Request for Quotation (RFQ)

Supply of Testing equipment and Track balises

Project Title: Serbia Railway Sector Modernization Project (SRSM)

Source of Funding: IBRD 9221 YF and CRS 1015 02 D

Contract Ref: SER-SRSM-RFO-G-25-81

Contract Name: Supply of Testing equipment and Track balises

Date: May 20, 2025

Dear Sirs,

1. You are invited to submit your price quotation for:

Supply of Testing equipment and Track Balises

Line Item	Description of Goods and accompanying Services	Quantity	Physical unit
1.	Testing equipment for the locomotive component of the automatic train stop system	2	pcs
2.	Trainings for Srbijavoz staff for use and maintenance of the testing equipment and track balises and delivery of a set of user and maintenance manuals	1	
3.	Track balises with mounting bracket	9	pcs
4.	Preparation installation design and installation of track balises at six (6) dedicated locations and its testing and commissioning	9	

- 2. You must quote for all the items under this Invitation. Price quotations will be evaluated for all the items together and a contract awarded to the firm offering **the lowest evaluated total cost** of all the items.
- 3. Your price quotation in the form attached may be submitted electronically at the email address:
 - to: dejan.jeremic@mfin.gov.rs,
 - cc: larisa.puzovic@mgsi.gov.rs; ljiljana.krejovic@mfin.gov.rs; ljiljana.dzuver@mfin.gov.rs

and shall consist of:

- Form of Quotation filled in and signed (in PDF format)
- Terms and Conditions of Supply filled in and signed (in PDF format)
- Technical Specification filled in and signed (in PDF and word format)
- 4. The deadline for receipt of your quotation (s) by the Purchaser at the address indicated in Paragraph 3 is: **June 16, 2025, until 12.00 hours, noon, local time.**
- 5. Your quotation should be accompanied by the following technical documentation, evidence and catalogue(s) and other printed material or pertinent information for each item quoted:

	•	Proof of testing (evidence that the equipment has undergone and				
Testing equipment for the locomotive		passed functional and performance testing) IP protection rating certificate (confirming the device's resistance)				
component of the automatic train		to dust and water according to relevant standards)				
stop system	•	Certificate of origin (document identifying the country of manufacture of the equipment)				

Certificate of calibration (proof that the equipment has been calibrated in accordance with applicable standards and that calibration has been successfully completed) The Supplier shall submit the following documentation for track balises in accordance with the Rulebook on the Assessment of Conformity of Interoperability Components and Structural Subsystems, Verification of Structural Subsystems, and Issuance of Permits for the Use of Structural Subsystems (Official Gazette no. 33/22) and its provisions of Appendix 1 for the conformity assessment of signal-security devices that apply to national railway technical regulations: 1) For new products with issued certificates: o Certificate of conformity (according to module CB), Track balises 2) For existing products with issued Permits for use in Republic of Serbia: Permit for use of the product (according to module CA), and o Proof of compliance with the technical regulations in force at the time the product is placed on the market. The Supplier shall provide proof of testing for impacts, vibrations, and operating environment, as well as test reports for impacts, vibrations, and operating environment in accordance with the EN 50125-3 standard and 50121-4 standard

A Supplier who does not manufacture an item/s shall provide evidence of being duly authorized by a manufacturer (Manufacturer's Authorization Form) issued by Head Quarters/Branch Offices or submit documentation on, its status as a supplier, to the satisfaction of the Purchaser (e.g. authorized dealer/distributor of the items).

The quotation shall also include names and addresses of firms providing service facilities in Serbia.

- 6. Your quotation(s) should be submitted as per the following instructions and in accordance with the attached Contract. The attached Terms and Conditions of Supply are an integral part of the Contract.
 - (i) <u>PRICES</u>: The Bidder may express the Bid price in any convertible currency for the Total Cost at final destinations listed in Terms and Conditions of Supply 4. Delivery Schedule, which includes all taxes, customs, duties, inland transportation, and insurance, loading and unloading. Provision of goods in the Republic of Serbia is subject to payment of VAT. In this respect, if a Bidder is a foreign entity, it shall, in accordance with national legislation, appoint a tax representative or a legal entity based or registered in the Republic of Serbia. This representative must have been a registered VAT payer for at least 12 months prior to submitting the request for approval. The Bidder's permanent branch office or business unit in Serbia cannot serve as the tax representative.
 - (ii) <u>EVALUATION OF QUOTATIONS</u>: Offers determined to be substantially responsive to the technical specifications will be evaluated by comparison of the Total price at the final destinations (price without taxes, VAT, customs, duties, inland transportation and insurance).

In evaluating the quotations, the Purchaser will determine for each bid the evaluated price by adjusting the price quotation by making any correction for any arithmetical errors as follows:

a. where there is a discrepancy between amounts in figures and in words, the amount in words will govern;

- b. where is a discrepancy between the unit rate and the line-item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern;
- c. if a Supplier refuses to accept the correction, his quotation will be rejected.

The currency that shall be used for evaluation and comparison purposes to convert at the selling exchange rate all quotation prices expressed in various currencies into a single currency is: Serbian dinar (RSD).

The source of exchange rate shall be: National Bank of Serbia.

The date for the exchange rate shall be the deadline for submission of the Bids.

- (iii) <u>AWARD OF CONTRACT:</u> The award will be made to the Supplier offering the lowest substantially evaluated responsive quotation and that meets the required technical and financial capabilities. The successful Supplier will sign a Contract as per attached form of contract and terms and conditions of supply.
- (iv) <u>VALIDITY OF THE OFFER:</u> Your quotation(s) should be valid for a period of ninety (90) days from the deadline for receipt of quotation(s) indicated in Paragraph 4 of this Request for Quotation.
- 7. Further information can be obtained from address below:

Dejan Jeremić
CFU Procurement Specialist
Ministry of Finance
Central Fiduciary Unit
Balkanska 53
11000 Belgrade
Republic of Serbia

Tel/Fax: + 381 11 765 2565

E-mail: dejan.jeremic@mfin.gov.rs

8. Inspections and Audits

- 8.1 The Supplier shall carry out all instructions of the Purchaser which comply with the applicable laws where the destination is located.
- 8.2 The Supplier shall permit, and shall cause its Subcontractors and consultants to permit, the World Bank (Bank) and/or persons appointed by the Bank to inspect the Supplier's offices and all accounts and records relating to the performance of the Contract and the submission of the bid, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Supplier's and its Subcontractors and consultants' attention is drawn to Clause 5 Fraud and Corruption of the Form of Contract, which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).

Sincerely,	
Dejan Jeremić	
CFU Procurement Specialist	

FORM OF CONTRACT

THIS AGREEMENT number SER-SRSM-RFQ-G-25-81 made on 2025, between the Ministr						
of Construction, Transport and Infrastructure (MC7	of Construction, Transport and Infrastructure (MCTI), having its principal place of business at Nemanjina					
	einafter called "the Purchaser") on the one part and					
havi	ing its principal place of business at					
(hereinafter called "the Supplie	r") on the other part.					
WHEREAS the Purchaser has invited quotation for	r Supply of Testing equipment and Track balises to					
be supplied by Supplier, viz. Contract Ref No SER	-SRSM-RFQ-G-25-81 (hereinafter called "Contract")					
and has accepted the Bid by the Supplier for the supp	ply of goods and accompanying services under Contract					
at the sum of						
() exclusive of VAT hereinafter called "the					
Contract Price".						
The Contract will be effective from the date of sig	ning and will last until the finalization of the delivery					
upon Purchaser request, as specified in Terms and G	Conditions of supply.					

NOW THIS AGREEMENT witnesses as follows:

- 1. The following documents shall be deemed to form and be read and construed as part of this agreement:
 - a) Form of Quotation; Term and Conditions of Supply; Technical Specification
 - b) Addendum (if applicable)
- 2. Taking into account payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby concludes an Agreement with the Purchaser to execute and complete the supply of Contract and remedy any defects therein in conformity with the provisions of Contract.

The goods that are to be procured under this contract are for the needs of *JSC Srbijavoz (hereinafter: End Recipient)* and respective payments will be made by the Purchaser (the MoCTI) from the Serbia Railway Sector Modernization Project (SRSM) funds.

3. Testing

- 3.1 The Supplier shall, at its own expense and at no cost to the Purchaser, conduct all necessary tests and/or inspections of the Goods and Related Services to demonstrate their functionality, usability, and performance.
- 3.2 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser and End Recipient. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser and End Recipient or its designated representative to attend the test and/or inspection.
- 3.3 The Purchaser and End Recipient may require the Supplier to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications, codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out

of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.

4. The Purchaser hereby covenants to pay in consideration of the goods supply and acceptance of Contract and remedying of defects therein, the Contract Price in accordance with Payment Conditions prescribed by Contract.

5. Termination

4.1 Termination for Default

- (a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:
 - (i) if the Supplier fails to deliver any or all of the Goods and Services within the period specified in the Contract, or within any extension thereof granted.
 - (ii) if the Supplier fails to perform any other obligation under the Contract; or
 - (iii) if the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in Clause 5 below, in competing for or in executing the Contract.
- (b) In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

4.2 Termination for Insolvency.

(a) The Purchaser may at any time terminate the Contract by giving notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Purchaser.

4.3 Termination for Convenience.

- (a) The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- (b) The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
 - (i) to have any portion completed and delivered at the Contract terms and prices; and/or

(ii) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier

6. Fraud and Corruption

6.1 If the Purchaser determines that the Supplier and/or any of its personnel, or its agents, or its Subcontractors, consultants, service providers, suppliers and/or their employees has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices (as defined in the prevailing Bank's sanctions procedures), in competing for or in executing the Contract, then the Purchaser may, after giving 14 days' notice to the Supplier, terminate the Supplier's employment under the Contract and cancel the contract, and the provisions of Clause 4 shall apply as if such expulsion had been made under Sub-Clause 4.1.

7. Inspections and Audits

- 7.1 The Supplier shall carry out all instructions of the Purchaser which comply with the applicable laws where the destination is located.
- 7.2 The Supplier shall permit, and shall cause its Subcontractors and consultants to permit, the Bank and/or persons appointed by the Bank to inspect the Supplier's offices and all accounts and records relating to the performance of the Contract and the submission of the bid, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Supplier's and its Subcontractors and consultants' attention is drawn to Clause 5 Fraud and Corruption, which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).

Signature and seal of the Purchaser:	Signature and seal of the Supplier
FOR AND BEHALF OF	FOR AND BEHALF OF
Name of Authorized Representative	Name of Authorized Representative

FORM OF QUOTATION

(Date insert)	
To:	
Ministry of Construction, Transp	port and Infrastructure
Nemanjina 22-26	
11000 Belgrade	
Republic of Serbia	
We offer to execute the Supply	of Testing equipment and Track balises, Ref No: SER-SRSM-RFQ-G-
	onditions of Contract accompanying this Quotation for the Contract Price
of	
() exclusive of VAT. We propose to complete the delivery
	vices described in the Contract within a period of calendar days
-	acceptance will constitute a binding Contract between us. We understand the lowest or any Quotation you receive.
We hereby confirm that this Quo documents.	tation complies with the Validity of the Quotation required by the proposal
Authorized Signature: insert	
Name and Title of Signatory inse	ert
Name of Supplier: insert	
Address: insert	
Phone Number: insert	
Fax Number: insert	

Terms and Conditions of Supply

Project Title: Serbia Railway Sector Modernization Project (SRSM) Purchaser: Ministry of Construction, Transport and Infrastructure Contract Ref No: SER-SRSM-RFQ-G-25-81

Prices and Schedules for Supply

Ite m No.	Description of Goods and Services	Qty (pcs/set)	Net Unit Price at final destination (exclusive of VAT)	Total price at final destination (exclusive of VAT)	Total VAT (insert currency)	Total Cost at final destination (includes all taxes, VAT, customs, duties, inland transportation and insurance) (insert currency)	Delivery Schedule from contract signature date (insert days)
1	2	3	4	5 (3x4)	6	7 (5+6)	8
1.	Supply of Testing equipment for the locomotive component of the automatic train stop system	2	insert	insert	insert	insert	Insert
2.	Trainings for Srbijavoz staff for use and maintenance of the testing equipment and track balises and delivery of a set of user and maintenance manuals	1	insert	insert	insert	insert	Insert
3.	Track Balises with mounting bracket	9	insert	insert	insert	insert	Insert
4.	Preparation installation design and installation of track balises at six (6) workshop locations and its testing and commissioning	9	insert	insert	insert	insert	Insert
	TOTAL AMOUNT (insert currency)			insert	insert	insert	insert

Note: In case of discrepancy between unit price and total derived from unit price, the unit price shall prevail.

- 2. <u>Fixed Price</u>: The prices indicated above are firm and fixed and not subject to any adjustment during contract performance.
- 3. The Purchaser reserves the right at the time of contract finalization to increase or decrease by up to 10% the quantity of goods and services originally specified without any change in unit prices as well as other terms and conditions.
- 4. <u>Delivery Schedule:</u> Delivery shall be completed in accordance with the schedule outlined above, and in any case, no later than 120 calendar days from the date of contract signature.

Testing equipment for the locomotive component of the automatic train stop system shall be delivered to Belgrade (TPS Zemun), after which an **Operational Acceptance Certificate** will be issued for the testing equipment.

Trackside balises are to be delivered and installed at the following six workshop locations of Srbijavoz:

- 1. Belgrade (TPS Zemun) Two trackside balises
- 2. Lapovo One trackside balise
- 3. Sombor One trackside balise
- 4. Zaječar Two trackside balises
- 5. Zrenjanin Two trackside balises
- 6. Vršac One trackside balise

The scope of delivery includes the physical installation, testing, and commissioning of the balises at each specified location. Srbijavoz will assign appropriate personnel to support the Supplier throughout the installation, testing, and commissioning processes.

Upon successful installation and testing at each location, the Supplier must issue an **Operational Acceptance Certificate** for the balises installed at that specific workshop.

These certificates, to be signed by both the Purchaser and the End Recipient, will signify formal handover. Furthermore, the issuance of each certificate marks the start of the warranty period for the testing equipment and respective trackside balise, as documented in the corresponding Operational Acceptance Certificate.

- 5. <u>Applicable Law:</u> The Contract shall be interpreted in accordance with the laws of the Republic of Serbia.
- 6. <u>Resolution of Disputes:</u> The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute between them under or in connection with the Contract. In the case of a dispute between the Purchaser and the Supplier, the dispute shall be settled in accordance with the country procedures.
- 7. <u>Payment</u> for your invoice will be made as follows: 100% of contract amount within 45 days on handover of the Goods and issuing of **Operational Acceptance Certificate** for the last installed track balise in accordance with Delivery Schedule.
- 8. Warranty: The warranty period for delivered testing equipment and installed track balises shall be a minimum of 24 months from respective installation dates stated in **Operational Acceptance Certificate**. This warranty applies to all parts of the testing equipment and track balise. Upon request of the Purchaser and End Recipient and without additional costs, the Supplier is required to rectify any malfunction in the faulty equipment and replace it with functioning ones in cases where:
 - The malfunction is a consequence of a defect in the equipment itself.
 - The malfunction is a consequence of the Supplier's error during installation or configuration.

• The malfunction is due to a hidden defect.

During the warranty period, the Supplier is obligated, in up to five (5) working days and at their own expense, to restore all to functional condition and perform repairs within the warranty period at the Project Locations where installation was carried out, without additional costs to the Purchaser. Following the intervention on the equipment, it is the service provider's duty to conduct testing of the device operation and verify all functionalities.

- 9. <u>Trainings:</u> The Supplier is obligated to provide trainings at the TPS Zemun for 10 to 15 participants assigned by Srbijavoz. The training must cover the use and maintenance of both the trackside balises and the testing equipment for the locomotive component of the automatic train stop system. Trainings must be conducted prior to the official acceptance of the system.
- 10. <u>Packaging and Marking Instructions</u>: The Supplier shall provide standard packing of the Goods as required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract.
- 11. <u>Defects</u>: All defects will be corrected by the Supplier without any cost to the Purchaser within 30 days from the date of notice by Purchaser. Name and address of service facility which the defects are to be corrected by the supplier within the warranty period:

Address	NSERT
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12. <u>Force-Majeure:</u> The supplier shall not be liable for penalties or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force-Majeure.

For purposes of this clause, "Force-Majeure" means an events beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but not restricted to, act of Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

If a Force-Majeure situation arises, the Supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by Force-Majeure event.

- 13. Required Technical Specifications
 - (i) General Description
 - (ii) Specific details and technical standards
 - (iii) Performance Parameters

Supplier confirms compliance with above specifications {In case of deviations supplier to list all such deviations}.

NAME OF SUPPLIER	
Authorized Signature and Stamp	
Place:	
Date:	

Annex 1

Technical Specification

This procurement covers the supply and installation of trackside balises for an INDUSI PZB90-based Automatic Train Protection (ATP) system and testing equipment for the locomotive component of the automatic train stop system.

According to Appendix 12 of the Regulations on the maintenance of signal-security devices (Official Gazette of the Republic of Serbia, No. 136/20), which refers to the Maintenance of automatic train stop devices on traction vehicles, it is specified that upon exiting the workshop, the traction vehicle must pass over a continuously activated 2000 Hz (or 1000 Hz) trackside balise.

Item No	Name of Goods or Related Service	Technical Specifications and Standards	Offered functionality
1.	Testing equipment for the locomotive component of the automatic train stop system	The testing equipment is intended for the static verification of the functionality of the Automatic Train Protection System (ATPS) installed on rolling stock (locomotives, EMUs, DMUs). Its primary purpose is to simulate real track conditions and verify the proper operation of the onboard ATPS equipment without requiring the vehicle to move. The device must be capable of simulating vehicle speed during stationary testing. To achieve this, the equipment uses an actual trackside balise placed underneath the locomotive's receiver head (balise antenna). For precise positioning, a dedicated mounting frame or wheeled support must be provided to maintain a vertical distance of 120 mm between the test balise and the onboard receiver. The test balise should be able to generate a short, active signal pulse, with the pulse width proportional to the simulated vehicle speed, while remaining inactive for the rest of the test cycle. The equipment must include: • A portable controller housed in a rugged case • An external power supply • A test balise capable of generating signals at 500 Hz, 1000 Hz, and 2000 Hz	

Item No	Name of Goods or Related Service	Technical Spe	cifications and Standards	Offered functionality
		following min IP67 p Shock	unit must be suitable for field use, with the imum requirements: protection rating (when enclosed), vibration, and moisture resistance num battery-powered autonomy of 6 hours	
2.		for 10 to 15 pmaintenance equipment for stop system. In addition, the sets of user a equipment, to locations. The	chall provide a training session at the TPS Zemun participants. The training must cover the use and of both the trackside balises and the testing the locomotive component of the automatic train as Supplier is required to deliver at least 12 complete and maintenance manuals, covering all installed be distributed across the relevant operational see manuals must provide clear guidance on the adding, and routine maintenance of the supplied	
3.	Track balises and mounting bracket	Trackside balises must be combined 1000/2000Hz, with a ferrite core. Trackside balises must be compatible with the locomotive reception unit (INDUSI PZB90). Trackside balises must comply with the Technical Conditions for Signal-Security Devices Regulations (Official Gazette No. 118/21). General Technical Characteristics: Casing should be made of cast aluminium resistant to corrosion with reinforced front sides.		

Item No	Name of Goods or Related Service	Technical Specifications and Standards	Offered functionality	
		 Winding tray with a cover made of polyester resin should be resistant to oil, weather, and UV radiation on top. Magnet cavity should be filled with rigid polyurethane foam. Resonant circuit capacitors should be built into the foam. Cable connection with 4 terminal connectors, fitting, and protective sleeve. Balise should have insulated cable entry. Balise should be manufactured for stationary operation outdoors. Balise should be manufactured for operation in ambient temperature from -30°C to +70°C. Balise should be manufactured for shock load (horizontal) ≤200g. Balise should be manufactured with protection category according to IEC60529 IP67. Insulation resistance R iso > 150 MΩ, insulation strength voltage. 		
		Mounting bracket for the installation and connection of "small design" balises with a ferrite core for all types of rails, as shown in figure below, includes a complete set of equipment for the installation of one trackside balise.		

Item No	Name of Goods or Related Service	Technical Specifications and Standards	Offered functionality
		Nosać balize	
4.	Preparation installation design and installation of track balises at six (6) dedicated locations and its testing and commissioning	The Supplier is responsible for preparing an installation design, including technical drawings, in accordance with the prescribed technical requirements, standards governing the installation and operation of track balises, and best engineering practices. The installation must meet all relevant technical specifications to ensure the proper functioning of the trackside balises. Once the design is completed, the Supplier will execute the installation according to the prepared design. After installation, the Supplier will conduct testing to verify and confirm the functionality of the track balises. Upon successful verification, the balises will be commissioned and put into operation.	

Unless otherwise specified, the requirements in these Technical Specifications are presented as a **minimum standard** which the offered goods must meet to be compliant. The Supplier is expected to submit the documentary evidence (besides brochures, technical data sheets, etc.) of the technical compliance of his quotation.