

# Agenda of AŽD forum at INNOTRANS FAIR AŽD, Hall 27, Stand 650

Discussion on the latest trends in the field of autonomous & fully digital railways, ERTMS and the railway signalling technologies. Each of the topics will be introduced by a short presentation followed by a discussion with auditorium and experts.

# Wednesday, 21<sup>st</sup> September 2022 "AŽD Path on Autonomous Railway"

#### 2:00 p.m. Demonstration of Driverless Train Operation

 Extended information on ATO GoA4 LIVE DEMO broadcasted from "Švestková Dráha/Plum Railway" to Europe's Rail Stand on 20<sup>th</sup> September 2022 at 1:20 p.m.
Glance to the future of train operations

# 2:30 p.m. XŽD Railway Lines - history, presence and future

- What were the motivations of AŽD for acquiring its own railway lines?
- The story of the resurrection of the "Švestková Dráha/Plum Railway" the journey from a cancelled line to one of the most modern regional railways in Europe
- The transformation of the Dolní Bousov Kopidlno line into a technological test ground for the Autonomous Railway

#### 3:00 p.m. Autonomous railways - Deep dive - technology, visions and reality

- Detailed presentation of individual technologies for infrastructure and train
- for driverless operations. Path towards Autonomous railway operation
- Presentation of the new AŽD test vehicle for autonomous railway "EDITA"

# Thursday, 22<sup>nd</sup> September 2022

#### "Latest Technologies and Innovations"

### 2:00 p.m. AŽD solutions for ATO over ETCS (GoA2)

- Experience with the AŽD ATO solution in daily operation on the Czech railways for more than 30 years, currently about 400 equipped vehicles daily run on about 3,000 km of lines, development dating back to the 1960s
- Possibilities of ATO operation with and without ETCS. ATO and freight trains test results in the EU
- Efficient implementation of ATO Trackside linked to Traffic management system

#### 2:30 p.m. Experience with OBU ETCS integration and opportunities for line technologies

- Experience with the installation of OBU ETCS to the high diversity of railway vehicle classes in the Czech Republic - preparation, installation, approval for operation
- Special cases: ETCS in yellow vehicle classes
- Operation, maintenance and upgrade of ERTMS trackside installations

# 3:00 p.m. AŽD innovations for the future

- Presentation of new technologies ready for commercial operation:
- GNSS Train Positioning, ERTMS/ETCS on regional rail
- Wireless transmissions to object controllers (GS SWOC, Radiobox)
- C-ITS for level crossings, Independently powered level crossings
- TMS (Automatic route settings, ATO-Track side)
- Drones for remote and automatic track inspection
- Passenger information systems for regional rail
- Train integrity and others