

REQUEST FOR EXPRESSIONS OF INTEREST

CONSULTING SERVICES – FIRMS SELECTION

Republic of Serbia

The Western Balkans Trade and Transport Facilitation Project (WBTF)

Project ID No. P162043

Assignment Title:

Technical Control of Designs and Supervision Services for Improvement of Railway Level Crossings

Reference No. SER-WBTF-QCBS-CS-22-23

The Republic of Serbia (RoS) 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 Balkans 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 expected to perform following activities as a part of the consultancy service, grouped into 2 phases, as follow:

PHASE 1 – DESIGN REVIEW

Activity 1: Preparatory works (site-visit; Inception phase)

Activity 2: Technical Control of Design (Design phase)

PHASE 2 - SUPERVISION

Activity 3: Supervision of works (construction and equipment installation; Implementation phase)

Activities of the Consultant for supervision of works can be divided into two main sub-activities:

1. Construction and installation activities
2. Post-construction activities

Activity 4: Final works.

It should be noted that overlapping of phases is possible and this will depend on the work dynamic to be prepared by the works contractor(s) to be selected.

The period of implementation of the contract will be 42 months starting from the commencement date. This period includes 18 months for services related to technical control of designs and supervision of works and 24 months of Defect Liability Period.

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 company or consortium that can demonstrate extensive experience in technical design control and supervision services.

The following shortlisting criteria will be applied to all consulting firms that have submitted EoI:

- i) The Consulting firm must be a legal entity;
- ii) The consultant (individual company or joint venture altogether) has implemented and successfully completed, during the last ten years (from the January 2012 up to the deadline for the receipt of applications indicated below):
 - at least one (1) contract related to design and/or design technical control for RLCs' equipment installation. Contracts for design and/or design technical control for construction/reconstruction/rehabilitation of railway which included RLCs equipment installation, as well, shall be considered acceptable for this criterion. Participation of the Consultant should be minimum 60% of the contract brought as reference; and
 - at least one (1) contract related to supervision of RLCs' and equipment installation or works for safety improvement of RLCs. Contracts for supervision for construction/reconstruction/rehabilitation of railway which included RLCs equipment installation and/or rehabilitation of RLC, as well, shall be considered acceptable for this criterion. Participation of the Consultant should be minimum 60% of the contract brought as reference
- iii) Experiences in railway sector in Republic of Serbia will be advantage.

As a proof, the Consultant firm shall prepare a table listing following information: name of the relevant assignment, name of a firm that conducted the assignment, short scope of work, year of contract 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, EoIs of JVs will be evaluated based on composition of JV submitted whereas experience of other firms not included in the JV, including proposed sub consultants, will not be considered in the evaluation.

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

MoCTI, as 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. In the event that more than eight firms fulfil all the qualifying criteria above, the MoCTI shall use the following criteria to rank the firms 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, bullet 2) above, and in case of equality on this criterion, then the value of the eligible part (the value of the activities carried out by the firm) of the projects found eligible in para (ii, bullet 2).

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).

The attention of interested Consultants is drawn to paragraphs 3.14, 3.16 and 3.17 of 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 **November 25, 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:	lilijana.dzuver@mfin.gov.rs lilijana.stojic@mgsi.gov.rs	

TERMS OF REFERENCE

for

Technical Control of Designs and Supervision Services for Improvement of Railway Level Crossings

Western Balkan Trade and Transport Facilitation Project (Part referred to Republic of Serbia)

1. Background information

1.1 Beneficiary country: Republic of Serbia

Contracting authority/Client: Ministry of Construction, Transport, and Infrastructure of Republic of Serbia (MoCTI).

Final Beneficiary: Infrastruktura železnica Srbije (Serbian Railway Infrastructure - IZS).

1.2 Relevant country background

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 (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 Project.

At the national level, Project Implementation Unit (PIU), within the MoCTI, has primary responsibility for Project execution ensuring that the Project development objectives are met.

These Terms of References (ToR) refers to the services of consulting company who will be responsible for:

1. technical control of designs for the civil works and installation of equipment on the specific railway level crossings (RLCs) to be prepared by the Contractor and
2. supervision of execution of civil works, purchase and installation of equipment on the RLCs compliance with approved designs, to be implemented under the World Bank Contract "Design, supply and installation".

MoCTI with support of IZS, as Final Beneficiary intends to engage a highly qualified consultant to provide above given services for 58 RLCs, in total, listed in the Appendix 1 of this ToR.

1.3 General information

Level crossing represents weak spot for both traffic modes – road and railway. Due to increased traffic, which especially refers to road traffic, intersections of main roads with railway lines, i.e. level crossings, are dangerous points with traffic accidents. According to the European Railway Agency in the European Union every year on RLCs occur over 1,200 traffic accidents. The operationalization of functioning RLC is key to the objective of improving transport efficiency and predictability for the railway trade flows in the Western Balkans. EU Member States reported that in 2015, more than 400 RLC users were killed and 400 were seriously injured in a total of about 700 accidents occurring on more than 120,000 RLCs in the EU. Analysis of these accidents primarily identifies human factor as primary cause, while other reasons such as current state of pavement, vehicles or equipment are often disregarded.

Basic requirement for level crossings safety is reduction of number of accidents. Level crossings are becoming a national problem having in mind that the number of motor vehicles is increasing every year.

1.4 Current state of affairs in the relevant sector

Due to its position on the geographic borderline between the East and West, Serbia is often referred to as a gateway of Europe. The total length of railway network in RoS is 3,809 km. The important European Corridor X – the international highway and railway corridor, part of the core TENT-T network through RoS (Figure 1 and Figure 2), provides excellent connections with Western Europe and the Middle East.

In RoS, Core Network extends for 1,414 km and it encompasses Corridor X (with branches Xb and Xc -770 km), Route 4 (421 km), Route 10 (84.5 km) and Route 11 (138 km). Except for one section on the Corridor Xc (Nis - Dimitrovgrad), Corridor X is electrified with 108 km of double track sections and 219 km of single track sections. As for Route 4, connecting RoS with Montenegro and Romania, approximately 157 km is in very good and good condition, major part of route 4,212km is in medium condition, single track, electrified except for the section Pančevo - Vršac with diesel traction. Largest part of Route 10 traversing RoS is in good condition, and Route 11 section from Požega to Kraljevo is in very good condition.

Figure 1 TEN-T core Network corridors

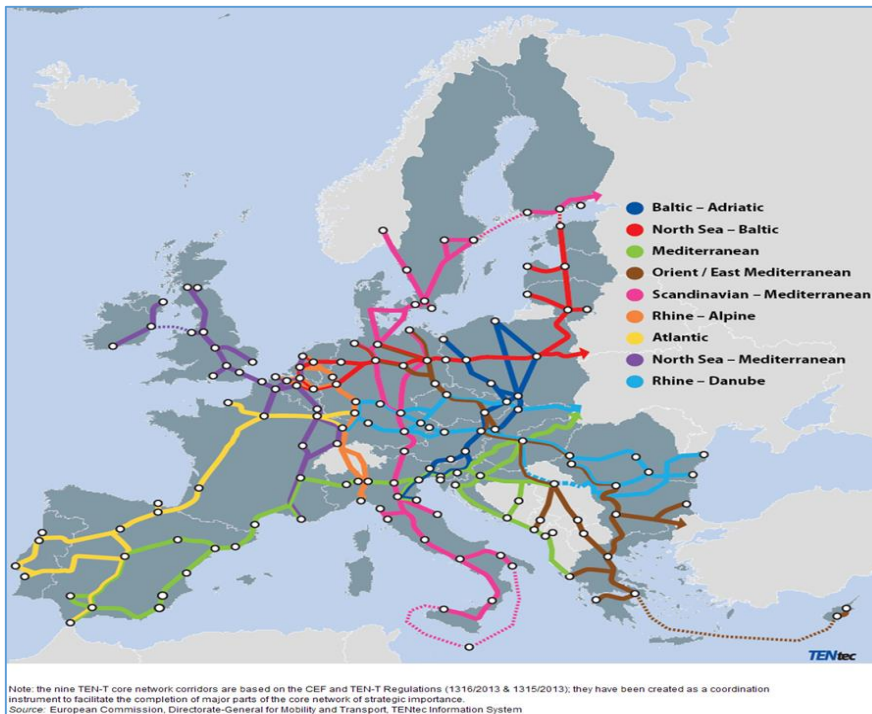


Figure 2 Extension of the TEN-T Comprehensive/ Core Network to the Western Balkan



There are many level crossings on the road and railway map of RoS which are „forgotten“, (i.e. poorly maintained) and which require increase of safety level, i.e. reduction of irregular events probability. There are approximately 2,100 locations with level crossings on the IZS network. The majority of level crossings (77%) are equipped with road signage. The remaining 23% are barrier and gated crossings with or without road traffic light signals.

Analysis of the level crossing present state from the aspect of safety gives conditions for further application of relevant measures for increasing the safety and interlocking level.

2. Objective, purpose and expected results

2.1 Overall objective

Objective of the Project is to reduce trade costs and increase transport efficiency in RoS. The Project consists of the following parts:

Component 1: Facilitating movement of goods across the Western Balkans. The component focuses on (a) the design and adoption and implementation of the National Single Window (NSW); (b) implementation of Electronic Data Interchange (EDI) for railways.

Component 2: Enhancing transport efficiency and predictability. This component will focus on (a) the adoption of an Intelligent Transport System (ITS), (b) the improvement of Railway Level Crossings (RLC) and c) development of National Transport Strategy.

Component 3: Improve market access in services and foster regional investments (this Component is covered by grant resources from other development partners, which complements the support from the World Bank Group) and

Component 4: Support project implementation unit (PIU) and provide additional technical support, including for policy coordination, operating costs, and monitoring and evaluation of the Project.

The Consultant shall support the successful implementation of the Project to time, quality and cost constraints thereby to bring the chosen RLCs into compliance with TENT standards by 2023 in line with relevant national policies and strategies.

2.2 Objective of the assignment

The term “the Contractor(s)” refers to the contractor to be selected for work contract(s).

The term “works contract” refers to the contract for design, civil works and purchase and installation of the equipment for RLCs to be signed with selected contractor(s).

The main purpose of this Contract is to engage highly qualified consultant company to perform

- (i) services of technical control of designs to be prepared by the contractor(s), ensuring that they are in line with national legislation requirements, international standards, designing schedule(s), contractor's dynamic plan, respectively defined deadlines, procedures and taking into account all relevant circumstances, as to ensure project documentation whose implementation in the field will increase safety at subject RLCs
and
- (ii) supervision services ensuring that works are implemented in accordance with the provisions of work contract(s) to be signed and that RLCs are improved vis a vis safety and efficiency of the signaling and interoperability.

Subject services will be conducted for 58 level crossings identified by IZS as weak points and shall be in function of rising security of railway and road traffic.

Procedure for selection of the contractor(s) for works contract is on-going. All 58 RLCs are divided into 2 lots. Contractor(s) to be selected will be responsible to prepare (i) conceptual designs, required for obtaining of location conditions and (ii) preliminary designs, (iii) purchase and install equipment and (iv) execute civil works.

2.3 Results to be achieved by the Consultant

The Consultant shall be responsible for the following results:

- Positive Report after Technical Design Control for each RLCs (58 in total) is issued;
- High quality of design(s) in accordance with regulations, standards and technical/location conditions using engineering skills and knowledge is achieved;
- Problems that had arisen during design preparation and/or change of solutions, in respect of ToR, if any, are solved;
- Construction approval, for each RLCs (58 in total) by the relevant authority issued based on the Technical Control Report;
- Compliance with World Bank Environmental and Social Framework (ESMF), Serbian pertinent legislation¹ and Project documents developed to comply with the WB ESF, is ensured;
- High quality construction is achieved and (all) works contract(s) is carried out timely and in full compliance with the engineering design, technical specifications and other works contract(s)'s documents;
- Timely identification and assistance in the resolution of issues (be they legal, technical, financial, environmental, social), and any resulting disputes and complaints arising in connection with the works contract(s) ensured;
- Other tasks on an ad hoc basis, per request of the Client, executed.

¹ Where gaps between the World Bank Environmental and Social Standards (ESS) and the national requirements are identified the more stringent one will prevail

3 Scope of the work

3.1 General

The Consultant shall carry out the specific tasks and activities as listed below and develop a well-functioning co-operation mechanism with the PIU and IZS on the basis of the following principles:

- a) Consultation and consent - the responsibilities for the general implementation of the Project are delegated to the PIU. MoCTI is the Client for all present and future contracts for works and/or services and for this Contract, as well. The PIU/MoCTI and the IZS, shall be involved in the decision making processes regarding the Contract implementation and shall be kept informed in all stages related to works contract(s) monitoring and implementation. IZS and several municipalities are among the final beneficiaries of the works contract(s) and they should be satisfied with all results and outputs. The cooperation with the final beneficiaries will be sustained and managed by the PIU;
- b) Know-how transfer - although the Contract does not contain a formal training activity, on the job training and instruction/mentoring in supervision will be provided to IZS to strengthen ownership and capacities;
- c) Efficiency - the cooperation with the IZS and PIU/MoCTI shall be designed to avoid any delay or discontinuity in the decision making process or any dilution of the Consultant's responsibility.

Services under this contract will be implemented in the territory of RoS as shown in the Figure 3, Geographical location of the RLCs. The Link for access to the map and geographical location of the RLCs is following address:

<https://www.zetp.rs/Prelazi>

user WBank

pass WorldB

All 58 RLCs, subject of this Contract, are divided into two groups. Procurement of design services, purchase and installation of equipment and construction works, will be done in lots respecting this grouping.

Figure 3 Geographical location of the RLCs



3.2 Specific activities

The Consultant is expected to perform following activities as a part of the consultancy service, grouped into 2 phases, as follow:

PHASE 1 – DESIGN REVIEW

Activity 1: Preparatory works (site-visit; Inception phase)

Activity 2: Technical Control of Design (Design phase)

PHASE 2 - SUPERVISION

Activity 3: Supervision of works (construction and equipment installation; Implementation phase)

Activity 4: Final works.

It should be noted that overlapping of phases is possible and this will depend on the work dynamic to be prepared by the works contractor(s) to be selected.

3.2.1 PHASE 1 – DESIGN REVIEW

3.2.1.1 Activity 1 Preparatory works

Following the Kick-off Meeting to be held with the MoCTI/PIU representative(s) and IZS, the Consultant's first task shall be to visit all sites, to be familiar with the specific areas, to meet with the relevant stakeholders and to gather the necessary data. The IZS will supply the Consultant with the existing background documentation. Gathered

information, data and collected documents shall be included in the Inception Report, with a detailed description and assessment of the current situation.

The outline of the Inception Report shall be proposed by the Consultant. 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.

3.2.1.2 Activity 2 Technical Control of Designs

The Consultant shall organize his work as to ensure technical control services from the beginning of design preparation up to its completion, respectively in parallel with preparation of Preliminary Design by the works contractor(s).

In this respect, the Consultant will provide professional inputs, advices and support during preparation and implementation of the Preliminary Designs for specific Railway Level Crossings (the list of 58 RLCs is attached in Appendix 1) in RoS through the provision of appropriate suggestions, comments for designs and costing estimates. Activities on technical control for specific Preliminary Design shall be considered to be completed upon issuing of Report on the technical control by the Consultant.

However, if the Ministry in line rejects to issue Decision on approval for works (construction solution) due to defects of the Preliminary Design and/or Report on the technical control, the Consultant shall perform the technical control of revised Preliminary Design and issue new Report or made required corrections in the previously issued Report in accordance with the issued remarks no later than 2 weeks following receipt of the revised Preliminary Design. The Consultant shall not be entitled to any compensation based on that reason.

The Consultant shall execute Technical Design control of the Preliminary Design in accordance with the Law on Planning and Construction ("The Official Gazette of RS" No. 72/2009, 81/2009-corr., 64/2010-decision US, 24/2011, 121/2012, 42 / 2013- US decision, 50/2013-US decision, 98/2013-US decision 132/2014, 145/2014, 83/2018, 31/2019, 37 / 19– other Law, 9/2020 and 52/2021), Regulations on the content, manner and procedure of preparation and performing control of technical documentation and according to the class and purpose of the facility ("The Official Gazette of RS" No. 73/2019). Further, during the process of technical control of the Preliminary Designs, the Consultant must apply all legal and other regulations, technical norms and standards, while respecting quality norms. The Consultant shall execute Technical Design control of the Preliminary Design in accordance with the Law on Environmental Impact Assessment ("The Official Gazette of RS" No. 135/2004 and 36/2009). Respectively, while performing the Technical Control, the Consultant shall comply with following:

- Valid laws, regulations and quality standards related to the Services being provided;
- Requirements from this ToR and the Contract
- Requirements related to safety
- Positive practices for this type of Services.

PIU will, in addition to the ToRs for each specific RLCs (given as Appendix 2), collect and supply the Consultant with documentation relevant for the review and preparation of the Technical Control Report, which will include following:

- 1) Existing technical documentation of the railway track at the intersection of the railway with the road;
- 2) Geodetic survey of the intersection of the railway and the road;
- 3) Records of the railway commission on the current condition of the level crossings;
- 4) Timetable of official places;
- 5) Environmental and Social Management Framework (ESMF) for the Project;
- 6) Conceptual design and Location conditions for each of the specific RLC prepared by the Works Contractor(s) and
- 7) Preliminary design for each of the specific RLC prepared by the Works Contractor(s).

For the purpose of Technical Control of the Preliminary Design the Consultant shall be required to check, as minimum, following:

- Is the Preliminary Design prepared in accordance with the respective ToR;
- Is the Preliminary Design compliant with laws and other regulations, standards and norms relevant for designing and execution of the works for reconstruction and rising the security level on level crossings;
- Does the Preliminary Design include all elements needed for execution of the Works determined by the law, fully in accordance with the relevant regulations that define contents and scope of preliminary work content and manner in which the technical documentation should be prepared;
- Is the Preliminary Design prepared in accordance with the location conditions and whether it includes consents and approvals of all relevant institutions;
- Is geodetic work executed in accordance with requirements from the relevant ToR and for requested level of accuracy of data;
- Is the BoQ within the Preliminary Design complete and whether quantities and measurement units are correctly calculated and stated;
- Is the Preliminary Design compliant to the World Bank Environmental and Social Safeguard policies and guidelines and in line with ESMF.

All correspondence during the execution of the Services between the Consultant and works contractor(s) shall be made exclusively in writing in Serbian with translation on English language, and with copy to Supervision Consultant, PIU and IZS.

IZS shall ensure monitoring of design preparation and activities on technical control, as well as provide clarification of requirements given in the ToRs, when needed, and timely inform PIU on any identified major issue that might negatively impact on foreseen dynamic of Contract execution.

3.2.2 PHASE 2 - SUPERVISION

3.2.1 Activity 3 Supervision of works (construction and equipment installation)

The Consultant will set up an adequate organization, including monitoring system, to meet requirements for an efficient supervision of construction and installation activities

and administration. In this respect, 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(s) within the agreed program and budget and to the quality standards and environmental provisions stipulated in those contracts.

The supervision of works shall be implemented in compliance with the requirements of the relevant legislation and WB environmental and social requirements. Having said that, the Consultant should have a license indicating the eligibility to act as a Supervisor in RoS for signaling interlocking and civil works.

Wherever appropriate and not in conflict with the works contract(s), the Consultant shall exercise every reasonable care to protect the interests of the MoCTI.

The Consultant shall be responsible for the supervision of the works contract(s), including but not limited to the below items:

- Supervision of works according to the national legislation, obtained construction approval, signed contracts, approved designs, technical specifications, general and special conditions, drawings and breakdown of the overall contract price of the works contract(s);
- Give approval for the sub-contractors for the works, if any;
- Give Commencement Order;
- Pre-approval of the interim payment application and sending it to the IZS and PIU for the final approval;
- Attend the taking over and final taking over committee;
- Pre-approval for the draft final statement of account and submission of final statement of account to the IZS and PIU for its final approval;
- Approval of verification operations;
- Approval of any change of the key personnel of the contractor(s) that is listed in the works contract(s);
- Approval of material samples;
- Other tasks (as needed) and responsibilities assigned to the supervision in the related works contracts.

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

- Agreeing or determining any matter, which will change the Contract Price of the works contract(s);
- Giving consent to a Sub-contractor for which a different sub-contractor is named in the works contract(s);
- Agreeing or determining time extension for the works contract(s);
- Instructing an administrative order which is expected to change the Contract Price for works contract(s) 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 MoCTI regardless of whether it will change the price or not (including the change of materials and design);
- Issuing an administrative order for the use of the provisional sums/contingencies/dayworks;
- Issuing a suspension order.

Activities of the Consultant for supervision of works can be divided into two main sub-activities:

1. Construction and installation activities
2. Post-construction activities

3.2.1.1 Construction and installation activities

The Consultant shall, on behalf of the MoCTI, provide full supervision services during execution of construction and installation activities by the works contractor(s). To this respect, Consultant's services will include but not be limited to:

- Ensure/check that all activities/formalities and in particular all Supervisor's responsibilities are fulfilled prior to the works are carried out or started up for each 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;
- 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;
- Supervision of the traffic work in respect to (i) technology of the traffic flow for the duration of the works on the road crossing and temporary regulation of the road traffic during the reconstruction works and raising the safety level of the road crossing; (ii) planning of temporary and permanent vertical and horizontal signaling and (iii) proposal for technical and technological intervention on raising safety level on the railway and on the road with possible stages of realization;
- Supervision of civil works (work on railway line and work on road in proposed zone of work for upgrading RLCs) in respect to: (i) upgrading of substructure and superstructure on railway level crossing in zone of railway land (with cadastral plan, the ownership document containing the drawing of insurance elements) presented on geodetic layout; (ii) checking of the longitudinal profile and cross sections with drainage plan; (iii) review of marking plan and major points of level crossing, railway sections and road section and (iv) supervision during installation of rubber panels at level crossing zone;
- Supervision of electrical works - RLC safety device shall be equipped with diagnostic device, thus it is necessary to ensure that diagnostics of each RLC is carried out from the authorized centers. The Consultant will be responsible to control if all required elements are executed in accordance with approved design;
- Carry out quantity surveys to verify the progress of the works;
- Monitoring and ensuring timely purchase and delivery of the equipment at the specific RLC site,
- Acceptance of equipment delivered from the plant to the specific RLC site,
- Quality control of installation performed,
- Check-up of interlocking,
- 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 of foundation (bottom) for mounting of equipment,
- Control of the quality of installation,
- Visual inspection of assembly and check-up of the whole equipment,
- 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,
- Specify the principles for the operation and maintenance of the equipment, considering the IZS existing in-house maintenance management systems for other RLCs,
- Check-up integration of new, installed equipment into existing system,
- Commissioning of the completed systems on RLCs,
- Supervision of trainings to be provide by the works contractor(s) for equipment usage;
- Checking of 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.;
- Supervise implementation of environmental, occupational, health and safety (OHS) and community safety related activities as outlined in the ESMF² of the Project and further defined in the Environmental and Social Management Plan (ESMP)³, required by the WB Safeguards Policies and the relevant national regulation;
- Organization of the bi-weekly site meetings, and ad hoc site meetings, whenever necessary, with the contractor(s) and other related parties (IZS, PIU/MoCTI, Municipalities, etc.), if any, to monitor the progress of works to ensure sound and timely completion of the works in the desired quality;
- Prepare post-contract documentation, checking the contractor's invoice(es), that amounts claimed have actually incurred in accordance with the requirements of the works contract(s), issuing the certificates of payment, variation orders, taking-over certificates, payment certificates, performance certificates etc.;
- Follow-up on cash flows and monthly progress time schedules;
- Control the contractor's setting out of the works, review and approve the as-built drawings and Operation and Maintenance Manuals prepared by the contractor(s) post construction activities;
- Review and approve the testing plans, performance test and commissioning plans in accordance with the special conditions of the works contract(s);
- Carry out the taking-over inspections;

² Developed by the MCTI, October 2018

³ To be developed by the MCTI for each specific sub-project

- Control the trial operating periods, performance tests and the handing-over of the works to the IZS/MoCTI;
- Settlement of disputes amicably;
- Prepare and submit Progress Reports (Monthly, Quarterly) which includes progress reporting, photos, physical and financial progress schedules, minutes of meetings related to the reporting period.

3.2.1.2 Post-construction activities

After completion of the works, the Consultant shall inspect the works on a semi-annual basis in order to ensure a proper monitoring of the works performance during the Defects Liability Period (DLP) defined in each works contract.

During this period, the Consultant shall notify the contractor(s) for works and the MoCTI/PIU of such visits.

- Regular inspections (semi-annually) up to the end of defects liability period of the works contract(s);
- Organization of the semi-annually site meetings, and ad hoc site meetings, whenever necessary, with the contractor(s), IZS and other related stakeholders to ensure sound and timely completion of the works in the desired quality. Preparation and distribution of the Minutes of Meetings;
- Agree (semi-annually) performance tests together with the contractors for proving the parameters of the work(s);
- Issue of the final Performance Certificate, when the contractor has fulfilled his obligations;
- Check the contractor's final statement of account and prepare and issue the final payment certificate for IZS and PIU approval;
- Supervise actions ensuring that the project remains compliant to the World Bank Environmental and Social Safeguard policies and guidelines.

3.2.2 Activity 4: Final works

Before the contract completion a Final Report shall be prepared by the Consultant providing the content of the ToR compared with the activities implemented, the achieved results, encountered problems and lessons learned.

4 Logistic and timing

4.1 Location

Operational base for the Contract will be Belgrade. Internal travel within the RoS is required for site supervision.

The Consultant shall undertake the works in the RoS, in his office(s) and at site offices indicated by the MoCTI and established by the contractor(s) as indicated in the works contract(s).

4.2 Commencement date and period of implementation

The intended commencement date is March 2023 but the actual commencement date will be defined with the signature of the Contract. The period of implementation of the contract will be 42 months starting from the commencement date. This period includes 18 months for services related to technical control of designs and supervision of works and 24 months of Defect Liability Period.

The Consultant will carry out the services in line with a detailed time schedule to be submitted as part of his draft view on project time life, which might be changed following communication with the works contractor(s) considering his designing plan.

The Consultant should note that it is envisaged that the works contractor(s) will obtain all required approvals necessary for installation and civil works for all railway level crossings, subject of the works contract (approvals of designs, location conditions, construction approval) within 12 months from the works contract(s)'s effective date. Further, upon acceptance of Preliminary Designs, the works contractor(s) shall no later than 2 months prepare Design for Execution, subject of approval of the Supervision Consultant. It will be on the works contractor(s) to organize his work according to these time requirements, where the Client strongly suggests to execute design works for different RLCs in parallel in order to obtain required Construction Approval and start with execution of works (civil and installation) on all RLCs and complete them within 18 months from the contract Commencement Date.

5 Requirements

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).

The assignment will require a qualified consulting company or consortium that can demonstrate extensive experience in technical design control and supervision services.

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 the Table 1, below and non-key experts, as needed. 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 to be identified by the Consultant in his methodology and work plan.

Having in mind the diversity of areas covered by this Contract it is expected that the Consultant will have sufficient expertise and required licenses to review designs and supervise the works contract(s). Moreover, considering the geographical distribution of the scope, the Consultant is expected to be flexible in terms of travelling.

The Team, as a whole, shall include experts familiar with RoS' regulations. The employment of local experts will be welcomed by the Client. The experts should have appropriate licenses issued by the MoCTI or a declaration stating that they shall apply for and receive the license in no more than 1 months after the announcement of the award.

The team organization, proposed staff availability and number of working days assigned to specific activities and backup will be evaluated as one of the criteria within the evaluation of the proposed methodology and time schedule.

The total inputs for experts, both key and non-key are given indicatively for the purpose of this contract.

Table 1 Indicative total inputs for experts

	Key Expert Position	Working Days (indicative)
1	Team Leader	200 days
3	Key Experts	800 days
	<i>Key Experts, total</i>	<i>1000 days</i>
	<i>Non - Key Experts</i>	<i>Working Days (indicative)</i>
1	Senior Experts	300 days
2	Junior Experts	800 days
	<i>Non-key experts, total</i>	<i>1100 days</i>

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

The Project language is English, except Technical Control of Preliminary Design which will be prepared in the Serbian language.

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

5.1.1 Key experts

All experts who have a crucial role in implementing the contract are referred to as key experts. Team Leader and Deputy Team Leader shall be appointed from one of the key or senior non-key experts, where at least one of them shall be familiar with the relevant national legislation and speak fluently Serbian. Further, a key expert nominated for the position of Team Leader shall have experience in managing of at least one railway project as Team Leader (Project Manager). The profiles of the key experts for this contract are given below. The Consultant should note that Key experts to be proposed for technical design review should possess relevant designer licenses issued in compliance with the national legislation. Further, supervision services shall request presence of the both, Key and non-key experts at the location of works, and the Consultant should clearly describe and provide their inputs within his Methodology and Work Plan.

Table 2 Key Experts

Title	Qualifications/Experience	Skills
Senior railway engineer	<u>Education:</u> Have as a minimum B. Sc. Degree in Civil or Electro Engineering or other relevant discipline <u>Relevant professional experience:</u> At least 15 years of general professional experience in railway sector At least 8 years of experience in design/technical control of designs/ supervision/ construction of railway projects	Excellent command of the English language. Computer literacy. Communication, coordination and managerial skills, good knowledge of RoS' railway regulations and procedures Knowledge of Serbian language will be an advantage
Engineer for the signaling/interlocking and telecommunication on RLC	<u>Education:</u> Have as a minimum B. Sc. Degree in electrical engineering or other relevant discipline <u>Relevant professional experience:</u> At least 10 years of general professional experience in telecommunication sector At least 5 years of experience in design/design technical control/supervision/construction of railway construction projects in field of signaling or telecommunication; License 352;353, 453/10 year	Computer literacy. Communication skills, good knowledge of RoS' railway regulations and procedures; Fluency in English. Knowledge of Serbian language will be an advantage

Title	Qualifications/Experience	Skills
Engineer for the road/railway traffic signalization on RLC	<u>Education:</u> Have as a minimum B. Sc. Degree in Traffic Engineering or other relevant discipline; <u>Relevant professional experience:</u> At least 10 years of general professional experience in the rail/road sector At least 5 years of experience in design/design technical control/supervision/construction of railway construction projects in field of traffic signalization for road/rail design License 368;370;470/10 year	Computer literacy. Communication skills, good knowledge of RoS' railway regulations and procedures; Knowledge of Serbian language will be an advantage
Engineer for power supply on RLC	<u>Education:</u> Have as a minimum B. Sc. Degree in electrical engineering or other relevant discipline <u>Relevant professional experience:</u> At least 10 years of general professional experience in power supply At least 5 years of experience in supervision/construction of railway construction projects in field of power supply License 351;451/10 year	Computer literacy. Communication skills, good knowledge of RoS' railway regulations and procedures; Fluency in English. Knowledge of Serbian language will be an advantage
Engineer for Civil Works on RLC	<u>Education:</u> Have as a minimum B. Sc. Degree in Civil Engineering or other relevant discipline <u>Relevant professional experience:</u> At least 10 years of general professional experience in construction sector At least 6 years of experience in supervision and/or construction of railway construction projects in field of substructure or superstructure design License 315;312;412;415/10 year	Computer literacy. Communication skills, fluency in English. Knowledge of Serbian language will be an advantage.

5.1.2 Non-key experts (NKE)

The consultant shall hire Environmental specialist for this contract with minimum B.Sc. degree in environmental sciences, engineering or other relevant social science and minimum 10 years of post-graduate professional experience in environmental issues on the infrastructure projects/investments.

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

The Consultant is expected to select and hire other experts as required according to the profiles identified in the Organization & Methodology including but not limited to civil engineer, railway engineer, mechanical engineer and electrical engineer. 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 the responsibilities they take on.

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

Senior non-key experts: Minimum 10 years of experience. Good command of written and spoken English. Knowledge of local language is an asset. Non-key senior experts shall be licensed in accordance with the national Law on Planning and Construction of the RS (license No 312, 315, 350,351, 352, 353, 412, 415, 450, 451, 453, 368;370;470/). Full computer literacy in MS applications. Profile such as civil engineers, mechanical engineers, electrical engineers, etc.

Junior non-key experts: Minimum 5 years of experience. Profiles such as design engineers, civil engineers, mechanical engineers, electrical engineers, survey technicians, inspectors, etc.

5.2 Office accommodation

Office accommodation for each expert working on the Contract is to be provided by 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 the neither Client (MoCTI), PIU nor Beneficiaries (IZS) as part of this service contract or transferred to the Client or beneficiaries at the end of this Contract.

6 Deliverables

Considering the Scope of the Work, described in the Section 3, work of the Consultant and consequently outputs as result of his work, will be split into two groups, in compliance with phases.

In this respect, as a result of work in Phase 1, the Consultant shall prepare below listed documents:

Table 3 List of deliverables for Phase 1

Deliverables, Phase 1	Description	Due date	Format
Inception Report	Preparation of the plan to establish and follow detailed construction supervision procedures based on sound international practice to monitor the completion of the works contract(s) within the agreed time and budget and to the quality standards and environmental provisions stipulated in the works contract(s). (up to 30 pages)	No later than 4 weeks after the commencement	Digital and three (3) hard copies English and Serbian language
Technical Control Reports	Technical Control Report (TCR) for each specific RLCs (in total 58) in compliance with national legislation requirements, grouped in 7 groups as described below	No later than 2 weeks upon submission of the Preliminary Design for specific RLC by the works contractor(s)	Digital and four (4) hard copies in Serbian language and two (2) hard copies and two (2) copies in CD in English language

Considering the volume of the work, and future organization of the work by works contractor(s), TCRs shall be grouped in 7 groups in total, where 6 groups will cover services of the Consultant on technical control for 8 RLCs, and one group for 10 RLCs. It is up to the Consultant to determine the specific RLC to be included in each of these groups. As a result of technical control of Preliminary Design for RLC, the Consultant shall prepare TCR no later than 2 weeks upon submission of the Preliminary Design for specific RLC by the works contractor(s) in Serbian language. In respect of requirements from the national legislation, and on the other hand the Project, the Consultant shall submit TCR in four (4) hard copies A4 format preferably on both sides of the paper with appropriate headers and footers and two (2) copies on CD in Serbian. Upon issuance of the Construction Approval by the relevant authority, final version of the TCR shall be submitted in two (2) hard copies and two (2) copies on CD in English. All TCRs shall include an executive summary, the statement of the performer of the technical control (Appendix 3) and shall be submitted in Serbian language. The draft version of the reports (electronic copy) shall be submitted to PIU for distribution to the IZS. The commenting period for the outputs is 1 week. In case of no-reaction to the submitted TCR such status will be interpreted as “no objection” and shall be deemed as approved. In the course of Contract execution, the Consultant shall prepare the Minutes of Meetings for all meetings held with the works contractor(s), and shall include clear decisions, persons in charge and deadlines. The Consultant will distribute Minutes of Meetings to the works contractor(s), PIU and IZS. MoM must be commented within 3 calendar days by participants.

During Supervision phase, i.e. Phase 2, the Consultant shall prepare, as a minimum, below listed reports:

Figure 4 List of deliverables for Phase 2

Deliverables	Description	Due date	Format
Monthly Progress Reports	The key issues to be addressed in this report are the brief description of the quantitative progress (completion, disbursements, milestones reached) and major bottlenecks for each works contract(s) (not more than 10 pages).	Not later than 2 weeks after the end of month	Digital and three (3) hard copies English and Serbian language
Quarterly Progress Reports	Description of progress (technical and financial) including problems encountered; planned activities for the next 3 months (up to 50 pages) The key issues to be addressed in the quarterly report are the progress of the activities as detailed under Section 3 of this ToR including the measures subject to the supervision activities such as environment protection, safety, quality, progress, work programme, resources, contract management and cost control. The report must detail delays and difficulties encountered and proposed mitigation measures to alleviate them and provide future projections for implementation of the activities. The financial section must contain details of the time inputs of the experts and of the provision for expenditure verification.	No later than 1 month after the end of each 3 month supervision period	Digital and three (3) hard copies English and Serbian language
Works Contract Completion Report	On completion of each works contract, upon issue of the Taking-Over Certificate, within 15 days the Consultant shall submit a Completion Report to the IZS and PIU/MoCTI. The main report must contain: <ul style="list-style-type: none"> ○ Copies of the Taking-Over Certificate(s) ○ Verified "as-built" drawings showing all revision to the design of the works ○ A complete analysis of the completion 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 ○ 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 	No later than 15 days after issue of Taking-Over Certificate of each works contract.	Digital and three (3) hard copies English and Serbian language

Deliverables	Description	Due date	Format
	<ul style="list-style-type: none"> ○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 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	<p>In addition to the Completion Report the Consultant shall submit for each works contract, 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:</p> <ul style="list-style-type: none"> ○ All manufacturer's test certificates for materials, if any ○ Performance test certificates and warranty agreements where applicable for mechanical and electrical equipment, ○ Requests for inspection (if any), approvals and test results. 	The QA Dossier will be compiled during the course of the each works contract and it must be available for inspection by the MCTI at any reasonable time.	Digital and three (3) hard copies English and Serbian language
Final Report	<p>There must be a final report for the Contract, final invoice and the financial report at the end of the period of execution.</p> <p>Extensive description of progress (technical and financial) including problems encountered.</p> <p>It must describe, in detail, technical design control, technical progress of works, it must compare in detail the actual progress with the agreed work programs, it must describe the achievements and the suggestions for future similar works (up to 60 pages)</p>	No later than 1 month before the end of the implementation period.	Digital and three (3) hard copies English and Serbian language

All reports and other outputs, if any, for Phase 2, both, draft and final version, must be submitted in Serbian and English language and must include an executive summary. Each report shall consist of a narrative section and a financial section. The financial section must contain details of the time inputs of the experts and expenditure.

The draft version of the reports (electronic copy) must be simultaneously transmitted to the PIU/MCTI and to the IZS.

The commenting period for the outputs is 2 weeks. In case of no-reaction to the submitted outputs from the stakeholders such status will be interpreted as “no objection” of the related stakeholder and shall be deemed as approved.

The Consultant shall prepare the Minutes of Meetings (MoM) for the site meetings and monthly progress 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 commented within 7 calendar days by participants. MoM for the monthly progress meetings will be always in the agenda of the next monthly meeting to be approved and followed up.

All deliverables will be sent as electronic copies to the MCTI/PIU and IZS.

Hard copies will be send to the following addresses:

- “Serbian Railways Infrastructure“ JSC, 6, Nemanjina Street, 11000 Belgrade, Republic of Serbia
- PIU, Omladinskih brigada 1, office 555, 11070 Novi Beograd, Republic of Serbia.

7. Terms of Payments

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

- For Phase 1 – Design Review – lump-sum payments with milestones against submission of deliverables and
- For Phase 2 - Supervision – time based with periodic payments against time actually spent on the services.

Appendix 1 List of Railway Level Crossings

Lot 1:

No	Railway track	Position on a rail track
RLC 1	Ruma-Sabac-branch-line junction Donja Borina – state border – (Zvornik Novi)	Loznica 49+511
RLC 2	Ruma-Sabac-branch-line junction Donja Borina – state border – (Zvornik Novi)	Budjanovci 3+285
RLC 3	Ruma-Sabac-branch-line junction Donja Borina – state border – (Zvornik Novi)	Donja Borina 67+660
RLC 4	Ruma-Sabac-branch-line junction Donja Borina – state border – (Zvornik Novi)	Klenak 29+048
RLC 5	Ruma-Sabac-branch-line junction Donja Borina – state border – (Zvornik Novi)	Zejtin Voda 62+425
RLC 6	Ruma-Sabac-branch-line junction Donja Borina – state border – (Zvornik Novi)	Sabacki put 50+317
RLC 7, RLC 8	Ruma-Sabac-branch-line junction Donja Borina – state border – (Zvornik Novi)	Ilicevo 1 52+471 Ilicevo 2 52+714
RLC 9	Ruma-Sabac-branch-line junction Donja Borina – state border – (Zvornik Novi)	Prnjavor Macvanski 27+774
RLC 10	Belgrade Centre – Pancevo main - Vrsac – state border – (Stamora Moravita)	Pivarski 17+544
RLC 11	Belgrade Centre – Pancevo main - Vrsac – state border – (Stamora Moravita)	Strazara 11 49+577
RLC 12	Belgrade Centre – Pancevo main - Vrsac – state border – (Stamora Moravita)	Strazara 2 19+836
RLC 13	Belgrade Centre – Pancevo main - Vrsac – state border – (Stamora Moravita)	Strazara 22 58+060
RLC 14 RLC 15 RLC 16	Subotica - Bogojevo – state border – (Erdut)	Strazara 105 127+680 128+340 128+854
RLC 17	Vrbas-Sombor	Kljajicevo 76+073
RLC 18	Lapovo – Kraljevo – Lesak – Kosovo Polje – Djeneral Jankovic – state border – (Volkovo)	Kaznovici 155+449
RLC 19	Lapovo – Kraljevo – Lesak – Kosovo Polje – Djeneral Jankovic – state border – (Volkovo)	Lapovo – Kraljevo 33+242
RLC 20	Lapovo – Kraljevo – Lesak – Kosovo Polje – Djeneral Jankovic – state border – (Volkovo)	Lapovo - Kraljevo 30+043
RLC 21 RLC 22	Stalac - Kraljevo - Pozega	Sumadija 40+967 Trstenik 41+715
RLC 23	Stalac - Kraljevo - Pozega	Spanac 74+044
RLC 24	Stalac - Kraljevo - Pozega	Stopanja 29+700
RLC 25	Stalac - Kraljevo - Pozega	Kamidzora 68+336
RLC 26	Crveni krst - Zajecar - Prahovo port	Svrljig 39+605
RLC 27	Belgrade – Mladenovac – Lapovo – Nis – Presevo – state border – (Tabanovce)	Koncarevo 138+649
RLC 28	Belgrade – Mladenovac – Lapovo – Nis – Presevo – state border – (Tabanovce)	Block 2 st. Paracin 155+535

No	Railway track	Position on a rail track
RLC 29	Belgrade – Mladenovac – Lapovo – Nis – Presevo – state border – (Tabanovce)	Block 1 st. Vranje 353+833
RLC 30	Pancevo Main – Zrenjanin – Kikinda – State border (Jimbolia)	Melenci 105+561
RLC 31	Belgrade – Resnik – Pozega – Vrbnica – State border	20+497
RLC 32	Belgrade – Resnik – Pozega – Vrbnica – State border	24+269
RLC 33	Belgrade – Resnik – Pozega – Vrbnica – State border	32+022
RLC 34	Belgrade – Resnik – Pozega – Vrbnica – State border	33+484
RLC 35	Belgrade – Resnik – Pozega – Vrbnica – State border	53+795
RLC 36	Belgrade – Resnik – Pozega – Vrbnica – State border	66+716

Lot 2:

No	Railway track	Position on a rail track
RLC 37	Belgrade – Resnik – Pozega – Vrbnica – State border	75+705
RLC 38	Belgrade – Resnik – Pozega – Vrbnica – State border	225+878
RLC 39	Belgrade – Resnik – Pozega – Vrbnica – State border	253+549
RLC 40	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	20+183
RLC 41	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	21+858
RLC 42	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	34+436
RLC 43	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	41+841
RLC 44	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	78+247
RLC 45	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	79+362
RLC 46	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	99+939
RLC 47	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	100+976
RLC 48	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	105+545
RLC 49	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	114+196
RLC 50	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	116+995
RLC 51	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	131+308
RLC 52	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	162+516
RLC 53	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	163+819
RLC 54	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	171+810
RLC 55	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	201+565
RLC 56	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	208+192
RLC 57	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	212+914
RLC 58	Belgrade – Mladenovac – Lapovo – Nis – Presevo – State border	222+057

Appendix 2 – ToRs for RLCs

Appendix 3 – Statement of the Performer of the Technical Control with Summary of the Technical Control Report

STATEMENT GIVEN BY THE PERFORMER OF TECHNICAL CONTROL, WITH TECHNICAL CONTROL SUMMARY REPORT, FROM CERTIFICATE OF CONSTRUCTION PERMIT DESIGN

2.0. STATEMENT GIVEN BY THE PERFORMER OF TECHNICAL CONTROL

Investor: (name of investor and its head office)
Facility: (name of facility with location, cadastral (property register) parcel number and cadastral community)

Type of Technical Documentation: (CPD- Construction Permit Design)

for Construction Design / for execution of Construction works: (new construction, extension, reconstruction, adaptation, restoration, change of purpose)

Technical Control No. and date:

As the Representative of the Performer of Technical Control of Design, (Construction Permit Design for the Construction of Business and Manufacturing Facility XXXX, on cadastral parcel XX/X, cadastral community XXX on location X), I,

(name, surname and professional title)

HEREBY CONFIRM

- 1) that the Construction Permit Design was prepared in compliance with the location conditions;

- 2) that the Construction Permit Design is in accordance with the laws and other regulations, and that it is prepared in full compliance with technical regulations, standards and norms in relation to the design and construction of that type and class of Facility;
- 3) that the Construction Project Design includes all necessary parts specified by the Rule Book provisions defining the content of technical documentation;
- 4) that the Construction Permit Design includes duly applied results of all previous and investigative works executed for the purpose of the Construction Permit Design preparation, and it also includes all general and specific technical, technological and other bases and data;
- 5) that the Construction Permit Design provides technical measures in order to meet the key requirements for the given Facility.

Performer of Technical Control: (name and surname, i.e., name of entrepreneur/legal entity, address)

Person in charge / representative: (name and surname)

Seal:

Signature:



Number: (identification number from the record of entrepreneur/legal entity)

Location and date: (location and date of preparation)

2.1. PERFORMERS OF TECHNICAL CONTROL

1. ARCHITECTURE DESIGN:

Performer of Technical Control: (name, surname and professional title, Serbian Chamber of Engineers licence number)

2/1. CONSTRUCTION DESIGN:

Performer of Technical Control: (name, surname and professional title, Serbian Chamber of Engineers licence number)

2/2. ROAD DESIGN:

Performer of Technical Control: (name, surname and professional title, Serbian Chamber of Engineers licence number)

3. HYDRAULIC INSTALLATION DESIGN:

Performer of Technical Control: (name, surname and professional title, Serbian Chamber of Engineers licence number)

4. ELECTRICAL INSTALLATION DESIGN:

Performer of Technical Control: (name, surname and professional title, Serbian Chamber of Engineers licence number)

.....
.....

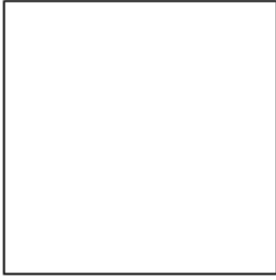
2.2.1. (2,3..) TECHNICAL CONTROL SUMMARY REPORT

(.....insert the summary text)

Performer of Technical Control: (name, surname and professional title)

License number: (Serbian Chamber of Engineers license number)

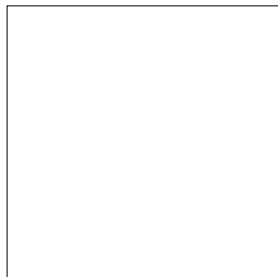
Personal seal: **Signature:**



Title and identification of the design portion: (e.g. 1-Architecture Design)

Location and date: (location and date of technical control)

Note: Verification shall be done by all Performers of Technical Control



Appendix 4 Quarterly Progress Report

The Consultant shall consider following measures in his reports;

Safety: An update of accidents at works, an appraisal of the safety of the contractor's working practices, and how many safety transgressions may be remedied.

Quality: A summary of the quality of the contractor's work and materials and any problems related thereto with recommendations for improvement. A summary of all samples and tests carried out on materials, equipment and works.

Progress: A summary of the progress of the works with particular reference to major activities and those on the critical path for completion. The report shall detail delays and difficulties encountered and proposed measures to alleviate them.

Environmental Management: A summary of the remedial actions for the environmental protection as addressed in the EIA report.

A copy of the contractor's program marked up to show actual progress to date shall be included in the report.

Specific progress details for major activities and those on the critical path shall be presented showing a comparison between actual and scheduled progress.

Resources: A schedule of the contractor's labor, staff and equipment resources with an updated appraisal as to whether or not these are adequate to complete his Contract on time.

Contract Management and Cost: a revised projection of the final cost of the works, which takes into consideration but is not necessarily restricted to the following:

- value of interim payment certificates to date
- anticipated decreases or increases in the contract price
- valuation of any variation of orders issued by the contractor
- substantiation and valuation of any claims submitted by the contractor
- cost implications for any time overruns with or without extensions of time being granted to the contractor.

The values of the completed works shall be presented in graphical form showing a comparison between actual and proposed schedules values from commencement of the works.

Tabulated summaries of:

- Submittals of the contractor and approvals of the Consultant
- Site Instructions issued to date
- Administrative Orders for Modifications issued to date
- Claims notified by the contractor
- Interim Payment Certificates certified by the Consultant with the tabulation clearly showing the date on which the contractor has received payment, the

outstanding amount to be paid of any advance payment, and the amount of retention held

- Provisional sums or contingencies used to date
- Authorized day-works to date
- Other contractual issues e.g.; claims made on the insurance policies

In a suitable appendix the quarterly progress report shall contain the minutes of the monthly site meeting and any other contractual meetings, and a copy of the latest interim payment certificate.

The Quarterly Report shall also summarize the activities of the Consultant as:

- An appraisal of the working relationship with the PIU, IZS and contractor, detailing any specific administrative, supervision and inspection problems (including significant changes vs initial scope) encountered with the recommendations and how these may be overcome.
- Financial and technical summary of the work carried out by the Consultant during the period as well as in the previous periods
- Planned activities for the next period
- A schedule of the Consultant's staff in this service and any other relevant information, for example, visits to site by the IZS, PIU or the Consultant, meetings held, availability of the facilities etc.
- Any significant issue that has occurred and any significant risk may affect the project's operation
- A summary, in a tabulated format, of the disbursement made to the Consultant.