



# Who we are...

- Business-oriented joint-stock company
- The only shareholder is the company České dráhy, a.s. (Czech Railways, joint-stock company)
- VUZ is a company with more than 50 years of tradition











### VUZ has a wide range of activities

#### These include:

- Notified body / Authorized body:
  - Interoperability conformity assessment
- Accredited activities:
  - Testing
  - Product certification
  - Inspection
- Services of Test Centre VUZ Velim

- Participation in international projects
- Exchange of technical information
- Supervision



### Large and Small Test Rings

### Large Test Ring (LTR)

Total track length

Permissible axle load

Permissible maximum speed

13,276 km

22,5 t (25 t)

200 km/h (230 km/h)

### Small Test Ring (STR)

Total track length

Permissible axle load

Permissible maximum speed

3,951 km

22,5 t (25 t)

80 - 115 km/h





## Participation of VUZ

### European projects:

- INNOWAG Intelligent freight wagon with predictive maintenance (S2R-OC-IP5-03-2015)
- CARBODIN Car Body Shells, Doors and Interiors (S2R-OC-IP1-01-2019)
- Railenergy Innovative Integrated Energy Efficiency Solutions for Railway Rolling Stock, Rail Infrastructure and Train Operation
- WORC Database of research organizations

### National project:

Study on hydrogen utilization in railway transport in the Czech Republic



### **CARBODIN**

### **Facts and Figures**:

- Topic: Advanced Car body shells for railways and light material and innovative doors and train modularity
- EU Contributions: 3.5 m€
- Duration: 27 months
- Project start date: 01/12/2019
- Project end date: 28/02/2022
- Partners: 14 partners from 7 countries
- Project coordinator: FUNDACIO EURECAT
- H2020-S2RJU-OC-2019
- Grant agreement n° 881814
- https://carbodin.eu/



### Consortium



























- 1. General conditions of the Shift2Rail program
- 2. Call for proposals 2019
- 3. Consortium creation/assembly
- 4. Preparation of the grant application
- 5. Signing the consortium agreement
- 6. Project realization
- 7. Cooperation agreement with the PIVOT2 project
- 8. Finalization of project outputs and results





- 1. General conditions of the Shift2Rail program
- The Shift2Rail Joint Undertaking (S2R) was established in July 2014 pursuant to Council Regulation (EU) No 642/2014 of 16 June 2014 establishing the Shift2Rail Joint Undertaking).
- S2R is a part of the 8th framework program Horizon 2020, is a public-private partnership that supports investment in innovation and research.
- Duration of the program 2014-2020.
- Key documents:
  - Master Plan
  - Multi Annual Action Plan
  - Annual Work Plan and Budget
  - Financial Rules
  - Communication Strategy



- 1. General conditions of the Shift2Rail program
- 2. Call for proposals 2019
- Open call
- Call for members of S2R JU
- The duration of the call for submission of grant applications: approx. 5 months
- Funding & tender opportunities (Single Electronic Data Interchange Area)
  - <a href="https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home">https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home</a>



- 1. General conditions of the Shift2Rail program
- 2. Call for proposals 2019
- 3. Consortium creation/assembly
- VUZ is a member of EURNEX
- Attends ERRAC meetings
- Participates in UIC meetings
- Participates in IRCG meetings
- Distribution of roles and tasks in the consortium
- Consortium leader
- Work packages leaders
- NDA





- 1. General conditions of the Shift2Rail program
- 2. Call for proposals 2019
- 3. Consortium creation/assembly
- 4. <u>Preparation of the grant application</u>
- Project/preparatory team meeting 1x per week (online working meeting)
- CARBODIN budget sheet VUZ
- CARBODIN Proposal\_Information Request IP1
- CARBODIN\_Exploitation questionnaire VUZ
- Proposal Submission Forms
- NDA



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- CARBODIN Consortium Agreement





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- 6. Project realization
- 12/2019 2/2022
- Kick-off Meeting 12/2019
- Project team meeting (WP12) 1x every 2 weeks (online working meeting)
- Project team meeting (consortium)- 1x quarterly (online consortium meeting)
- General Assembly
- Final meeting





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- 7. <u>Cooperation agreement with the PIVOT2 project</u>
- The CARBODIN project was based on the outputs of the PIVOT2 project, i.e. a cooperation agreement had to be concluded
- Complex negotiations, delays in delivering outputs, delays in the CARBODIN project schedule





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### Thank you for your attention

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