

Technical Specifications Services:

**Defining details, concept and curriculum development for establishing Regional
Centre of Railway Excellence**

PS/SRV/RCE/001B/2024

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1. Introduction

This document includes all the requirements on the basis of which each Tenderer will prepare its tender (Technical Proposal and Financial Proposal) for the performance of the services that are the subject of the Contract resulting from this procedure.

The Contracting Authority is the Transport Community through by the Permanent Secretariat of the Transport Community.

Permanent Secretariat of Transport Community - is one of the institutions set up under the Transport Community Treaty ("Treaty"). The Transport Community is an International Organisation in the field of mobility and transport, consisting of 33 participants and 3 observers – the EU, the six South East European Parties, established by the Treaty establishing the Transport Community and three observing participants (<https://www.transport-community.org/about-us/>).

Permanent Secretariat of Transport Community provides administrative support to the other institutions of the Transport Community, acts as a Transport Observatory to monitor the performance of the indicative TEN-T extension of the comprehensive and core networks to the Western Balkans and supports the implementation of the Western Balkans Six (WB6) Connectivity Agenda aiming to improve links within the Western Balkans as well as between the region and the European Union. It also reviews and monitors the implementation of the obligations under the Treaty.

Address: Beogradjanka building, Masarikova 5/8, 11000, Belgrade, Serbia

Internet addresses:

Main address: <https://www.transport-community.org/>

2. Background

2.1. Information about the Contracting Authority

Under the Treaty establishing the Transport Community, the South East European Parties (namely the Republic of Albania, Bosnia and Herzegovina, North Macedonia, Kosovo*, Montenegro and the Republic of Serbia hereinafter referred as "*Regional Parties*") have committed to ensure the development of the indicative extension of the TEN-T comprehensive and core networks to the Western Balkans, in view of their commitment to progressively integrate their transport markets with the European Union's, based on the relevant *acquis*. Part of this joint effort, the Permanent Secretariat of the Transport Community (further on "TCT") has been tasked to support the parties on the path towards achieving their common goals.

In order to assist the Regional Parties, a Rail Technical Committee (further on "RTC") was set up to cover rail transport related aspects falling under the scope of the Transport Community Treaty (TCT). To serve this purpose, the RTC with the support of the Permanent Secretariat of the Transport Community during 2020 elaborated a coherent set of concrete actions to be implemented by the Regional Parties in a coordinated and timely manner and outlined in the Rail Action Plan <https://www.transport-community.org/railways/action-plan/>. It aimed in particular at regional market

* 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.

opening, passenger rights, level crossing safety improvement, governance, interoperability, improving the rail border – crossing / common crossing operations and modernisation of the rail network.

Transport Community Treaty signed by Regional Parties, includes the following obligations, as part of its Annex 1 ([https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22017A1027\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22017A1027(01)&from=EN)), related to Rail Transport and part of the Rail Action Plan (<https://www.transport-community.org/wp-content/uploads/2020/11/Rail-Action-Plan.pdf>) as per the given topics:

- Market access
- Train driver licensing
- Interoperability
- European Union Agency for Railways
- Railway safety
- Inland transport of dangerous goods
- Transportable pressure equipment
- Social field - working time / hours
- Passenger rights
- Procurement procedures
- Public services

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

The participants at the Rail Excellence Summit in 2023 in Pristina and Doboj highlighted that the main challenge for development of rail transport in the Western Balkans is a lack of skilled human resources and an urgent need for additional training and education.

Eighty (80) rail experts, universities, and government representatives gathered to discuss how to support skilled human capital in the region and spur innovation and technological development in the rail sector. One solution would be an establishment of the Regional educational and training centre for Rail Excellence. The centre would educate and provide training on implementing EU standards and norms relevant to the rail sector, as stipulated in [ANNEX I](#) to the Transport Community Treaty.

Regional railway operators and academia/educational institutions took part in a panel discussion focused on rail excellence and the integration of the Western Balkans' rail system into the EU's.

Participants voiced a set of policy guidelines:

- **Political and institutional support** is needed for successful establishment of the Regional Centre of Excellence.
- The **synergy/common efforts between all stakeholders** (rail companies, educational institutions, government authorities) is a pre-condition. The educational programs at the secondary level and faculties could be adjusted according to the long-term needs of the rail companies as well as with new technologies (digitalisation etc).
- **Removing administrative barriers** at the regional level is a crucial step. Documents issued by the Centre should be recognised in the entire region.

- Using the **best practices from the EU** and the Western Balkan to successfully train and educate the rail staff.
- **Cooperation with the private sector** should be improved. Private companies are willing to offer internships for students as well as scholarships in accordance with their needs.
- Private and public companies, need to **self-assess their capacities**. Exchange of experts is possible if there is a surplus of engineers and technicians in one company and can be shared. The same principle could be applied to the fleet of wagons and locomotives.
- **Friendly environment** for newcomers is needed. It included better treatment by the managers in the companies, possibilities for career progress and additional education through training.
- **Current curricula** in educational institutions should be improved **with a focus on practical work** in public and private rail companies. This will decrease the time for the adaptation of young professionals after the completion of studying.
- **Rail suppliers** could think about extending their offer. They can use a positive approach already established by some companies which are **performing training and education** for all their products in their own training centres or on the field.
- **Transfer of knowledge** from the **seniors** to the young colleges should be done before or after retirement. With it, knowledge will stay in the company.
- **Exploring possibilities for subsidising women** in rail. There is a good example in Serbia, where World Bank has covered scholarships for female rail students at the master's level degree.
- The issue needs a **holistic approach**. With the involvement of each regional partner's national educational institutions and railway companies the Centre of Excellence can capitalise on their resources. Also, the chambers of commerce can contribute with their ideas and resources.
- The idea for the Centre of Excellence can be **implemented in phases** with a focus on **quick wins** at the beginning.
- **Crucial step forward is securing financing** for the determination of the **modus operandi** of the future Rail Centre of Excellence.

To kickstart the process of establishing the Regional Centre of Rail Excellence, railway companies and educational institutions signed [the Memorandum of Cooperation on Railway Excellence](#).

2.3. Objectives (Information about the expected benefits from creation of the Centre)

Rail Centre of Excellence would be a training and educational centre on rail related topics, allowing the participants to gain sound technical knowledge and understanding of development of most recent trends, policies and regulation, and best practices in the field. It will be focused on topics relevant for the railway operations, on all aspects related to the rail systems (train drivers, station masters, dispatchers, remote controllers, etc.).

Rail Centre of Excellence approach should be multi-disciplinary one and cover governance, legal, economic, technical, operational as well as state of the art aspects of the railway system. This holistic approach will allow the participants to become aware of the complexity of topical rail issues from different points of view, while at the same time enabling them to find new approaches and come to solutions so urgently needed for the Regional Partners. The Rail Centre of Excellence aims to foster the development of participants' competences in all topics related to rail in an innovative manner.

Rail Centre of Excellence additional objectives are:

- Organised by a network of educational and research institutions from the SEE region and beyond, to foster excellence in Rail Transport training through a multidisciplinary approach and cooperation with the Transport Community Secretariat;
- A unique focus on the Transport Community through topics and subjects relevant for the rail market, covering both specific issues from the TCT Signatory Parties ;
- An interdisciplinary training program bringing academia, practitioners and future professionals together;
- Allowing coaching of participants to support them in overcoming difficulties in dealing with practical issues from their daily work relevant for the rail sector.

Expected results and outcomes from the creation of the Centre:

1. Higher Quality of the Knowledge and skills of the rail transport professionals
2. Skill Upgradation for Future Industry Demands
3. Promoting Lifelong Learning
4. Improved Quality of rail operations
5. Efficient and Effective implementation of the priorities of the TCT
6. Increased Regional Cooperation
7. Creation of Network of Rail Transport Professionals
8. Improving Capacities of the rail system
9. Improving the knowledge exchange with the Educational Institutions.

2.4. Stakeholders

Information about the stakeholders and their implication in the contract implementation:

- Transport Community Treaty Permanent Secretariat (TCT Secretariat) – Contracting Authority;
- Consultation with Signatories of the [Memorandum of Cooperation on Railway Excellence](#), and Railway Infrastructure Managers and Railway Undertakings from the South East European Parties on reaching the objectives of the contract implementation. The consultation process shall be facilitated by the contracting authority.

3. Description of the services

3.1. General objective to which the services shall contribute

The general objective of this assignment is to contribute towards the fulfilment of the obligations derived from the Transport Community Treaty signed by Regional Parties, related to Annex 1 of the Treaty, implementation of the Rail Action Plan and establishment of competitive, reliable and safe transport system with improving and modernising the signalling on level crossing of railway with road infrastructure.

3.2. Specific objective to which the services shall contribute

The objective of this assignment is to define the essential particulars for the establishment of a Regional Centre of Railway Excellence in the Western Balkans. In addition to focusing on defining key components such as infrastructure and equipment requirements, specialised training programs,

human resources and strategic collaborations, the assignment investigates into the comprehensive framework necessary for creating a hub of excellence in the railway sector.

This includes a thorough examination of specific details crucial for the centre's success, such as technology integration, curriculum development, and industry partnerships. Furthermore, the assignment should consider the importance of legal conformity and certificates recognition within the Western Balkans (WB6) region. Ensuring compliance with regional regulations and standards is integral to the success of the Centre, fostering a seamless integration with existing legal frameworks and facilitating the recognition of certificates issued by the centre.

The assignment should provide a detailed and clear roadmap for stakeholders and decision-makers on the planning and establishment of Regional railway centre. It should include step-by-step guidelines, milestones and objectives to be reached, and a full framework detailing the establishment of the Regional Centre of Excellence. By incorporating considerations for legal conformity and certificates recognition, the assignment should contribute to the center's credibility, harmonization with regional regulations, and the facilitation of cross-border cooperation in the field of railway education and training within the Western Balkans.

3.3. Services and activities to be performed

The contractor is requested to perform the following activities/tasks:

Task 1: Options/scenarios Analysis and Definition of Technical Specifications:

Conduct a thorough option/scenario analysis to assess the possibilities for establishing the Regional Centre of Railway Excellence, considering legal, economic, technical, and operational factors.

A thorough option/scenario analysis for establishing the Regional Centre of Railway Excellence involves an in-depth examination of various critical factors, such as but not limited to:

1. Legal Factors:

- Regulatory Compliance: Evaluate the legal landscape governing educational institutions and training centres in the Western Balkans. Investigate compliance with regional and national regulations for the establishment and operation of the centre at Regional level.
- Certificate Recognition: Investigate the legal frameworks for recognising certificates issued by the future Regional Centre of Railway Excellence within the Western Balkans Regional Partners. Define the actions and needs for the recognition of certificates issued by the centre across the Western Balkans region.

2. Economic Factors:

- Cost estimates analysis for the option/scenario proposals: Conduct cost estimates analysis to assess the financial part of establishing and operating the centre. Define initial setup costs, operational expenses, and potential revenue streams.
- Funding Sources: Explore potential funding sources, including government contributions, private investments, and international support. Determine the financial sustainability of the centre over the long term.

3. Technical Factors:

- Infrastructure Requirements: Identify and define the necessary infrastructure components, such as classrooms, laboratories, simulation facilities, and IT infrastructure. Ensure that the technical aspects align with industry standards and promote effective learning.
- Technology Integration: Assess the incorporation of state-of-the-art technologies for training purposes. Evaluate the feasibility of implementing simulators, virtual reality tools, and other modern educational technologies.

4. Operational Factors:

- Curriculum Development: Investigate and define which modules and curricula is needed to be developed. Develop a detailed needs and quantities for the physical infrastructure of the centre, including classrooms, laboratories, and simulation facilities.
- Human resources: Investigate the profiles of human resources needed and the ways of their engagement.

5. Needs Assessment:

- Industry Human Capital Demand: Conduct an analysis to understand the demand for skilled professionals in the railway sector within the Western Balkans. Identify potential partnerships with industry players to align training programs with market needs.
- Competitive Landscape: Assess existing educational and training institutions in the region to understand the training and education landscape for rail professionals. Differentiate the centre by offering unique and high-quality programs to fill in the gap for industry human capital demand.

6. Risk Assessment:

- Risk Identification: Identify potential risks and challenges associated with establishing and operating the centre. This includes regulatory uncertainties, funding risks, and market fluctuations.

7. Stakeholder Engagement:

- Collaboration Opportunities: Explore collaboration opportunities with government bodies, industry associations, and international organizations. Engage with stakeholders to garner support and ensure the centre's alignment with broader industry goals.

By conducting a thorough options/scenarios analysis encompassing these detailed considerations, propose 3 options/scenarios for establishing the Regional Centre of Railway Excellence in the Western Balkans so the decision can be made on the most suitable option: do- minimum, optimal solution and do-maximum.

All segments in these tasks shall be in accordance with the respective legal framework of the Regional Partner having in mind the applicable EU Acquis.

By finalising the comprehensive **Roadmap for establishing Regional Railway Centre of Excellence** encompassing these detailed considerations, TCT together with the Regional Partners can seamlessly enrol the process of establishing the Centre.

The delivery under these tasks shall include the above and shall be reflected in Reports of Task no. 1 as described at point 3.4 below.

All deliverables shall be prepared in English and shall be handed over in electronic editable format.

Deadlines for delivery refer at the draft version of the reports:

In principle, the deadlines set out below cannot be extended. The Contractor is deemed solely responsible for delays occasioned by subcontractors or other third parties (except for rare cases of *force majeure*). Adequate resources and appropriate organisation of the work including management of potential delays should be put in place in order to observe the timetable.

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

The main deliverable of the Contract shall be comprehensive **Roadmap for establishing Regional Railway Centre of Excellence** encompassing detailed considerations, TCT together with the Regional Partners can seamlessly enrol the process of establishing the Centre.

More specifically, the following deliverables shall be produced by the Contractor under the Contract:

No.	Deliverable	Deadline for submission
1.	<p>Output of Task 1 Options/scenarios Analysis</p> <ol style="list-style-type: none"> 1. Legal Factors 2. Economic Factors 3. Technical Factors 4. Operational Factors 5. Needs Assessment 6. Risk Assessment 7. Stakeholder Engagement 	Commencement plus 8 months.
3.	<p>Final Report - Roadmap for establishing Regional Railway Centre of Excellence</p> <p>Shall incorporate a summary of all tasks and actions carried under the Contract as well as the final version of all the deliverables.</p>	Commencement plus 9 months.

* Note: Each of the sub-deliverables need to be aligned and preapproved by the Contracting Authority before the submission of the whole output of the relevant Task.

3.5. Duties and responsibilities of the parties

The Contractor shall be fully responsible for:

- ensuring resource planning in relation to the estimated schedule for the performance of the contract and presented in this document;
- fulfilling its obligations, in compliance with the best practices in the field, the relevant legal and contractual provisions, as well as with full understanding of the complexity related to the successful execution of the Contract, so as to ensure the fulfilment of the established objectives, ensuring that the activities performed and the obtained results are at the required quality parameters;

- ensuring the validity of all authorisations and certificates which might be needed for the performance of the services;
- ensuring a certain degree of flexibility in the performance of services according to the objective needs of the Contracting Authority at any time during the course of the contract. This might include slight adaptations of the schedule of performing the services, to bring it in line with challenges on the ground.
- 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 shall be responsible for:

- facilitating contacts with relevant stakeholders in all regional partners;
- taking over the deliverables and paying the contract price at the time and in the manner prescribed in the contract.

4. Assumptions and risks

Applicable regulations and technical norms might vary from one Regional partner to the other and could include formal review/approval/verification by certified individuals or state bodies, or specific authorisations.

5. Approach and methodology

The Contractor will have to define a methodology, describing in detail the activities and sub-activities (if any) that will be performed according to these ToR to achieve the expected results. Additional activities may also be suggested, and their need justified for the successful implementation of the assignment.

The methodology should indicate the intended results in the realisation of the respective (sub)activity by linking it to the specifics of the activity itself and the proposed way of its implementation and to clearly describe the chronological, technological, and logical interconnection of the processes in the implementation of the individual (sub)activities.

The methodology should include a detailed schedule with specific deadlines for the implementation of specific activities in the individual stages and the assignment as a whole. The proposed timetable should comply with the overall deadlines under the project and shall be presented in the form of a Gantt Chart.

The Contractor has to apply a system for the management of the risks within this assignment. This risk management process of the Contractor has to include, as a minimum, a risk analysis, identification of possible risks and the necessary actions to avoid, transfer, mitigate or accept them.

The methodology shall be included in the tender and further refined at Inception stage.

6. Work plan for activities/services

The main relevant milestones for the contract implementations are defined in sections 3.3 and 3.4 above. In due observance of the deadlines therein provided, the Contractor will prepare the implementing schedule as part of its methodology (see point 5 above).

7. Place and duration of activities/services

7.1. Place and duration of activities/services

Contracting Authority's headquarters is located in Belgrade, Republic of Serbia. While the Contractor shall not be asked to open a branch office or otherwise register in Serbia for the scope of performing the contract, physical presence of its team in Belgrade shall be required from time to time.

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

The contract shall last **one year** from the commencement date.

8. Staff

The team delivering the services should include, as a minimum, the profiles hereunder provided.

The team should provide experts who have qualification and legal capacity to perform in a timely manner all the obligations of the Contractor described in this Terms of Reference throughout the term of the contract.

Experts who have a crucial role in implementing the contract are referred to as key experts. The profiles of the key experts for this contract including minimum requirements with regard to qualification and skills, specific professional and project related experience are provided below.

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):

8.1. Main /key experts' profile

Role of the expert: Team Leader	
Educational and/or professional qualification	University graduate in a field of engineering / transport / economics / law or equivalent Proficient English user.
General professional experience	15 years of general professional experience acquired after graduation.
Specific professional experience	At least 8 years' professional experience in transport /
Project related experience	Completed at least 1 Project related to setting up of training or educational entity in the Contracting Party of the TCT or Observing Participants with a value of at least of EUR 100,000.
Responsibilities under the Contract	Team Leader will lead the implementation of all the components and retain the leadership and capacity of overall coordination, communication as well as the quality control of the project's outputs and outcomes. The team leader will be part of and will manage the team of experts, organises all aspects of the technical project work, ensure good communication with the project partners and Contracting Authority.

Role of the expert: Education – Training Expert	
Educational and/or professional qualification	University graduate in a field of engineering / transport / economics/law or equivalent Proficient English user.
General professional experience	10 years of general professional experience acquired after graduation.
Specific professional experience	At least 5 years' professional experience in education / training.
Project related experience	Experience in at least 1 Project related to setting up of training or educational entity in the Contracting Party of the TCT or Observing Participants with a value of at least of EUR 70,000.
Responsibilities under the Contract	Education – Training Expert will be responsible for definition of the educational and training aspects of the Centre of Excellence.

8.2. Non-key experts (secondary experts)

The Contractor is responsible to select, hire and/or use local experts if needed, as well as other experts whose inputs might prove necessary for the proper delivery of services without seeking Contracting

Authority's prior approval in this regard. In particular, the Contractor must be aware that extensive knowledge of the overall transport sector with specific knowledge of the relevant railway institutions, entities and railway operations will be needed for this assignment and that the profile of the expertise to be used shall correspond to such needs.

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 approval of services

9.1. Services approval

All the services and deliverables to be produced under the contract shall be subject to acceptance by the Contracting Authority. 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:

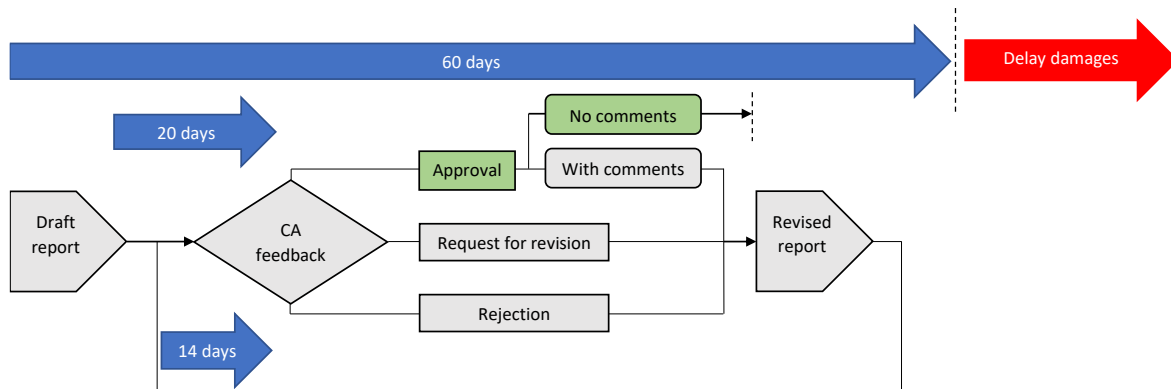
- a. Unconditioned approval;
- b. Approval with comments;
- c. Request for revision (in case the deliverable needs quality and/or content improvement);
- d. Rejection (in case the minimum contractual requirements on the deliverable's content and quality are not met).

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 Contracting Authority's entitlement to reject or request revision of a deliverable until its feedback 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.

Contracting Authority's failure to send feedback within the time limits set under this article would result in the reports being deemed approved starting from the day following the date such feedback was due.

The typical sequence of report approval events is presented graphically below:



9.2. Meetings and phone conferences

For facilitating the performance by the Contractor of this activity, the TCT Secretariat shall provide the Contractor with the full list of members of the Rail Technical Committee who will be regarded as national focal points for the implementation of this TA in their respective administrations.

TCT Secretariat will seek to facilitate the communication between the Contractor and beneficiaries whenever needed, but it is the ultimate responsibility of the Contractor to obtain a sufficient flow of information from the national focal points to be able to complete each of the tasks of this contract.

The Contractor shall be in regular communication with the Rail Coordinator from the TCT Secretariat for the entire duration of the contract.

The contractor is expected to participate in the following meetings and phone conferences:

- A kick-off meeting, virtual or in TCT Premises in Belgrade, at the latest 7 calendar days following the entry into force of the contract.
- Conference calls between the Contractor, TCT Secretariat and national focal points – shall be organised to discuss key deliverables, and any other important issues on request of any of the parties, Contractor or TCT Secretariat.
- Progress calls between the Contractor and TCT Secretariat shall be organised once per month. The contractor will be notified in case a summary record is deemed necessary for any of those meetings or conference calls. If requested, the summary record should be drafted by the contractor within 3 working days following the meeting and it needs to be agreed among the participants.