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
	Identification of cooperation areas including concrete actions for deployment/uptake of technologies/innovative solutions
	Dissemination events, communication activities
	National/regional measures concerning deployment activities in relation to JU
	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
	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

    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 *Note: presentation to be delivered at SRG meetings on project details for sharing or publication on EU-RAIL website*	Suggestions for potential synergies 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;	Projects funded by BRIK II Program (Research and Development in Railway Infrastructure): 1. **Development of an Innovative Railway Vehicle Warning System:** The increase in train speeds on lines managed by PKP PLK and the improvement in railway service quality necessitate comprehensive safety measures. Therefore, it is essential to develop a system that provides advance warning of an approaching railway	TBD

	vehicle, allowing workers to safely leave the track. 2. **Development of a Line Dispatcher Support System:** The project involves developing a system that supports line dispatchers in making the quickest possible decisions to reroute certain trains during crisis situations. 3. **Implementation of Bidirectional Traction Substations and Energy Storage Systems:** The aim is to increase network receptivity and improve energy efficiency and reliability in railways. The project involves developing new technologies to utilize the process of electric energy recuperation for the railway infrastructure manager's operations. 4. **Enhancing the Energy Efficiency of**	

	Electric Heating Systems for Turnouts (EOR): The task aims to improve energy efficiency mainly by proposing technical and organizational solutions to reduce electricity consumption for EOR devices.	
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;	Projects funded by BRIK II Program (Research and Development in Railway Infrastructure): **Innovative Solutions for the Use of Photocatalytic Concrete in Infrastructure Managed by PKP PLK:** The project will include research and analyses to determine the optimal use of photocatalytic concrete technology in PKP PLK's operations. This technology, which helps combat smog, could be used, for example, on platform slabs.	TBD

	Development of a Method for Managing Environmental Hazards Affecting Railway Traffic Safety: The project will develop and test an effective method for obtaining information about trees and shrubs located near railway lines and a methodology for managing them.	
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;	Project funded by BRIK II Program (Research and Development in Railway Infrastructure): **Development of a Concept for Using Point Clouds from Scanning Measurements to Model Spatial Objects Near Railway Tracks:** The project aims to develop a concept for using scanning measurement data for both maintenance and investment processes. It includes creating and testing software for modeling and	TBD

	analyzing the acquired data in real-world conditions. **Development of a System for Precise Monitoring of Railway Networks Managed by PKP PLK in Terms of the Impact of Railway Traffic on the Environment:** The project aims to develop an innovative system for precise monitoring and processing of traffic, technical, and environmental data on the railway network, in compliance with current legal regulations. The acquired data will, among other things, streamline the complex investment process in preparing environmental documentation. **Development of Innovative and Eco-friendly Solutions for Vegetation Control on Railway Lines Managed by PKP PLK:** The project aims to enable the use of ecological methods for vegetation control	

	on railway infrastructure.	
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;		
develop demonstration projects in interested Member States;		
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

   R&I projects are still ongoing, deployment activities are to be determined at later stage

3. Specific project-level dissemination events, communication activities

4. R&I projects are still ongoing, major dissemination events, communication activities are foreseen at later stage.