AŽD Praha s.r.o.





AŽD PRAHA S.R.O. RAILWAY SIGNALING SYSTEMS

company presentation

2019

COMPANY PROFILE I.



- Leading Czech supplier of control, command, signaling and telecommunication equipment for transportation
- More than 64 years tradition on railway market
- Czech capital and stability of the renowned company
- Core business areas:
 - railway transportation
 - road transportation
 - telecommunications
 - Metro
- Member of associations:
 - UNIFE
 - UNISIG
 - ERTMS developer



COMPANY PROFILE II.



- Other business areas:
 - Civil engineering development
 - Cable harness production
 - Precise electronics
 - other
- Company provides R&D, design, production, installation and servicing in the field of telecommunication and signaling technology
- Company has yearly turnover over 300 mil. € (in 2018)
- AŽD Praha 1835 employees, AŽD Group 2900 employees
- Active in 18 countries of the World

EQUIPMENT TECHNICAL LEVEL



- Most up to date technical solution meeting European Standards
- Fully microprocessor based core equipment (ESA 44, ABE-1, PZZ-J, DOZ-1) meeting SIL-4 safety requirements (validated by notified bodies)
- Compatibility with any signaling systems used worldwide
- Systems designed also for high speed lines up to 250 kmph
- Systems fully compatible with ETCS/ERTMS
- System adaptability as per customer's requirements



TRAIN DETECTION SYSTEMS

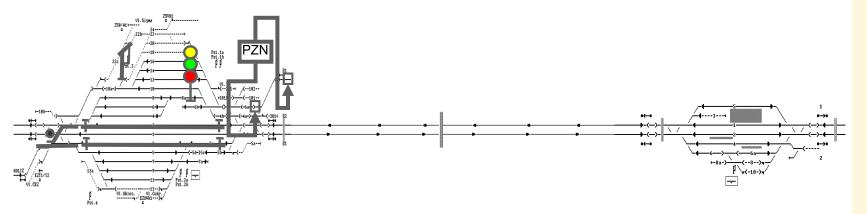
- axle counters
- track circuits

WAYSIDE ELEMENTS

- signals (LED, bulb)
- Impedance bonds

SWITCH-POINT PROGRAM

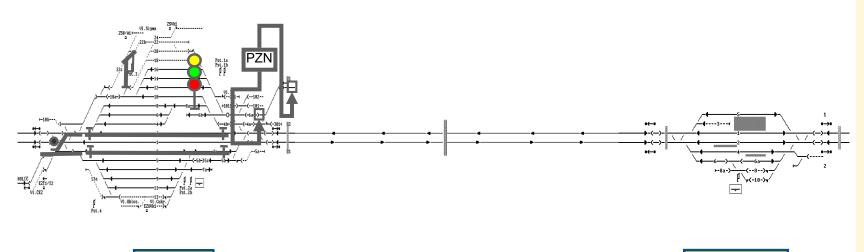
- point machines EP 600
- jaw-locks
- roller chairs
- end-position check units
- self-returning points





ELECTRONIC INTERLOCKING SYSTEMS

- SZZ-ETB (relay based architecture)
- ESA 11 (semi-electronic architecture)
- ESA 44 (fully electronic architecture)



ESA44

ESA44

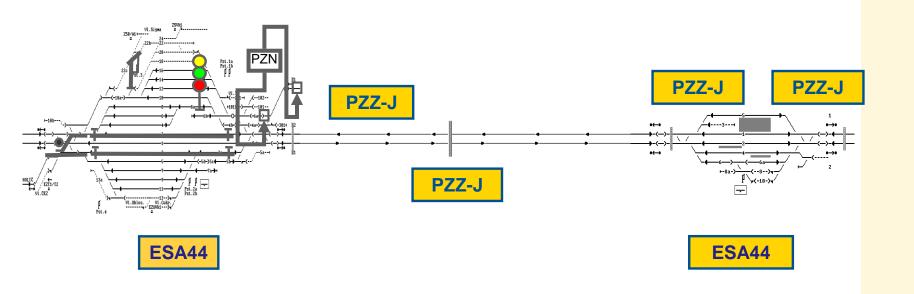


LEVEL CROSSING EQUIPMENT

- •PZZ-RE (relay based architecture)
- •PZZ-EA (electronic architecture)
- PZZ-AC (electronic architecture)
- PZZ-J (new generation fully electronic architecture)

WAYSIDE ELEMENTS

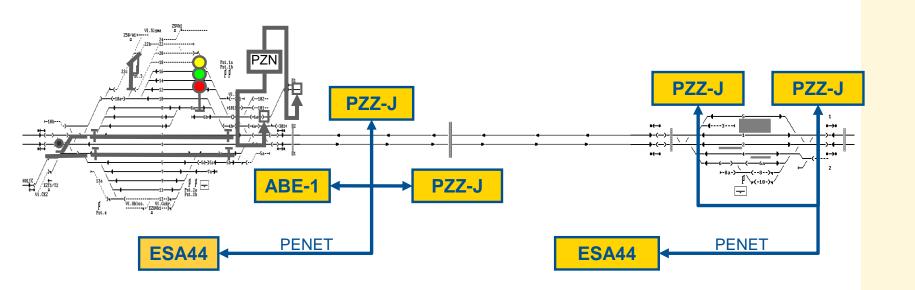
- LX warning boards (LED, bulb)
- LX barriers





LINE SIGNALING

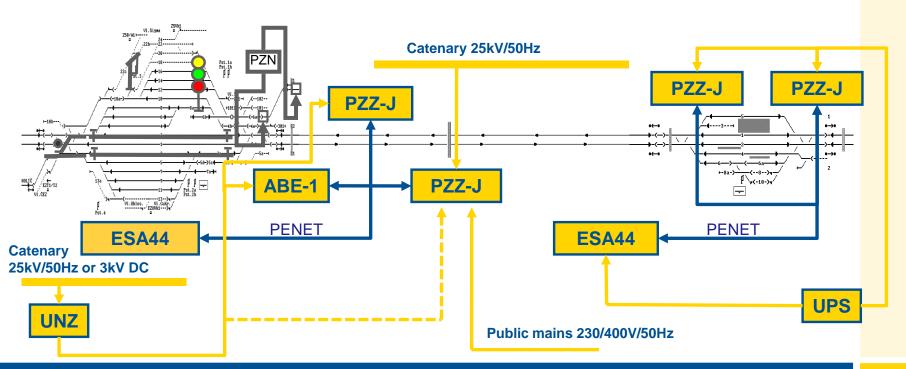
- Automatic block AH 88 (relay based architecture)
- Electronic automatic block ABE-1 (fully electronic architecture)
- ITZZ integrated in ESA44



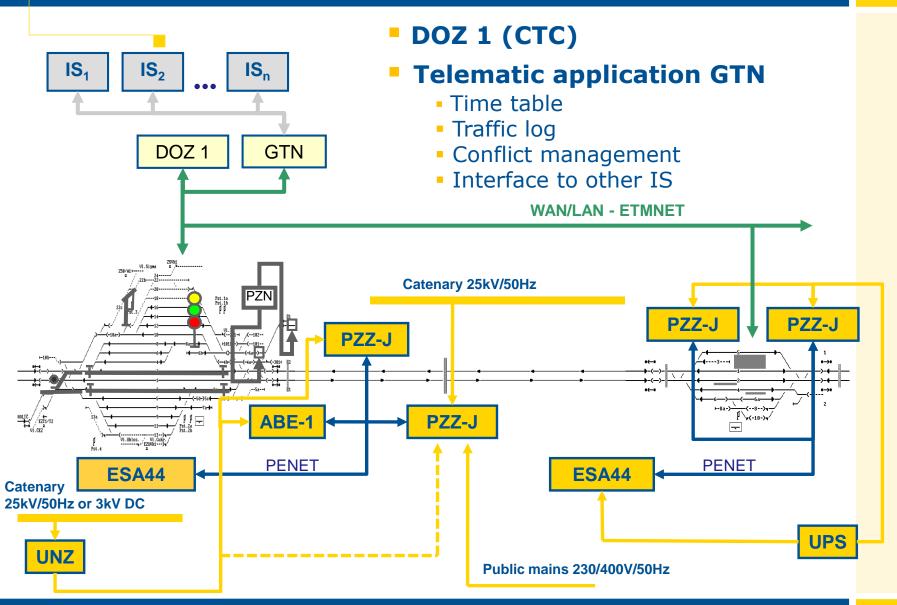


POWER SUPPLY SYSTEMS

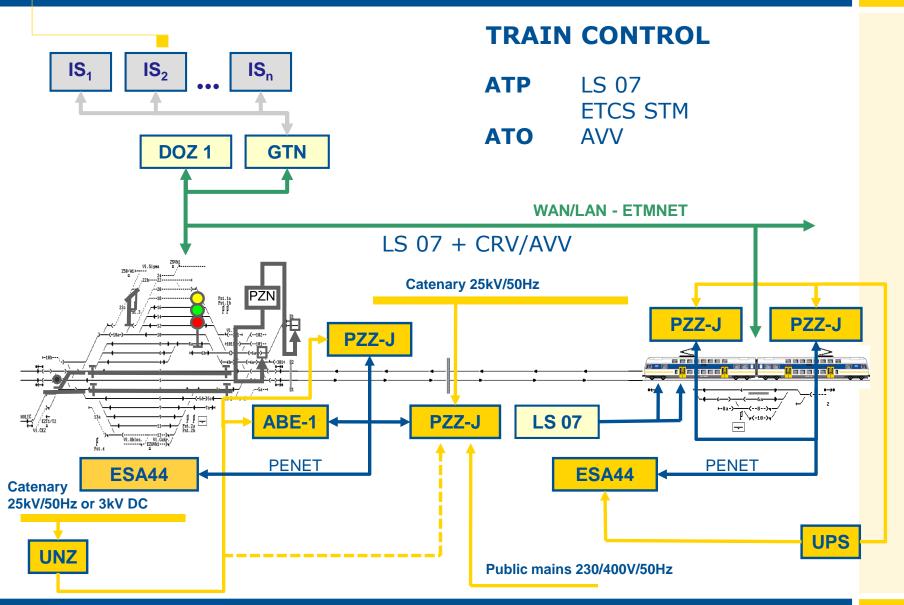
- UNZ 1,2 UNZ 3
- DAK
- UPS



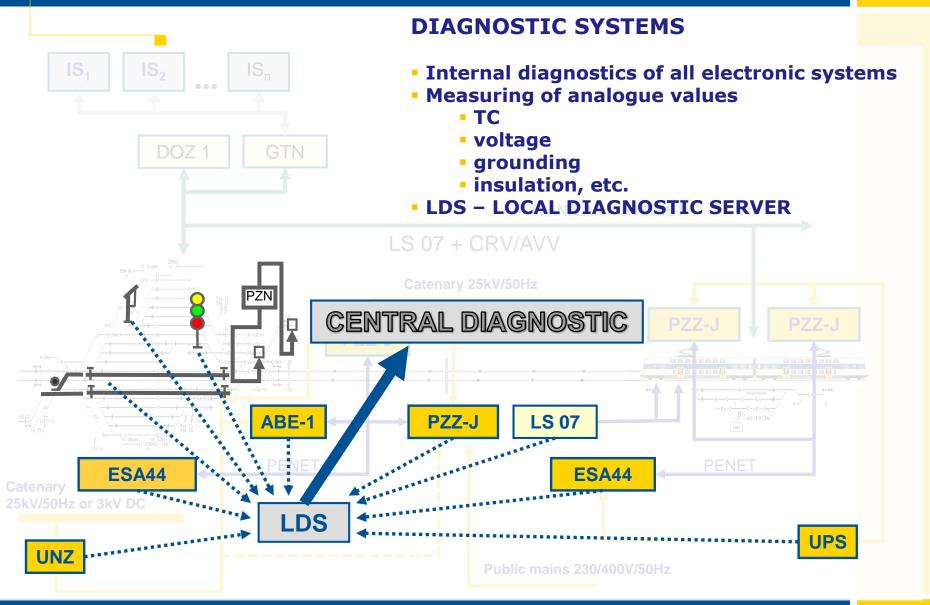












MAIN REFERENCE

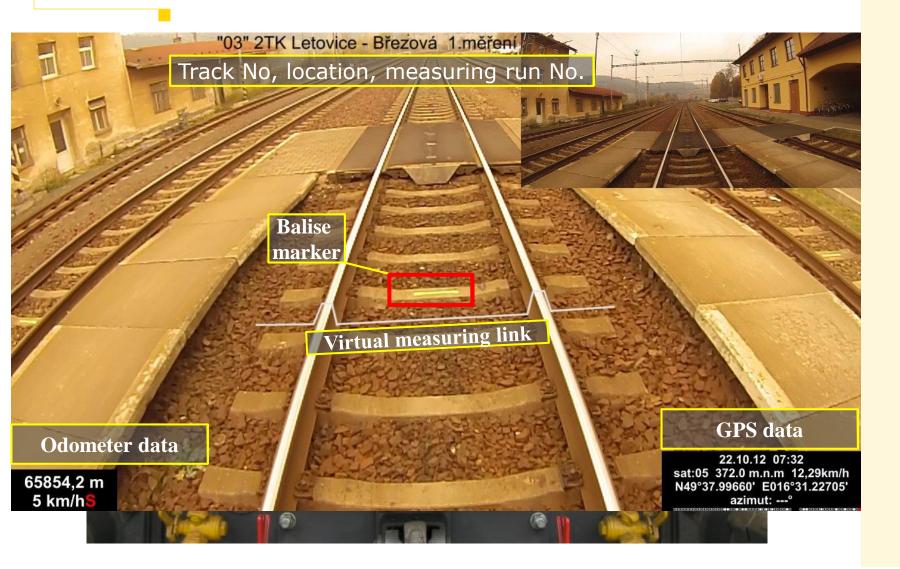


- ETCS L2 2.3.0d (Baseline 2) on the line sections Kolín-Břeclav (a TEN-T corridor)
- Length 277 km double track, 3250 balises placed
- Put in commercial operation
- 8 RBCs to be installed, all centralized at one place
- Mixed traffic of ETCS fitted and non-fitted trains
- AZD furnished its own ERTMS measuring car
- Unique track mapping methodology developed
- Special national functions above ERTMS spec. implemented



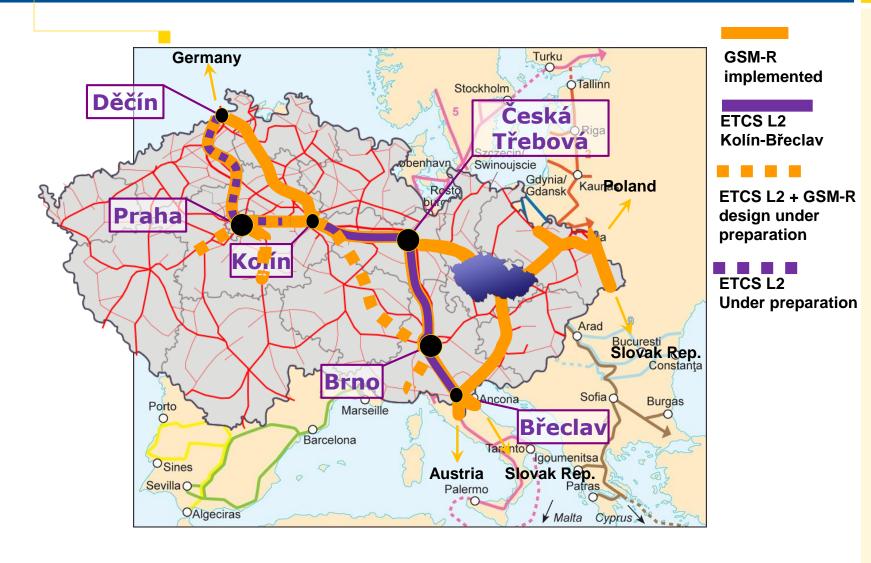
MAIN REFERENCE Track mapping pictures





MAIN REFERENCES





END OF THE PRESENTATION



