

SYSTEM SOLUTIONS EXPERT GROUP

1. Characteristics and Objectives of the Expert Group Professional Focus

The Expert Group "System Solutions" is one of the core groups of the Technology Platform. The Expert Group is managed by the Director of the International Affairs Department of the state organization Správa železnic (Railway Administration) Mgr. Ing. Radek Čech, Ph.D.

Main objectives:

- Transfer output from individual expert groups into activities of top European railway institutions and bodies (SERAC, RISC, CER, etc.).
- Formation of a national position to the documents under discussion in the European railway institutions and bodies.
- Sharing relevant expertise and organizational knowledge and support for expert groups and experts throughout the TP.
- Creating conditions for the development of human resources and support for the involvement of experts in European institutions.
- Increase expertise of collaborating organizations and entities at the national level and thereby enhancing the competitiveness of rail transport.

2. Contents of Expert Group Activities

System Solutions Expert Group continues its activities to the activities of other working groups. The purpose is to coordinate and transfer outputs of other groups into activities of top bodies SERAC (Single European Railway Committee), RISC (Rail Interoperability and Safety Committee), Working Group CER (The Community of European Railway and Infrastructure Companies) and CER ERA (European Railway Agency) Steering Unit, Working Groups ERA (European Railway Agency) and Working Group SERAC for RFC (Working Group of the Single European Railway Area Committee for rail freight corridors).

The Expert Group creates an environment for discussion about currently solved problems associated with the whole standardization process, aiming to create the conditions for interoperability and is an important support for an entire group of experts, involved in this process at various levels, from the preparation of directives and their application documents and manuals up to the preparation of European standards.

Within the Expert Group are discussed current issues presented in RISC, SERAC for RFC, CER Working Group and CER ERA Steering Unit and Working Groups CER and SERAC for RFC and their possible impacts on the Czech railway environment. Members of the Expert Group, also in the framework of its activities, discuss issues with the presentation of various interested experts from groups. They are looking for applications of the results obtained in the scientific and research activities and their impact on the discussion of the relevant topics. Obtained results and suggestions are passed on through representatives who interpret them at meetings of the working groups and bodies.

Formation of national position on proposed and prepared documents in European legislation in the railway transport is thus very complex and complicated matter involving issues of the whole railway. These positions which are presented in the European institutions must also be coordinated and interrelated. They must also be linked with the activities of other expert groups. A great benefit is the cooperation with universities when documents approved by RISC become learning material and simultaneously so there are incentives for entering the specialized work as well as incentives for science and research.

3. Composition of the Expert Group

	<i>Name</i>	<i>Company/Institution</i>	<i>Expertise</i>
<i>Manager</i>	Mgr. Ing. Radek Čech, Ph.D.	Správa železnic, státní organizace	Director of the International Affairs Department
<i>Deputy of the Manager</i>	Ing. Martin Švehlík	Správa železnic, státní organizace	Director of the Department of preparation HSL
<i>Member</i>	Ing. Petr Kolář	Správa železnic, státní organizace	System specialist
<i>Member</i>	Ing. Václav Souček, Ph.D.	Výzkumný Ústav Železniční, a. s.	Head of Infrastructure Department
<i>Other Associates</i>	Other experts and officials of companies operating in the area of railway transport.		

4. Specific Expert Group Collaboration with the other Members of TP IZI

<i>Member of TP IŽI</i>	<i>Content and Focus of Collaboration</i>
VUŽ, VUKV	Interoperability, TSI revision, TSI implementation, creation of a national position for the RISC, etc.
UPa, DFJP, ČVUT, VUT	European legislation (Regulations, Directives,...), materials and participation in teaching, creating a position for the RISC
SUDOP	Interoperability, TSI revision, TSI implementation, etc.
AŽD	Interoperability, TSI revision, TSI implementation, etc.
Internally Správa železnic	Interoperability, TSI revision, TSI implementation, creation of a national position for the RISC, etc.

5. Overview of Implemented Projects (*in the period from 2018 to the end of 2020*)

Due to the content of the activities of the Expert Group mentioned in point 2, the Expert Group of System Solutions did not independently participate in specific projects.

<i>Project Title/ Acronym</i>	
<i>Project No</i>	
<i>Funded by</i>	
<i>Implementation Period</i>	
<i>Total Budget</i>	
<i>Beneficiary/ Coordinator</i>	
<i>Consortium</i>	
<i>Project Goal/ Project Benefits</i>	

6. Overview of Implemented Expert Group Activities (*in the period from 2019 to the end of 2020*)

- Representation of the Czech Republic at regular meetings of the Rail Interoperability and Safety Committee (RISC)
- Representation of the Czech Republic at regular meetings of the Single European Railway Area Committee (SERAC)
- Representation at regular meetings of the ERA CER Steering Unit
- Participation at meetings of the coordination group AsBo (Assessment Body)
- Participation in the Shift2Rail Open Calls Seminar
- Active participation in the conference ŽELEZNICE 2019, Prague
- Active participation in the scientific conference High-speed lines - the future of Czech railways
- Active participation in the conference Czech Rail Days in Ostrava
- Active participation in the seminar "Construction of transport infrastructure, seminar of secondary schools of mechanical engineering, construction and transport Děčín"
- Presentations and active participation in the preparation of a professional workshop for the 4th railway package
- Representation at the 9th International Railway Summit in Warsaw
- Participation in the international conference Shift2rail Innovation Days
- Participation in the international professional conference PRIME
- Participation in the international webinar Railway Forum Digital Edition
- Cooperation in the elaboration of the document "Comprehensive overview of TP strategies and analyses until 2020"

- Cooperation in the preparation of the document "Roadmap - the process of introducing modern technologies in the preparation and implementation of HSL"

7. Representation of the Expert Group in National and European Institutions

<i>National or European Institution</i>	<i>Name</i>	<i>Place of work</i>
RISC (Rail Interoperability and Safety Committee)	Mgr. Ing. Radkem Čechem, Ph.D.	Správa železnic, státní organizace
ERA CER Steering Unit (The Community of European Railway and Infrastructure Companies)	Ing. Petr Kolář	Správa železnic, státní organizace
Interdepartmental Management Team of the HSL Program	Ing. Martin Švehlík	Správa železnic, státní organizace
ERA AsBo (Assessment Body)	Ing. Václav Souček, Ph.D.	Výzkumný Ústav Železniční, a. s.
CER TWG INF (Infrastructure Working Group) CER TWG SRT (Working Group for safety in railway tunnels)	Ing. Václav Souček, Ph.D.	Výzkumný Ústav Železniční, a. s.