



COUNTRY FICHE

SPECIFIC INFORMATION

A: Legal Basis:

Art 20.9 of the Single Basic Act: The SRG shall report to the GB, and act as an interface with the JU, on the following matters:	Status of relevant national/regional R&I programmes DOPRAVA 2020+ (TRANSPORT 2020+) – programme closed 2025 DOPRAVA 2030 (TRANSPORT 2030) – ongoing programme, 4th call to be opened in March 2026 TREND – ongoing programme
	Identification of cooperation areas including concrete actions for deployment/uptake of technologies/innovative solutions
	Dissemination events, communication activities Regular info days, communication through webpages, information spreading to relevant stakeholders and working groups
	National/regional measures concerning deployment activities in relation to JU Transport Policy of the Czech Republic covers also activities related to JU (similarly Transport Research Strategy)
	National/regional initiatives ensuring complementarities with JU SRIA Agenda/AWP
Art. 20.10 of the Single Basic Act: The SRG shall submit, at the end of each calendar year, a report:	Describing national/regional policies in the scope of the JU Priorities defined by strategic documents (Transport Policy of the Czech Republic, sectoral Transport Research Strategy)
	Identifying specific ways of cooperation with the actions funded by the JU

B. Specific Information – to be filled in by each SRG representative and submitted to the EU-RAIL JU before SRG meetings:



1. Potential synergies and complementarities with EU-RAIL JU

a. Priority areas linked and/or related to EU-RAIL JU activities:

EU-RAIL JU area	Country's priority area
FA 2 FA 5	Automation, digitalization, radio communication Automation, digitalization
FA 6	Low emission and environmentally friendly rail
-----	-----
List of national funded projects related to areas of interest at the JU level	Ongoing projects CL02000022 Reliability limits of the human factor in the interaction with rail vehicle automation systems https://starfos.tacr.cz/en/projekty/CL02000022?query=r5ux77776ota CL02000125 Advanced Diagnostics of Railway Turnout Movable Parts https://starfos.tacr.cz/en/projekty/CL02000125?query=tlm777773shq CL02000139 5GRailCare Innovative Remote 5G Management of Railway Rolling Stock According to ECM Standard with Predictive Maintenance Estimation https://starfos.tacr.cz/en/projekty/CL02000139?query=tqtp77773h5a CL02000146 Sustainable Concept of Railway Capacity Allocation https://starfos.tacr.cz/en/projekty/CL02000146?query=tqtp77773h5a CL01000137 Modular Traction Converter for Substations and Flexible AC Transmission System (FACTS) https://starfos.tacr.cz/en/projekty/CL01000137?query=rhch777773ha CL01000180 Use of Artificial Intelligence in Support of Dispatcher Control of Rail Freight Transport https://starfos.tacr.cz/en/projekty/CL01000180?query=rhch777773ha

	Projects before implementation (closed in 2025) CK04000041 SmartRail - Automated data analysis related to rail freight traffic https://starfos.tacr.cz/cs/project/CK04000041 CK04000082 Advanced cyber security methods in tunnel systems as a part of critical transport infrastructure https://starfos.tacr.cz/cs/project/CK04000082 CK04000088 Increasing of tunnel safety using continuous accurate vehicle location https://starfos.tacr.cz/cs/project/CK04000088 CK03000182 Research of construction-technical requirements for the use of TEN-T ground infrastructure to solve large-scale crisis situations https://starfos.tacr.cz/en/projekty/CK03000182?query=sot777775loa FW08010072 Wagon 5G communication unit https://starfos.tacr.cz/cs/project/FW08010072 CK04000107 Research and development of advanced composite cylinders for alternative fuels https://starfos.tacr.cz/cs/project/CK04000107 CK04000109 Predictive diagnostics of ITS technological equipment using AI approaches https://starfos.tacr.cz/cs/project/CK04000109
--	---

b. Priority areas linked and/or related to EU-RAIL specific objectives (art 85(2) SBA)

EU-RAIL Specific Objectives	If any Country's objectives (in	Suggestions for potential synergies
-----------------------------	---------------------------------	-------------------------------------

	prioritization 1st, 2nd, 3rd..) - With specific reference to national project developed <i><u>Note:</u> presentation to be delivered at SRG meetings on project details for sharing or publication on EU-RAIL website</i>	with on-going EU-RAIL projects
facilitate research and innovation activities to deliver an integrated European railway network by design, eliminating barriers to interoperability and providing solutions for full integration, covering traffic management, vehicles, infrastructure also including integration with national gauges, such as 1 520, 1 000 or 1 668 mm railway, and services, and providing the best answer to the needs of passengers and businesses, accelerating uptake of innovative solutions to support the Single European Railway Area, while increasing capacity and reliability and decreasing costs of railway transport;		
deliver a sustainable and resilient rail system by developing a zero-emission, silent rail system and climate resilient infrastructure, applying circular economy to the rail		

sector, piloting the use of innovative processes, technologies, designs and materials in the full life-cycle of rail systems and developing other innovative solutions to guided surface transport;		
develop through its System Pillar a unified operational concept and a functional, safe and secure system architecture, with due consideration of cyber-security aspects, focused on the European railway network to which Directive (EU) 2016/797 of the European Parliament and of the Council (39) applies, for integrated European rail traffic management, command, control and signalling systems, including automated train operation which shall ensure that research and innovation is targeted on commonly agreed and shared customer requirements and operational needs and is open to evolution;		
facilitate research and innovation activities related to rail freight and intermodal transport services to deliver a competitive green rail freight fully integrated into the logistic value chain, with automation and digitalisation of freight rail at the core;	2nd priority	Number of projects are focused on rail freight, and the dual use military mobility (with specific priorities)
develop demonstration projects in interested Member States;	1st priority	ATO validation test in Czech Republic and on cross-border line (in preparation, proposed)



contribute to the development of a strong and globally competitive European rail industry;		
enable, promote and exploit synergies with other Union policies, programmes, initiatives, instruments or funds in order to maximise its impact and added value.		

2. Measures concerning deployment activities in relation to the JU

N/A

3. Specific project-level dissemination events, communication activities

N/A