

AŽD Praha s.r.o.

AŽD Railway Lines - history, presence and future

Vladimír Kampík, MIRSE

"Answer to the Ultimate Question of Life, the Universe, and Everything"

42

But is it also the answer for important question for signalling company?

And question is...

WHY TO BUY OUR OWN RAILWAY LINE ???



2015: Opportunity

Year 2015

Sprava zeleznic (CZ infra manager) offered two unused lines for purchase to public in open tender.

Dolni Bousov – Kopidlno Čížkovice - Obrnice



2015: Opportunity

<u>Dolni Bousov – Kopidlno</u>

Length of the line: 22.37 km

Gauge: 1435mm

Braking distance: 400 m

Single-track

Traction system: independent

Without regular service since 2010

Maximum speed: 60km/h

NO SIGNALLING, NO RADIO SYSTEM

<u>Čížkovice - Obrnice</u>

Length of the line: 35,892 km

Gauge: 1435 mm

Braking distance: 400 m

Single-track

Traction system: independent

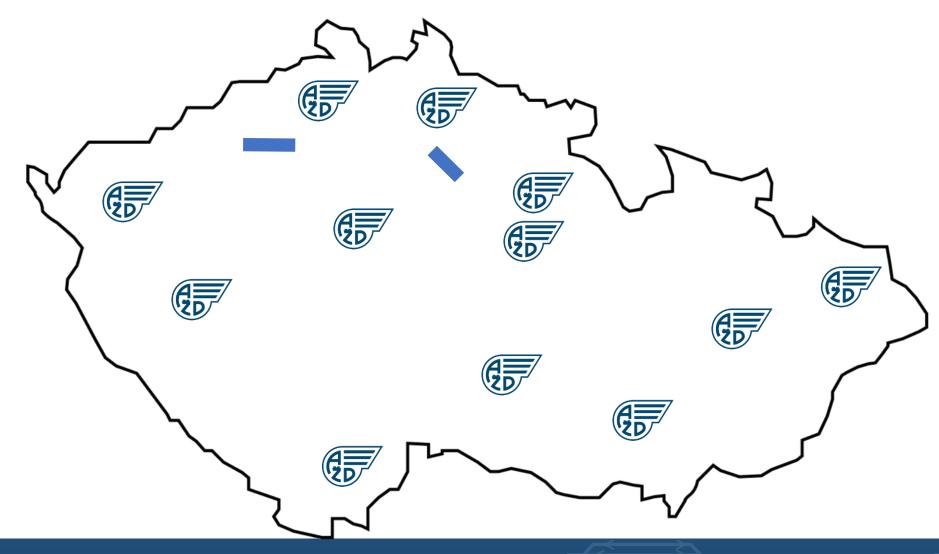
Without regular service since 2007

Maximum speed: 50km/h

NO SIGNALLING, NO RADIO SYSTEM



Questions, questions and questions





The Original Serious reasons ...

Quoting from original tender document

"AŽD Praha is interested in purchasing the regional railways DOLNÍ BOUSOV - KOPIDLNO and ČÍŽKOVICE - OBRNICE to use them as a <u>research base</u> - a <u>test polygon for the development and testing of technologies applicable on regional lines</u> in the Czech Republic and other countries within internal development and also EU Shift2Rail program.

The aim is to develop safe equipment with minimal investment and maintenance requirements and to increase transport safety and make rail transport more efficient. We plan to maintain and promote the operation of trains for tourists."



Čížkovice – Obrnice - "Plum Railway"

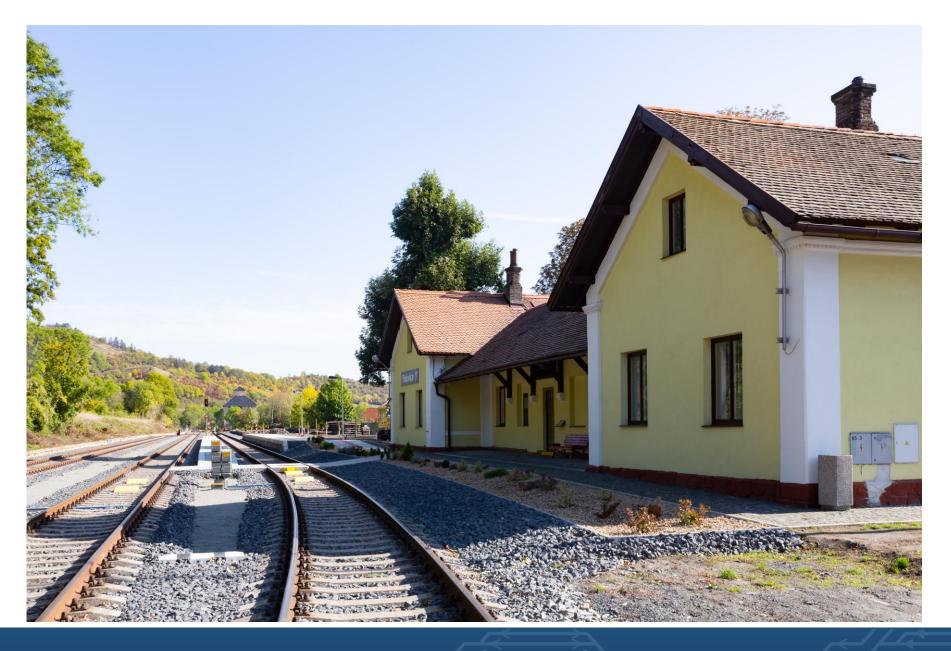




History of Plum Railway

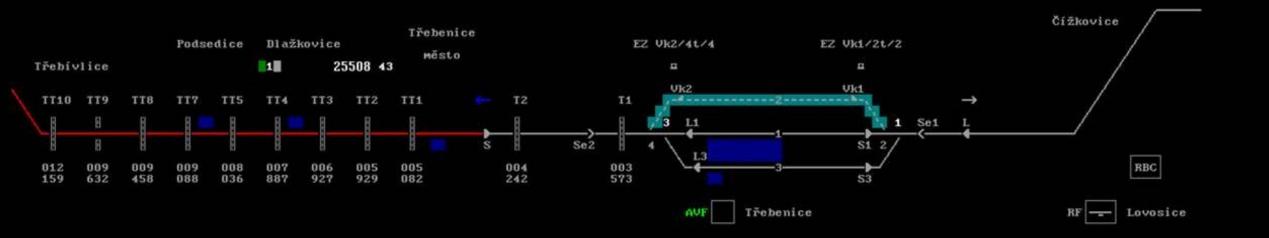
- The "Plum Railway" Lovosice Most line got its nickname during the First Republic after the plum plantations along the line.
- 1898 2007 Regular operation on the line
- 2007 2014 No regular operation, railway enthusiasts continued to organise special runs of historic trains
- 2014 -2016 The line is designated as <u>unnecessary</u> and offered it for sale
- 2016 AŽD Praha bought the line with the aim of resuming regular railway operation and building a test polygon for signaling technologies
- Year 2017 2019 Renovation of the line by AŽD Praha, Weekend tourist operation
- 15.12.2019 Start of regular operation line U10 Litoměřice Lovosice Most.













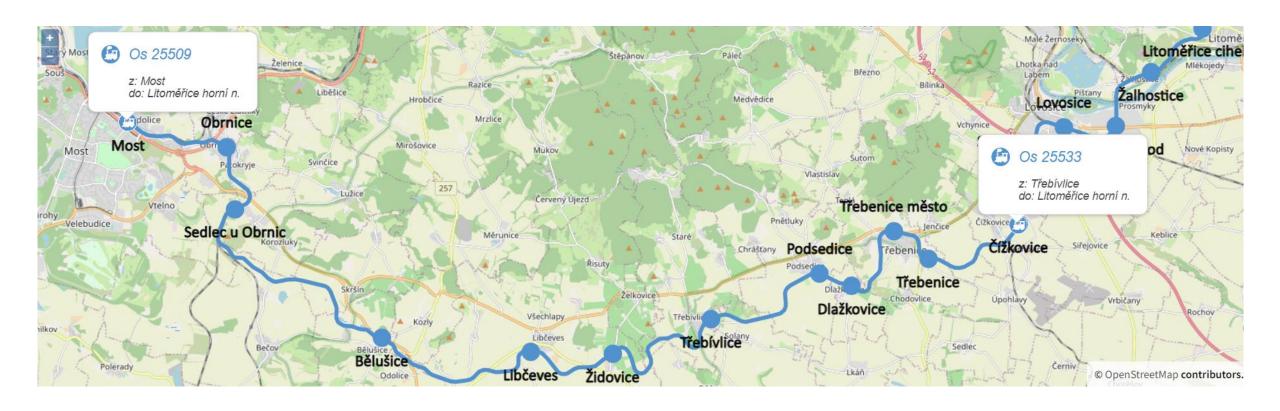
Regular passenger operation

- Daily operation since 15.12.2019
- 11 (eleven pairs)
 of trains running
 between Litoměřice
 and Most
- another 7 (seven
 pairs) in the section
 Litoměřice –
 Třebívlice





Čížkovice – Obrnice - "Plum Railway"





Polygon for Infrastructure Technology

- CTC controlled line from the regional dispatching centre in Lovosice,
- Fully electronic distributed interlocking StationSWing ESA-44
- ETCS Level 2 RBC type TrainSWing REA-11 (B3R2)
- ETCS Balises type RailSWing ABA-12
- GSM-R network, for voice, ETCS Level 2, GPRS
- ETCS Level 1 type TrainSWing LEA-10

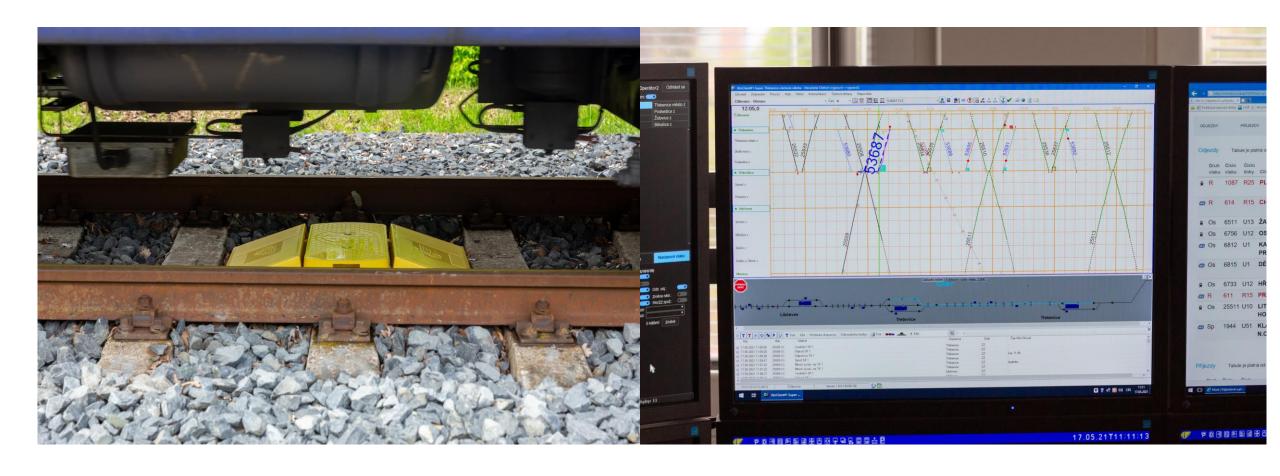


Polygon for AŽD Infrastructure Technology

- Object oriented level crossing GateSWing in various modifications
- All types of manufactured point machines and switch components
- Solution for C-ITS connected level crossing road user warning information to the car (C-Roads specification)
- Wireless connected Object Controllers fulfilling Cyber Security requirements
- Intelligent Stop solution for passenger

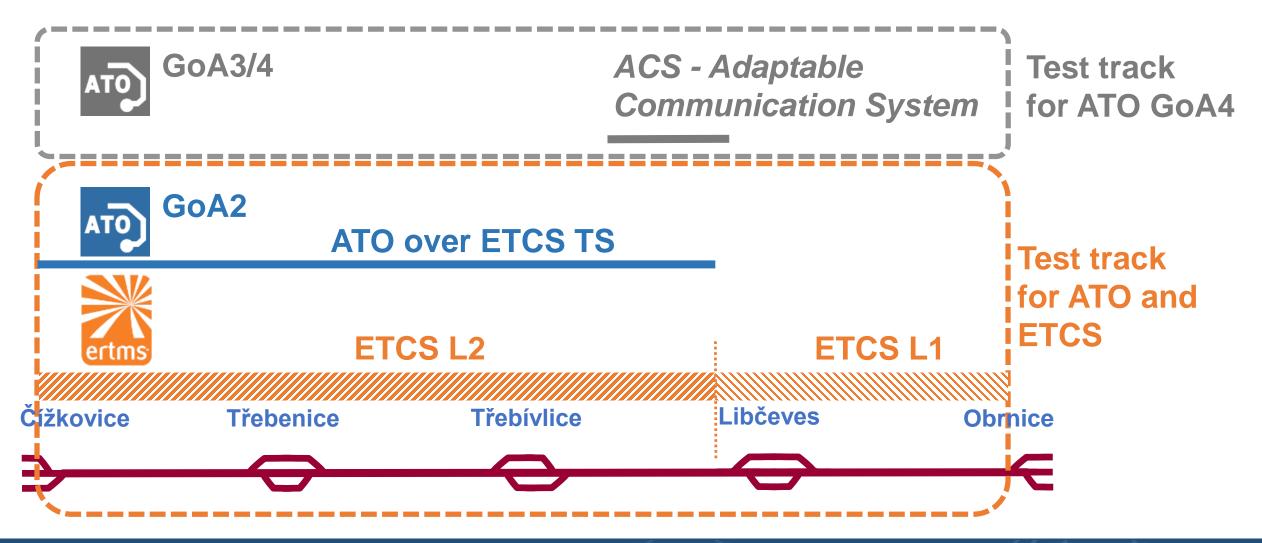


Test Polygon for Rolling Stock Applications





Test Polygon for Rolling Stock Applications





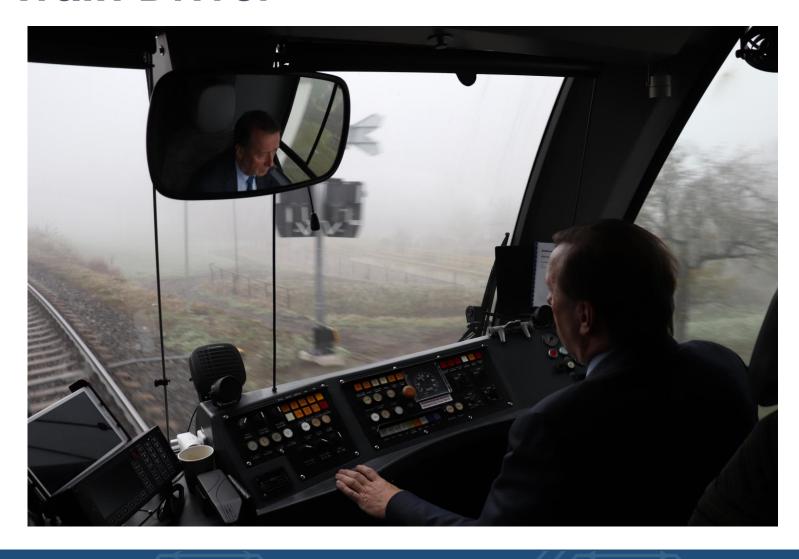
Polygon for Maintenance and Operation

- Diagnostic tool for rail defectoscopy detects the rail rupture by optical cable along the track
- Autonomous drone operation for regular and fault inspection of railway elements and track conditions

- Beside signalling producer also Railway Operator and Infrastructure Manager experience
- Better Understanding of Train Driver experience



AŽD Praha CEO as Train Driver







Social and Environmental Responsibility





Time for your questions

