

## ENERGY EXPERT GROUP

### 1. Characteristics and Objectives of the Expert Group Professional Focus

Characteristic of professional focus:

- the group is focused on requirements of interoperability, related standards and technical solutions for the Energy subsystem

Objectives of professional focus:

- create support for representatives of the Czech Republic in the European institutes and their working groups
- create conditions for members of Technology Platform (TP) in R&D activities and participation or cooperation on national and international projects focused on needs of TP members

### 2. Contents of Expert Group Activities

Activities focused on the following areas:

- issue of "Transition to a unified power supply system 25 kV 50 Hz"
- issues of high-speed lines, especially power supply and overhead lines for high-speed lines
- support for the preparation and implementation of projects in the field of power supply to the railway network and overhead lines
- preparation and organization of workshops and training activities in the field of the energy subsystem
- participation in NB-Rail SG Energy meetings and participation in national and foreign conferences, seminars, etc.

### 3. Composition of the Expert Group

|                              | <i>Name</i>                  | <i>Company/Institution</i>     | <i>Expertise</i>  |
|------------------------------|------------------------------|--------------------------------|---|
| <i>Manager</i>               | Ing. Lenka Linhartová        | EUROVIA CS a.s. (TP IŽI)       | Interoperability  |
| <i>Deputy of the Manager</i> | Do. Ing. Pavel Drábek, Ph.D. | ZČU FEL                        | Power electronics, Electromagnetic compatibility, Electric drives |
| <i>Members</i>               | Ing. Petr Bošek              | Správa železnic                | Strategy Department   |
|                              | Ing. Radovan Bureš           | Výzkumný Ústav Železniční a.s. | Interoperability - assessment of the energy subsystem             |

|                         |                                    |                         |  |
|-------------------------|------------------------------------|-------------------------|--|
|                         | Ing. Radovan Doleček               | Správa železnic         | Electric traction and power supply                         |
|                         | prof. Ing. Jaroslav Novák, CSc.    | UPa DFJP                | Power electronics, Electric drives, Microprocessor control |
|                         | Jiří Podhradský                    | SUDOP Brno spol. s r.o. | Designing, Energy calculations                             |
| <i>Other Associates</i> | Doc. Ing. Martin Pittermann, Ph.D. | ZČU FEL                 | Power electronics, Electric drives                         |

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

| <i>Member of TP IŽI</i>         | <i>Content and Focus of Collaboration</i> |
|---------------------------------|---|
| Elektrizace železnic Praha a.s. |   |
|                                 |   |

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

|                           |  |
|---------------------------|--|
| No project implementation |  |
|                           |  |

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

|   |
|---|
| <ul style="list-style-type: none"> <li>• Monitoring and participation in solving the problem of "Transition to a unified power system"</li> <li>• Participation in the international meeting of NB-Rail SG ENERGY</li> <li>• Participation in conferences, workshops on railway infrastructure, in particular the supply of railway lines, high-speed lines and the transition to a single power supply</li> <li>• Negotiations on the use of hydrogen in rail transport</li> </ul> |
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#### 7. Representation of the Expert Group in National and European Institutions

| <i>National or European Institution</i>  | <i>Name</i>           | <i>Work Place</i>              |
|--|-----------------------|--------------------------------|
| NB-RAIL SG ENERGY  | Ing. Radovan Bureš    | Výzkumný Ústav Železniční a.s. |
| Expert Advisory Group to the Shadow Program Committee "Climate, Energy and Mobility" | Ing. Lenka Linhartová | EUROVIA CS a.s. (TP IŽI)       |