

Terms of reference for the engagement of
Locally contracted expert – RAMS Infrastructure Expert
on TCT Support in preparation of Terms of Reference for Road Asset Management
System

1. Background

The Transport Community is an international organisation in the field of mobility and transport. It has 36 participants – the European Union Member States represented by the European Commission, the Southeast European Parties (the Republic of Albania, Bosnia and Herzegovina, Kosovo*, Montenegro, the Republic of North Macedonia, and the Republic of Serbia - hereinafter referred to collectively as “regional partners”) and the three observing participants (Georgia, Republic of Moldova and Ukraine). Transport Community is working on integrating Western Balkans’ transport markets into the EU by assisting the regional partners in adopting and implementing the EU legislation in the transport field and supporting projects connecting the region with the EU.

The organisation was founded with a Treaty¹ Establishing the Transport Community, signed on 9 October 2017 by all partners (Council Decision (EU) 2019/392).

The aim of the Treaty, therefore, is the creation of a Transport Community in the fields 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 Transport Community shall be based on the progressive integration of transport markets of the South East European Parties into the European Union transport market based on the relevant acquis, including in the areas of technical standards, interoperability, safety, security, traffic management, social policy, public procurement and environment, for all modes of transport excluding air transport. For this purpose,

* 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

¹ <https://www.transport-community.org/wp-content/uploads/2022/10/treaty-en.pdf>

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this Treaty sets out the rules applicable between the Contracting Parties under the conditions set out hereinafter. These rules include the provisions laid down by the acts specified in Annex I².

As part of the broader EU integration agenda, the Western Balkans have committed to aligning their transport policies, systems, and infrastructure management practices with EU standards. A key aspect of this process involves improving the efficiency, transparency, and sustainability of road asset management through the establishment of modern, data-driven systems.

In the past, infrastructure development in the region, including in Kosovo, has often been pursued without a comprehensive framework for long-term asset management. However, recent years have seen growing recognition of the need to shift from reactive to proactive approaches in road maintenance and investment planning. This transition is critical to ensuring optimal use of limited public resources, preserving the value of existing road infrastructure, and improving safety and service quality for users.

To support this, several Regional Partners have started implementing or upgrading Road Asset Management Systems (RAMS), supported by national strategies, regional cooperation mechanisms, and external technical assistance. The Transport Community's **Next Generation Road Action Plan (2025–2027)** and the revised **TEN-T Regulation**, which now formally integrates Kosovo into the European core and comprehensive transport networks, reinforce the need for data-based decision-making and performance monitoring in road sector governance.

2. Description of the assignment

Kosovo, as a signatory of the Transport Community Treaty, has committed to modernising its road sector governance, including the development of a fully operational Road Asset Management System (RAMS). This system is intended to serve as a central tool for planning, budgeting, and prioritising road maintenance and investment based on objective, up-to-date data.

In this context, the assignment focuses on preparing the Terms of Reference (ToR) for the future development and implementation of Kosovo's RAMS, in line with best European practices and Transport Community objectives.

² <https://www.transport-community.org/wp-content/uploads/2024/07/annex-1.pdf>

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The **overall objective** is to provide targeted technical assistance to define the scope, structure, and functional requirements of a national Road Asset Management System for Kosovo, aligned with EU standards and regional strategic goals.

The **specific objectives** are to:

- Define the purpose, scope, and key components of the future Road Asset Management System (RAMS) for Kosovo, including its expected functionalities and outputs;
- Identify and describe the technical specifications, data requirements, and system architecture necessary for an effective and scalable RAMS;
- Outline the legal, institutional, and operational requirements for the development, implementation, and long-term sustainability of the RAMS;
- Develop clear Terms of Reference (ToR) for the procurement of services or systems related to RAMS development, including proposed workstreams, deliverables, timelines, and resource needs;
- Ensure that the drafted ToR is aligned with EU standards, international best practices, the Transport Community's Next Generation Road Action Plan (2025–2027), and Kosovo's national road sector reform priorities;
- Provide recommendations on stakeholder roles, coordination mechanisms, and capacity-building needs to support the future implementation of the RAMS.

3. Scope of work

The expert will work under the supervision of the **Ministry of Environment, Spatial Planning and Infrastructure of Kosovo** (the end beneficiary), in close coordination with other relevant institutions and stakeholders, as applicable. The assignment will consist of the following tasks:

Task 1: Institutional and Legal Framework Review (3 days)

- Review the existing legal, institutional, and operational framework relevant to road asset management in Kosovo;
- Assess institutional roles, administrative capacities, and potential overlaps or gaps in responsibilities for RAMS development and implementation.

Task 2: Stakeholder Needs and Functional Requirements (2 days)

- Conduct consultations with key stakeholders (e.g., road authorities, municipalities, transport ministries, donor-funded programmes) to identify current practices, data availability, and expectations for the RAMS;
- Define the high-level functional and technical requirements of the RAMS, including core modules (inventory, condition monitoring, maintenance planning, reporting);
- Identify required data inputs and sources (e.g. traffic volumes, pavement condition, GIS layers).

Task 3: Drafting the Terms of Reference (15 days)

Prepare a comprehensive Terms of Reference (ToR) for the procurement of services or systems for the design and implementation of Kosovo's Road Asset Management System and cover the following key components:

3.1. Project Objectives and Scope

- Define the objectives of the RAMS project from a policy and operational perspective
- Clarify the scope in terms of road categories (national, regional), system users (MESPI, Kosovo road agency, municipalities), and data coverage (inventory, condition, usage, maintenance history, costs)

3.2. Functional and Non-Functional Requirements

Provide a detailed functional specification for the RAMS, including but not limited to:

- Road network inventory and classification
- Pavement condition monitoring and assessment
- Traffic data integration
- Performance prediction and deterioration models
- Maintenance planning and prioritisation
- Budget forecasting and cost-benefit analysis
- GIS visualisation and map-based reporting
- Dashboards and decision-support tools

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- Define non-functional requirements such as:
 - System performance (response times, scalability)
 - Interoperability with existing systems (e.g. planning, budgeting, GIS)
 - Data security, user access levels, and backup protocols
 - User interface usability and multilingual support (e.g. Albanian and Serbian)

3.3. Technical Architecture and System Design Parameters

Propose a high-level system architecture that includes:

- Central database and cloud/physical hosting preferences
- Client-server architecture or web-based platform options
- Interfaces with external systems or databases (e.g. GIS, traffic sensors, climate data)
- Specify system software components, recommended programming languages, licensing arrangements (open-source vs proprietary), and hardware/environment requirements

3.4. Implementation Approach and Methodology

- Define a phased implementation methodology (e.g. Inception, Development, Pilot, Rollout, Capacity Building, Support)
- Provide indicative timelines and milestones
- Outline expected contractor responsibilities during each phase, including coordination with MESPI and other stakeholders

3.5. Data collection for RAMS (based on the outputs of road infrastructure expert)

- Identify the full range of data sets required for the effective operation of the RAMS based on the outputs of the road infrastructure expert, including inventory data, condition assessment, maintenance records, traffic and climate data
- Define appropriate data collection methodologies (manual, automated, remote sensing, etc.) and prioritise based on cost-efficiency and feasibility
- Propose a data collection plan, including timelines, roles and responsibilities, quality assurance mechanisms, and integration with the RAMS design

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- Coordinate closely with the local expert(s) responsible for technical inputs and geospatial data layers to ensure compatibility and consistency with system architecture

3.6. Staffing and Capacity Building

- Identify the required expertise of the contractor's team (e.g. IT developers, transport engineers, asset management specialists, GIS experts, trainers)
- Specify requirements for knowledge transfer and on-the-job training of MESPI staff
- Include user manuals, technical documentation, and training delivery (initial and refresher)

3.7. Testing, Commissioning, and Operational Acceptance

- Outline pre-deployment, pilot testing, and final commissioning procedures
- Define success criteria for each phase and minimum requirements for system acceptance
- Include protocols for issue resolution and performance validation during testing

3.8. Maintenance and Support

Detail requirements for post-deployment maintenance and technical support, including:

- Bug fixing and troubleshooting
- System upgrades and feature enhancements
- Helpdesk operations
- Duration and terms of the support period

3.9. Deliverables and Reporting

Specify all expected deliverables, including:

- Inception report
- System design documentation
- User and admin manuals
- Pilot test reports
- Final RAMS system with source code and licenses

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- Training materials and sessions
- Monthly/quarterly progress reports
- Set clear deadlines, quality expectations, and review procedures.

4. Evaluation Criteria

Propose objective criteria for evaluating technical and financial proposals submitted by potential contractors, such as:

- Technical quality and approach,
- Relevant experience and qualifications,
- Proposed implementation timeline and methodology,
- Price competitiveness and cost-effectiveness.

All the above tasks should be completed to ensure consistency with national transport strategies and key EU and regional documents, including:

- EU Transport Policy and ITS framework,
- Transport Community Treaty and its Road Action Plan,
- Green Agenda for the Western Balkans,
- Economic and Investment Plan for the Western Balkans,
- Growth Plan for the Western Balkans and the Reform Agenda agreed with Kosovo,
- TEN-T Regulation (2024 revision).

5. Deliverables

The expected deliverables are:

1) Institutional and Legal Assessment Report

- Content: Overview of the legal and institutional context for RAMS in Kosovo; identification of responsibilities, gaps, and coordination issues.
- Length: Approx. 5 - 7 pages (excluding annexes).

2) RAMS Functional Requirements Note

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- Content: Key stakeholder needs; proposed system functionalities and modules; data input types and sources.
- Length: Approx. 5 - 7 pages (excluding annexes).

3) Draft Terms of Reference for RAMS Development

- Content: Full draft ToR text suitable for launch of procurement process.

4) Policy Alignment Note

- Content: Summary of how the proposed RAMS ToR aligns with:
 - Kosovo's national road strategy and planning documents;
 - Transport Community Road Action Plan (2025 - 2027);
 - Green Agenda and Growth Plan for the Western Balkans;
 - Relevant EU frameworks on infrastructure governance and performance monitoring
- Length: Approx. 2 - 4 pages.

5) Final Report

- Content: Summary of activities, findings, methodology, stakeholder feedback, and recommendations.
- Annexes: All deliverables listed above, plus any meeting minutes or stakeholder inputs collected.
- Length: Approx. 5 - 8 pages (main text, excluding annexes).

6. Qualifications and exclusion criteria

- a) A university degree (minimum 4 years) in Information Technology, Computer Science, Transport Engineering, Transport Planning, or a closely related field is required.
- b) Postgraduate education in Infrastructure Planning, Asset Management, or Transport Policy will be considered an asset.
- c) Any professional/civil servants working in the end-beneficiary institution are ineligible to apply.

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7. Work experience

- a) A minimum of **seven (7) years of professional experience** in one or more of the following areas:
- Road infrastructure planning or management;
 - Transport policy or legal framework development;
 - Preparation of procurement documents (ToR) for public infrastructure or digital systems.
- b) At least **one relevant reference activity in the past five (5) years** related to:
- Road Asset Management System development or upgrade;
 - Drafting of technical specifications or terms of reference for infrastructure or digital transport systems.
- c) Demonstrated knowledge of RAMS methodologies (HDM-4, PMS, GIS-based inventory tools, etc.).
- d) Prior experience working in the **Western Balkans** or neighbouring EU/EU pre-accession countries is considered an **asset**.

As proof of points a) and b), a reference letter confirming the criteria above shall be included.

8. Languages

- o Proficiency in English, with knowledge of the Albanian language considered an asset.
- o The Final Mission Report shall be submitted to the TCT Secretariat in English, while the Draft Terms of Reference for RAMS Development shall be submitted in both English and Albanian.

9. Timing and Location

The assignment foresees work from home/online or in person meetings in the **Ministry of Environment, Spatial Planning and Infrastructure of Kosovo** (the end beneficiary). The assignment is expected to start in September 2025.

10. Remunerations

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The assignment foresees up to 160 working hours or 20 working days of engagement for the expert with a maximum value of EUR 5,000. The payment will be made in one instalment after completing all the tasks and submitting payment documents as stated in the contract.

The final outputs will be subject to the TCT Secretariat and the end beneficiary, with quality control and approval before payment is executed.

Note: No other costs will be covered besides the expert cost per day.

11. Financial Offer

The financial offer should be shown in a form showing the price per working day of 8 hours.

The offer with the lowest price will be scored with a maximum of 20 points.

12. Selection and Award criteria

Selection will be done based on work experience.

Work experience	Minimum score	Maximum score
A minimum of seven (7) years of relevant experience in road infrastructure planning or management, transport policy and preparation of ToR for public infrastructure or digital systems.	20, for at least seven (7) years of relevant experience in road infrastructure planning or management, transport policy and preparation of ToR for public infrastructure or digital systems. Every additional year, the score will be 2 points up to the maximum score.	30
At least one (1) reference activity in the past 5 years related to Road Asset Management System	20 for at least one (1) reference for activity conducted in the past 5 years related Road Asset Management System	30

development or upgrade or drafting of technical specifications or terms of reference for infrastructure or digital transport systems.	development or upgrade or drafting of technical specifications or terms of reference for infrastructure or digital transport systems Every additional reference will be scored 2 points up to the maximum score.	
Knowledge of Asset Management methodologies (HDM-4, PMS, GIS-based inventory tools, etc.)	0	10
Experience in working in the Western Balkan environment or EU / EU pre-accession countries	10	10
Total	50	80

The abovementioned work experience will be scored based on the information provided in the CV and the reference letters as per point 6) of this ToR.

The total maximum score for the selection criteria is 80. The total maximum score for the financial offer is 20.

The offer with the highest score, combining work experience and offered price, will be proposed for the assignment, and the contract shall be signed.

No subcontracting is allowed for the assignment.