

TECHNICAL SPECIFICATIONS

Maintenance of the information system and mobile apps of the Western Balkans Road Safety Observatory¹

PS/SRV/ISM/001/2026

¹ <https://wbrso.transport-community.org/>



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1. Introduction

This document sets out the requirements that each Tenderer must meet to prepare its tender (Technical Proposal and Financial Proposal) for the performance of the services subject to the Contract resulting from this procedure.

The Contracting Authority is the Transport Community, through its Permanent Secretariat.

The permanent Secretariat of the Transport Community is established under the Transport Community Treaty ("Treaty"). The Transport Community is an international organisation in the field of mobility and transport, consisting of 33 participants – the EU and the Western Balkans regional partners, established by the Treaty establishing the Transport Community, as well as the three observing participants (Georgia, the Republic of Moldova and Ukraine).

The Permanent Secretariat of the Transport Community ("the Secretariat") provides administrative support to the other institutions of the Transport Community (the Ministerial Council, the Regional Steering Committee, the technical committees and the Social Forum). The Secretariat acts as the Transport Observatory to monitor the performance of the indicative TEN-T extension of the comprehensive and core networks to the Western Balkans, and to assist the six Western Balkans partners in adopting and implementing EU transport legislation and in supporting projects connecting Western Balkans regional partners among themselves and with the EU.

The Secretariat also reviews the implementation of obligations under the Treaty.

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2. Background

2.1. Information about the Contracting Authority

The Transport Community is an international organisation in the field of mobility and transport. Transport Community is working to integrate the Western Balkans' transport markets into the EU by assisting regional partners in adopting and implementing EU transport legislation and supporting projects that connect the region to the EU. The aim of the Treaty, therefore, is the creation of a Transport Community in the field of road, rail, inland waterway, and maritime transport, as well as the development of the transport network between the European Union and the Western Balkan Parties.

The Permanent Secretariat of the Transport Community (hereinafter, "TCT") has been tasked with supporting the parties in achieving their common goals. The organisation was founded by the Treaty² establishing the Transport Community signed on 9th of October 2017 by all partners (Council Decision (EU) 2019/392).

* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence

² <https://www.transport-community.org/wp-content/uploads/2022/10/treaty-en.pdf>

2.2. Information about the context which has made the procurement of the services necessary

Upon the establishment, under the provisions of the Treaty, of the Technical Committee on Road Safety, it was decided that the Western Balkans Road Safety Observatory is necessary as an effective monitoring tool for road safety performance. The information system and mobile apps for the Western Balkans Road Safety Observatory were developed in 2022 under the contract numbered PS/SRV/RSO/016/2021, named “Design, implementation and maintenance of the Information System for the Western Balkans Road Safety Observatory (WBRSO)”. Subsequently, a service contract, PS/SRV/ISM/016/2023, was signed to continue maintaining the information system for WBRSO and its mobile apps through 2025. Since the WBRSO serving as a data collection platform is a priority of the Next Generation Road Safety Action Plan, the Secretariat seeks to continue maintaining the WBRSO information system and its mobile apps. The importance of continuing this platform has been presented and discussed with the Regional Partners.

Since its establishment, the WBRSO platform has become the primary source of evidence-based road safety reports. It continues to serve as a core signal for developing successful road safety policies in the region. It is crucial for understanding road safety performance, designing road safety strategies, and measuring progress in reducing road casualties. The ultimate goal of the WBRSO is to provide a regional platform for information exchange and the collection of timely, objective, and reliable data to effectively assist governments in formulating road safety policies, specifically those aimed at reducing road casualties. It will build knowledge on improving national crash data systems and on harmonising data with the CADAS protocol. One of the main goals of the WBRSO is to ensure that road safety data from the Regional Participants meet sufficient quality and breadth of coverage to facilitate a smooth transition to the EU's CARE database.

The WBRSO Information System and mobile apps for iOS, Android, and Huawei were developed in 2021. The system and mobile app are up and running and available online. That said, the Transport Community needs to maintain them and ensure the system remains accessible and provides the information users require.

2.3. Objectives (Information about the expected benefits)

The overall objective of the project, of which this contract will be a part, is:

- to contribute to the improvement of the road safety data in the region and their harmonisation.
- to define the gaps and provide evidence-based data for policymakers in order to reduce the number of serious injuries and road traffic deaths.

The specific objectives of this contract are as follows:

- Maintain the central database in the TCT Secretariat and its information system for monitoring the road safety performance indicators
- Produce additional (if needed) road safety analyses depending on the needs of the users
- Ensure data integrity and improve on-time delivery performance and reporting
- Ensure system security of the information system and mobile apps

- Security Updates (including security patches) & Code Maintenance (Code updates to ensure compatibility with new versions of iOS or Android, and any connected APIs)
- Performance monitoring (For your marketing department, performance monitoring also keeps track of how many people are using your app, new downloads by day, actions taken within the app, and more.)

2.4. Stakeholders

Implementation of these services will require regular communication and meetings between the Contractor and the Transport Community Secretariat, based on the system's needs, to ensure the efficiency of the system (WBRSO web application, WBRSO mobile apps and central database based on TCT Secretariat premises).

3. Description of the services

Maintenance of the WBRSO Information system (WBRSO web application and mobile apps) shall include regular monitoring of system performance, including updates, patches, and bug fixes. Also, improvements to the current graphs and minor additional queries will be part of implementing these services.

3.1. Description of the present situation

WBRSO Information System and mobile apps for IOS, Android and Huawei were developed in 2022. The system was finalised by 4 December 2022 and is continuously maintained for the duration of the previous contract. During the previous process of maintenance, the system was tested by users, who could enter data online and view results in reports, graphs, and tables. Regular updates were performed during this period. The database and the application server are on the TCT Secretariat server, ensuring security at the same time. In addition, potential bugs identified during online data entry or when retrieving results are reported and fixed promptly without inconveniencing users.

The platform is set as a three-tier architecture. The presentation tier uses Angular 14 for the web and React native for mobile applications. The application tier uses the Java Spring Boot framework while the Database tier uses Postgres SQL 12.

The application tier communicates with the presentation tier through REST API using JSON, and Security is handled with JWT tokens.

That said, the Transport Community needs to maintain the WBRSO Information System, including its mobile apps, on a regular basis and ensure that the system is accessible and provides the information required by its users.

3.2. The general objective to which the services shall contribute

The overall objective of the project, of which this contract will be a part, is to improve and harmonise road safety data in the region, identify gaps, and provide evidence-based data to inform policymakers in reducing serious injuries and road traffic deaths.

3.3. Specific objective to which the services shall contribute

Maintenance of the WBRSO web application, database and mobile apps for iOS, Android and Huawei.

3.4. Services -and activities to be performed

The specific objectives of this contract are as follows:

- Maintain the central database in the TCT Secretariat and its information system for monitoring the road safety performance indicators
- and produce a set of additional road safety analyses depending on the needs of the users.
- Ensure data integrity and improve on-time delivery performance and reporting
- Ensure system security of the database, information system (web application) and mobile apps
- Security Updates (including Security patches) & Code Maintenance (Code updates to ensure compatibility with new versions of iOS or Android, and any connected APIs)

3.5. Expected results/outcomes following the performance of the services

All systems are in place, up and running, and accessible to users at any time, with security assured. The contractor shall regularly update the WBRSO, list the maintenance tasks performed, and submit these as regular reports to the contracting authority. Additional reports or queries created during this period, on demand for maintenance work, are also part of the outcomes.

3.6. Duties and responsibilities of the parties

The Contractor may be fully responsible for:

- ensuring resource planning in relation to the estimated schedule for the performance of the contract as presented in this document;
- ensuring the validity of all authorisations and certificates which are for the performance of the services;
- performing the services - and presenting the results - in accordance with the requirements of the Technical Specifications;
- collaborating with the assigned staff of the Contracting Authority.

The Contracting Authority may be responsible for:

- making available to the Contractor all available information for obtaining the expected results, such as input data, reports, and specific situations;
- ensuring all the resources that are in his charge for the smooth running of the Contract.

4. Assumptions and risks

The Contracting Authority will facilitate access to its servers and ensure they are optimally configured to accommodate the WBRSO database and its web application. The Contractor will be responsible for maintaining the WBRSO web application and its mobile applications.

5. Approach and methodology

The Contractor will define an appropriate methodology that details the activities and sub-activities (if any) to be performed in accordance with these Terms of Specifications to achieve the expected results. Additional activities may also be suggested, and their necessity justified for successful assignment implementation.

A Gantt chart for presenting the activities would be preferable.

The Contractor must implement a risk management system for this assignment. The Contractor's risk management process must, at a minimum, include a risk analysis, identification of potential risks, and the actions necessary to avoid, transfer, mitigate, or accept them. The methodology shall be included in the tender.

6. Work plan for activities/services

Regular maintenance activities undertaken by the Contractor shall be presented and submitted in writing to the Contracting Authority on a six-month basis.

A mid-term report shall be submitted by the end of the first year of the maintenance period, and the Final report shall be submitted by the end of the contract.

7. Place and duration of activities/services

7.1. Place and duration of activities/services

The Contractor shall perform activities remotely. Access to the system will be given by the Contracting Authority.

7.2. Commencement date and completion date for the execution of the services or the Time/Period for Completion of the Services

The time period for completion of the Services shall be 2 years (24 months).

8. Necessary resources/expertise to carry out the activities in the Contract and achieve the results

8.1. Number of experts per experience level/ category

For carrying out the activities under the Contract, the Contracting Authority anticipates that certain fields of expertise or the following categories of professions (as applicable):

Key Expert	Qualifications and Skills	Professional Experience	Project-related experience
Team Leader	Will lead the implementation of all the components and retain the leadership and capacity of overall coordination, communication, as well as	- 7 years of professional experience in the field of road safety - 3 years of working experience in Road	Participation in a similar position in at least two similar projects, with this ToR preferably

	<p>quality control of the project's outputs and outcomes.</p> <ul style="list-style-type: none"> - University graduate from Transport/ Statistics/ Public Health or 5 years of general experience above the minimum requirement set-up in the professional experience; - Proficient in English, oral and written. - Proven skills in project management. 	Safety Data for Observatories;	covering road safety
Web Application Software developer	<p>Responsible for performing a wide variety of production tasks for the web application system and data management.</p> <p>University graduate in Computer Science/Electronics/ or equivalent general professional experience of 7 years in the field of web application software development.</p> <p>Proficient in English, oral and written.</p>	7 years of professional experience in the field of software web application development and/or software engineering.	Working experience as a software developer in two (2) projects in the web application database, from which at least one (1) to be in the transport field.
Mobile App developer	<p>Responsible for performing a wide variety of production tasks for mobile applications and data management.</p> <p>University graduate in Computer Science/Electronics/ or equivalent general professional experience of 5 years in the field of application software development.</p> <p>Proficient in English, oral and written.</p>	5 years of professional experience in the field of mobile app development.	Working experience as a mobile app developer in one similar project (i.e. development or maintenance of the mobile app)

The selection of experts shall be in line with the criteria described in 3.1 Description of the present situation, where the state of play of the system architecture and language is described.

The Contractor is responsible for selecting, hiring and/or using any other experts whose inputs might prove necessary for the proper delivery of services without seeking the Contracting Authority's prior approval in this regard. The expertise of a Product Solution – IT Services shall be available on demand, based on the needs of the system requiring a solution. Maintaining the WBRSO Mobile apps for iOS, Android, and Huawei is part of this service's tasks, and providing experts (staff) is crucial. In particular, quality assurance and system security are

considered of utmost importance for the proper delivery of services, and dedicated experts may be required. ISO 27001 international standard is required to ensure information security.

The costs for other experts, backstopping and support staff, as needed, are considered to be included in the tenderer's Financial Offer.

9. Contract Management and Reporting

All services and deliverables produced under the contract shall be subject to the Contracting Authority's acceptance. The following acceptance procedures shall apply.

Contracting Authority's feedback shall be submitted within 20 calendar days upon receipt of the draft version of a deliverable and may take one of the following forms:

- a. Unconditioned approval;
- b. Approval with comments;
- c. Request for revision (in case the deliverable needs quality and/or content improvement);
- d. Rejection (in case the minimum contractual requirements on the deliverable's content and quality are not met).

In cases listed at points b, c and d above Contracting Authority's decision shall be accompanied by a list of comments that the Contractor will have to consider when preparing a revised version of the deliverable.

The Contractor shall send the revised version as soon as practically possible, and the Contracting Authority shall provide its feedback within 14 calendar days from such submission. Notwithstanding the Contracting Authority's entitlement to reject or request a revision of a deliverable until its feedback is properly addressed, failure of the Contractor to have its reports approved within 60 calendar days from the initial submission would trigger delay damages applicable starting from the first day following such deadline.

The Contracting Authority's failure to provide feedback within the time limits set out in this article will result in the reports being deemed approved as of the day after the date on which such feedback was due.

9.1. Management of the relationship between the Contractor and the TCT Secretariat

The Contracting Authority and the Contractor will maintain regular communication regarding the needs of the system and its users via email, video calls, or in-person meetings as needed.

9.2. Reports/documents to be issued by the Contractor

Reports will include the work carried out during the reporting period. The reports issued by the contractor will be the following:

- A six-month report will be issued on a regular basis. The reports will include all tasks carried out during that period.
- A mid-term report will be issued by the end of the first year contract, including all tasks carried out during that period.

- A final report will be issued by the end of the second year (end of contract), including all tasks carried out for the whole contract period.