

COUNTRY FICHE

SPECIFIC INFORMATION

A: Legal Basis:

| | Status of relevant national/regional R&I | |
|---|--|--|
| | programmes | |
| | DOPRAVA 2020+ (TRANSPORT 2020+) - | |
| | ongoing programme | |
| | DOPRAVA 2030 (TRANSPORT 2030) – | |
| | ongoing programme | |
| | TREND – ongoing programme | |
| Art 20.0 of the Single Pasis Act | | |
| Art 20.9 of the Single Basic Act: | Identification of cooperation areas including | |
| | concrete actions for deployment/uptake of | |
| The SRG shall report to the GB, and act as an | technologies/innovative solutions | |
| interface with the JU, on the following | | |
| matters: | 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) | |
| | | |
| | . 6 | |
| | complementarities with JU SRIA Agenda/AWP | |
| Art. 20.10 of the Circle Basis Ast. | Describing actional factor and actions to the | |
| Art. 20.10 of the Single Basic Act: | Describing national/regional policies in the | |
| | scope of the JU | |
| The SRG shall submit, at the end of each | Priorities defined by strategic documents | |
| calendar year, a report: | (Transport Policy of the Czech Republic, | |
| | sectoral Transport Research Strategy) Identifying specific ways of cooperation with | |
| | | |
| | the actions funded by the JU | |
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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 Automation, digitalization |
| FA 6 | Low emission and environmentally friendly rail |
| List of national funded projects related to areas of interest at the JU level | CK0400041 SmartRail - Automated data analysis related to rail freigth 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 FW08010072 Wagon 5G communication unit https://starfos.tacr.cz/cs/project/FW08010072 CK03000168 Intelligent methods of digital data acquisition and analysis for bridge inspections https://starfos.tacr.cz/cs/project/CK03000168 CK03000182 Research of construction-technical requirements for the use of TEN-T ground infrastructure to solve large-scale crisis situations https://starfos.tacr.cz/cs/project/CK03000182 |



CK02000044

Progressive development of hydrogen economy in transport in the Czech Republic

https://starfos.tacr.cz/cs/project/CK02000044

CK02000218

Wayside diagnostic of railway vehicles running gear https://starfos.tacr.cz/cs/project/CK02000218

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

FW06010422

Simulation and design of structures from digital

https://starfos.tacr.cz/cs/project/FW06010422

FW03010571

Al system for multimodal traffic data evaluation https://starfos.tacr.cz/cs/project/FW03010571

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 prioritization 1st, 2nd, 3rd) - With specific reference to national project developed | Suggestions for potential synergies with on-going EU- RAIL projects |
|-----------------------------|---|--|
|-----------------------------|---|--|



| | Note: presentation to | |
|--|------------------------|--|
| | be delivered at SRG | |
| | meetings on project | |
| | details for sharing or | |
| | publication on EU-RAIL | |
| | website | |
| 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; | 2 nd priority | Number of projects are focused on rail freight, also including the dual use military mobility |
| develop demonstration projects in | 1 st priority | ATO validation test |
| interested Member States; | _ p | in Czech Republic (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 $$\rm N/A$$

3. Specific project-level dissemination events, communication activities

N/A