipment,
- Set out basic principles for the safe and reliable operation of equipment as a reference for the Contractor(s) to prepare his O&M manual,
- Check-up the integration and compatibility of newly installed equipment into the existing system(s),
- Supervise the implementation of environmental, OHS and community safety-related activities as outlined in the ESMF of the Project, further defined in ESMP of the sub-project, required by the WB Safeguards Policies and the relevant national regulation;
- Supervision of training to be provided by the Contractors.

IV. Completion, commissioning and handover activities

The Consultant's Services during the commissioning and handover of the performed works will include but not be limited to:

- Carry out and/or supervise the technical inspections, tests, and verifications before Works Contract milestones and Client acceptance;
- Carry out the taking-over inspections;
- Control, approve and compile the As-Built documents prepared by the Contractor;
- Providing assistance in the work of the Commission for the handover of works; preparation of documentation and participation in the work of the Commission for final settlement;
- Supervision of works on the elimination of deficiencies according to the remarks of the Commission for technical inspection of works.

4. Location and timing

4.1 Location

The operational base and main office of the Consultant will be established on his premises. Once established, the site offices of the Contractors will provide additional premises for the staff of the Consultant.

4.2 Commencement date and period of implementation

The intended commencement date is August 2024, but the actual commencement date will be defined with the signature of the Contract. The period of implementation of the contract will be 14 months starting from the commencement date.

The Consultant will carry out the services in line with a detailed time schedule to be submitted as part of his proposal, which could be changed during the negotiations in order to reflect the comments and/or requirements by the parties.

5. Consultant requirements

5.1 Personnel

The Consultant shall establish his Team in accordance with the needs and requirements of this ToR. The Team shall consist of a core team made of key experts with the qualifications and skills defined in **Error! Reference source not found.**, below and non-key experts.

The Consultant is obliged to ensure adequate staff in terms of expertise and time allocation, as well as needed equipment, in order to complete the activities required under the scope of work and to achieve the objectives of this Contract in terms of time, costs, and quality. The Consultant is expected to be flexible in terms of travelling.

All experts shall be independent and free from any conflicts of interest in the responsibilities. The experts should have appropriate personal licenses for provision of supervisory services under this ToR, or a declaration stating that they shall apply for and receive the license in no more than 1 month after the announcement of the award.

The Consultant shall secure that the construction sites are permanently staffed with the relevant key experts at any time during the construction/installation phase.

Note that staff of the public administration of the beneficiary country (Republic of Serbia) cannot be proposed as experts.

The Project language is English. All the team members assigned by the Consultant must be able to communicate effectively in English. A sufficient number of the Consultant's team should be fluent in Serbian, especially the staff assigned to be on site.

The Consultant shall provide adequate administrative staff (secretary, translators, drivers accountant) needed to support the expert team.

5.1.1. Key experts

The team should include key experts with the qualifications and experience listed below, as well as non-key experts, and as a minimum, the Consultant shall provide the following experts:

Title	Qualifications/Experience	Skills
Team Leader	Education: Have as a minimum MSc Degree in civil engineering or another relevant field;	Excellent command of the English language. Computer literacy.

 Table 1. Key experts for the assignment

	Relevant professional experience: At least 15 years of general experience; Experience as a team leader/project manager in the successful implementation of at least 2 contracts for works supervision on public buildings (schools, railway stations, bus stations, hospitals, malls industrial facilities etc) construction/reconstruction.which were executed according to the FIDIC or similar model contract (i.e. WB model) in the investment value amount of at least 15 million euros each. Experience in the railway sectior will consiedere as an advantage.	Knowledge of the Serbian language will be an advantage
Architectural Engineer	Education: Have as a minimum MSc. Degree in Architectural Engineering Relevant professional experience: At least ten (10) years of general professional experience. Participation in at least one (1) project in the last seven (7) years in works supervision on public buildings (schools, railway stations, bus stations, hospitals, industrial facilities etc) construction/reconstruction. Preparation of technical documentation and/or works supervision for railway stations shall be considered an advantage. Valid license 300 or 301 or 302 or 400 or 401 (or new licence number equivalent)	Excellent command of the English language. Computer literacy. Knowledge of the Serbian language will be an advantage
Civil Engineer	Education:Have as a minimum MSc. Degree in CivilEngineeringRelevant professional experience:At least ten (10) years of general professionalexperience, of which at least seven (7) of relevantexperience in execution of works or workssupervision in the railway sector.Participation in at least one (1) project in the lastseven (7) years for railway infrastructure workssupervisionrelatedtothe construction/reconstruction of tracks on the publicrailway infrastructure.	Excellent command of the English language. Computer literacy. Knowledge of the Serbian language will be an advantage

	Valid license 315 or 415 or 412 (or new licence number equivalent)	
	Education: Have as a minimum MSc. Degree in Electrotechnical Engineering	
Electrotechnical Engineer	At least ten (10) years of general professional experience, of which at least seven (7) of relevant experience in execution of works or supervision of works in the railway sector.	Excellent command of the English language. Computer literacy. Knowledge of the
	Participation in at least one (1) project in the last seven (7) years for railway infrastructure works supervision related to electric power installations.	Serbian language will be an advantage
	Valid license: 350 or 450 (or new licence number equivalent)	
	Education: Have as a minimum MSc. Degree in Mechanical Engineering	
Mechanical Engineer	Relevant professional experience:At least 10 years of general professionalexperience, of which at least 7 of relevantexperience in execution of works or supervision ofworks in transport/industrial sector.Participation in at least one (1) project in the lastseven (7) years related to the supervision of theworks on the installation of Heating, ventilation,and air conditioning (HVAC) systems.	Excellent command of the English language. Computer literacy. Knowledge of the Serbian language will be an advantage
	<u>Valid license 330 or 430 (or new licence number</u> equivalent)	
	<u>Education:</u> Have as a minimum MSc. Degree in Civil Engineering	
Hydrotechnic installation engineer	<u>Relevant professional experience:</u> At least ten (10) years of general professional experience, of which at least 7 of relevant experience in execution of works or supervision of works in transport/industrial sector.	Excellent command of the English language. Computer literacy. Knowledge of the Serbian language will be an advantage
	Participation in at least one (1) project in the last seven (7) years related to supervising the works on drainage, water supply or sewage systems.	

Valid license 314 or 414 (or new licence number equivalent)	

5.1.2. Non-key experts

The Consultant is expected to select and hire other experts, including but not limited to telecommunication engineers, civil engineers, rail signalling engineers, electrotechnical engineers, mechanical engineers, architectural engineers, RAMS, environmental, social and OHS specialists or any other engineers relevant to the assignment. They must indicate clearly which profile they have so it is clear which fee rate in the budget breakdown will apply. All experts must be independent and free from conflicts of interest in their responsibilities.

The pool of non-key experts is expected to support/complement all the activities of the key experts. Possession of a relevant Serbian license for design/construction will be required, as applicable.

The Consultant is expected to include other positions they consider necessary for the assignment in their proposals. CVs for non-key experts should be submitted in the proposal. However, they would not be subject to evaluation.

5.2 Office accommodation

The operational base for the activities will be established in the premises of the Consultant while the site offices of the Contractors will provide additional premises for the staff of the Consultant.

The Consultant shall ensure that experts are adequately supported and equipped. In particular, it shall ensure that there is sufficient administrative, secretarial, and interpreting provision to enable experts to concentrate on their primary responsibilities.

No equipment is to be purchased on behalf of neither Client and PIU or as part of this service contract or transferred to the Client or beneficiaries at the end of this Contract.

6. Outputs

6.1 Outputs requirements

The Consultant shall prepare, at minimum, the below-listed reports during the period of execution of the Contract.

All deliverables (draft and final versions) shall be prepared in both, English and Serbian language.

The deliverables should be delivered in accordance with the following timetable:

Deliverables	Description	Due date	Format
Inception Report	Describe the initial findings, progress in collecting data, any difficulties encountered or expected, and the	No later than 1 month after the	Digital in English and

Deliverables	Description	Due date	Format
	proposed approach, taking into consideration the situation at the starting date of the assignment. It will also set out a detailed work plan to complete the activities. If there are any proposed modifications to the original Terms of Reference due to changed circumstances after arrival on the site, these are to be discussed and agreed upon in principle with the Client before the submission of the Report (up to 20 pages) Subject to the approval of the Client	commencement date	Serbian language
Supervise Basis Report	The Supervise basis report shall summarise all data accessed and be used as input to the construction. It shall include a section on the validation of data and lack of data if any. (up to 10 pages) Subject to the approval of the Client.	No later than 1 month after the commencement of supervision	Digital
Monthly Reports	Description of the level of implementation of the contractor's dynamic plan, possible problems and proposals for their solution, review of adopted works by variations and explained proposal for change/variation, plan for engagement of supervision for the next period, data on inspections, data on incidents during works, E&S procedures implementation and others important events. Monthly reports must also contain an overview of all receivables submitted by the Contractor since the beginning of the implementation of the construction contract. This review should be made in a convenient form that allows consideration of requests, previous activities, and key deadlines for resolving requests. The monthly report should also contain photo documentation (up to 20 pages). Subject to the approval of the Client.	Not later than 7 days after the end of the month	Digital
Works Contract Completion Report	 On completion of the works contract, upon the issue of the Taking-Over Certificate, within 15 days the Consultant shall submit a Completion Report to the IZS and Client. The main report must contain: Copies of the Taking-Over Certificate(s) Verified "as-built" drawings showing all revisions to the design of the works. A complete analysis of the complete cost of the works. An overview of the actual progress of the works detailing reasons for delays and/or extensions of time Commissioning report for the various mechanical and electrical components of the works Details of all permits required for the operation of the works An overview of site safety procedures, any problems in this regard, and recommendations for improvement. 	No later than 15 days after issue of Taking-Over Certificate of works contract.	Digital and 4 hard copies in Serbian and 2 hard copies in English language

Deliverables	Description	Due date	Format
	 An overview of the Consultant's working practices and resources. 		
	 An assessment of the quality of materials and workmanship any problems in this regard and recommendations for improvement. 		
	 Details of technical difficulties encountered and how these were overcome. 		
	 Details of administrative difficulties encountered and how these were overcome 		
	An appraisal of the strengths and weaknesses in the contract documents and in the design of the works (including but not limited to the Special Conditions of the works contract, technical specifications, price schedules, design details, and drawings) with recommendations on how improvements could be made for future contracts.		
Quality Assurance (QA) Dossiers	 In addition to the Completion Report, the Consultant shall submit a comprehensive QA Dossier containing all original requests for inspection, approval, test forms, and certificates relating to the construction of the works, materials and equipment incorporated into the works. Documentation in the QA Dossier must include but not necessarily be restricted to: All manufacturer's test certificates for materials, if any Performance test certificates and warranty agreements where applicable for mechanical 	The QA Dossier will be compiled during the course of the works contract and it must be available for inspection by the Client at any reasonable time	Digital and 4 hard copies in Serbian and 2 hard copies in the English language
	and electrical equipment. Requests for inspection (if any), approvals and test results		

6.2 Submission and approval of outputs

All reports and other outputs must be written in English and translated into Serbian. The draft version of the reports (electronic copy) shall be submitted to the Client through PIU. The commenting period for the outputs is 2 weeks. In case of no reaction to the submitted outputs, such status will be interpreted as "no objection" and shall be deemed approved.

The Consultant shall prepare the Minutes of Meetings (MoM) for site meetings, monthly progress meetings, as well as all other meetings. All Meetings must be ensured to lead to clear decisions, persons in charge, and deadlines. Minutes of Meetings will be distributed by the Consultant. MoM of the site meetings must be commenced within 7 calendar days by participants. MoM for the monthly progress meetings will always be on the agenda of the next monthly meeting to be approved and followed up.

All deliverables will be sent as electronic copies to PIU.

Hard copies will be sent to the following addresses:

• Serbia Railway Sector modernization project – Project Implementation Unit

Uzun Mirkova street No. 3, office 31-36, 11000 Belgrade, Republic of Serbia.

Annex 1 – Brief Description of Works

1. Executed works

In the period spanning from 1996-2022, the following works are carried by the TI-CIP designs: Eight electrified tracks out of a total of ten planned; six-passenger platforms, with five of them being fully equipped; a reinforced concrete slab at an elevation of 105.00, covering an area of 50,972 m²; Metro tunnel under the tracks and underpasses in the length from the first to the sixth platform; Road from Bulevar Kneza Aleksandar to Dragana Mance Street with a connection at elevation 105.00; Part of the electrotechnical and telecommunications infrastructure, part of the communal infrastructure (water supply, sewerage network etc).

2. Works planned for execution

Interior arrangement works

Several interior areas of the station is subject of planned project, with works on flooring, tiling, covering of ceilings, arrangement of technical, arrangement of official and employee office spaces, as well as sanitary and other facilities, including installation of partitioning walls and other prefabricated systems.

Also, passenger routing works including marking of transparent barriers with visual indicators, with covering, equipping and marking of stairs.

Construction of outer and inner façade

The project includes construction of the buildings outer façade, structured as a glass facade with aluminum framing, including the steel façade sub-construction, as well as internal facades facing the track platforms and corridors – double glass packages.

Façade also includes composite stone paneling, which is to be placed on a metal sub construction. As well as synthetic stone façade covering, which is to be applied over a Q mesh, anchored onto the construction.

Construction and electrification of tracks

Construction of tracks No. 1 and No. 2 and turnout track No. 11, after which the planned station layout will be completed. The designed solution for the construction of the track superstructure includes the construction of a ballast less track on the already executed reinforced slab in the length of 417 m (track No. 1) and 420.00m (track No. 2). The electrification system in Beograd Center Station uses a single-phase 25kV, 50Hz system, and newly designed overhead contact line for tracks 1 and 2 will follow the solutions applied on other electrified tracks in the station.

Access roads

The project includes construction of several new access roads, namely Road B which is a station access road, which includes pedestrian lane, parking area and a roundabout, and road C which is an access road to the CTC, which includes employee parking area.

Internal horizontal and vertical communication

Equipment for internal horizontal and vertical communication is planned for installation, including several lifts, conveyors and escalators, as part of the mechanical design books. Works include supply and installation of equipment as well as all work on electrical and other installations related to full functionality of the installed equipment.

Greening

The design will incorporate greening and valorization of existing vegetation. The design will be connected to the traffic and architectural solution and contents on the ground floor.

Equipment and furniture

In terms of equipment and furniture, the corresponding part of the complex will be equipped with appropriate elements for sitting and rubbish bins at the places where pedestrians are stopped. A space for leaving bicycles in a bicycle rack will be provided along the road after the end of the bicycle path. Container-type facilities for switch drivers will be in the platform area, consisting of 2 units with a canopy and electrical installations.

Pedestrian surfaces, paths, and stairs

For pedestrian surfaces, paths, and stairs, a pedestrian square will be organized in front of the entrance to the station building at an elevation of 85.00, which will also serve as a roundabout for firefighting vehicles. Emergency and supply vehicles will have access to this area via a temporary road. The square will be greened with low and medium-high vegetation that blocks the view towards the technical rooms and the parking area.

Equipment for informing and directing passenger movements

In terms of equipment for informing and directing passenger movements (info equipment), info equipment will be installed in the lower station square, station building below elevation 105, complete first platform, longitudinal half of platform II next to track 2, parts of other platforms in the area of new vertical communications, and parts of the subway in the area of new vertical communications. The arrangement of the railway space intended for passengers and other users in terms of the type and sequence of installation of info equipment will be carried out in accordance with local conditions so that passengers and users can easily recognize the contents of the station. The arrangement of access areas will be adapted to all passengers, and places will be specially marked for people with reduced mobility.

Thermomechanical installations

In terms of mechanical installations and thermomechanical installations, the facility will be connected to the remote heating system of Belgrade Power Stations via two primary heating substations located at an elevation of 85.00. The project will envisage various installations in the facility, including air heating and cooling systems, ventilation systems, Fencoil systems, floor heating system, preparation of domestic hot water, air curtain systems, cooling of the server room, VRF and DX systems, electric floor heating, electric radiators, and ventilation of the diesel unit. A diesel generator with a capacity of 825 kVA will be provided as a backup power supply.

Telecommunication and signaling installations

This project aims to integrate all railway functionalities into a single technological unit, while also considering the existence of multiple independent and technologically connected railway companies and public services. To achieve this, various telecommunication and signaling systems will be installed, including an electronic network for communication and data transmission, a telephone system, a visual notification system for passengers, a clock system, and wireless internet distribution. Additionally, a stable fire alarm system, an automatic shutdown management system, an SOS system, and a tour registration system for employees will be implemented to ensure passenger safety. The complex will also feature technical protection systems such as a video surveillance system, an access control system, a burglar alarm system, a video intercom system, a radio network for security services, and the integration of all technical protection systems.

Electrical Installations

The new design will provide electric power installations for the station building below elevation +105.50, including the first platform with tracks 1 and 2, the station building from elevation +80 to +105.50, external lighting of pedestrian approaches from the lower station square, and existing contents belonging to the station. The design will involve the connection of the facility to the power grid according to technical conditions, the construction of a new substation 10/0.4kV, 2x1250kVA with dry transformers, and the installation of unique electricity metering for all consumers of the station building below elevation +105.50. A backup power source (diesel-electric generator) will be provided for all necessary consumers of the station building below elevation +105.50.

The electrical installations will also include power distribution in the building from the connection to the final consumers, installation of internal lighting of the building (working, evacuation, anti-panic), electrical shock protection installations, and installations of protection against atmospheric discharge (lightning protection installation). The future works will involve the supply of all consumers of station buildings below +105.50 elevation, installation of external lighting in the lower station square, installation of available connectors and outlets for powering electrical consumers, installation of sockets and outlets for powering technological electrical consumers, and a system of central supervision and management of technical systems.

Hydrotechnical Installations - Water Supply and Sewerage Network

The new connection will be built to the existing city water supply network (Ø150) in Prokupacka Street for the planned water supply to the railway facility below the elevation of 105.00. A water meter shaft of the required dimensions will be constructed within the plot, and independent internal distribution networks of the required diameters for sanitary and fire-fighting water will be executed. A reservoir with a volume of 200 m3 and a pumping station for the fire hydrant network will be constructed to guarantee the additional required amount of fire water in the event of a fire. The pipeline routes of the internal water supply network will go through technical galleries, buildings, and partly in the ground floor of the lower station square.

For the sewerage network, the complex will have a separation system for sewerage, and connections will be made through the yard of the Belgrade Beer Industry complex of rain sewers (\emptyset 1600) and fecal sewers (\emptyset 250) to the city's sewerage network via boundary shafts. Planned fecal sewage installations will accept used water from the facility of the station building below the elevation of 105.00 and will be connected to the existing internal fecal sewage network in the complex. A storm sewer network will be planned for the drainage of the roof of the station building and newly designed roads on the slab and approaches to the lower square. The storm sewer network will be connected to the existing internal storm sewer network of the complex, which flows into it through the boundary shaft near the wet collector. The section of the internal storm sewer network in the internal road from the direction of Postavnica will be connected to the existing storm sewer shaft in Prokupacka street, which will remain with the change of status to internal storm sewer within the boundaries of the plot.