

# Prvni Signalni **develops and supplies** Signalling Technology for Railways, Tram & Metro



All around the world, Prvni Signalni supports its clients to create, develop and maintain reliable and safe transport networks that ease and solve their today's goals and future challenges.

As a manufacturer of mission-critical control systems and recognized specialist for software engineering, Prvni Signalni, a.s. has been developing, manufacturing and delivering safety control systems for railways, trams and metros – interlockings, line blocks, as well as level crossings, since 1985.



TRAM



METRO





# Permanent Quality

Since day one, Prvni Signalni has always set trends. It designs and deploys cutting-edge technologies to meet infrastructure managers' needs. The company's innovative nature has been confirmed countless times, such as developing the very first all-electronic interlocking in the Central and Eastern Europe.

Prvni Signalni's customers are railway infractructure managers, from both Passengers & Freight Railways, as well as large signalling companies for which it delivers subsystems or develop safety software or the whole products.

Prvni Signalni makes a point of constant innovation, best quality, superior customer support and outstanding service for its products and systems. Meanwhile Prvni Signalni components, systems or complete transportation solutions are successfully in many countries on 3 different continents.

# Certificates

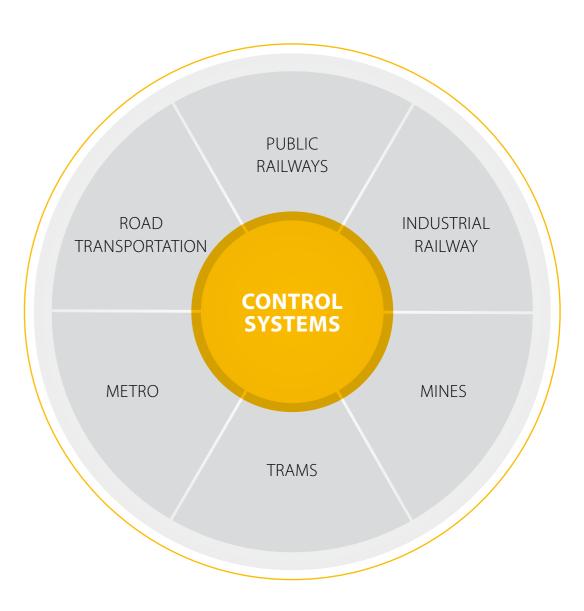








# **Business Segments**



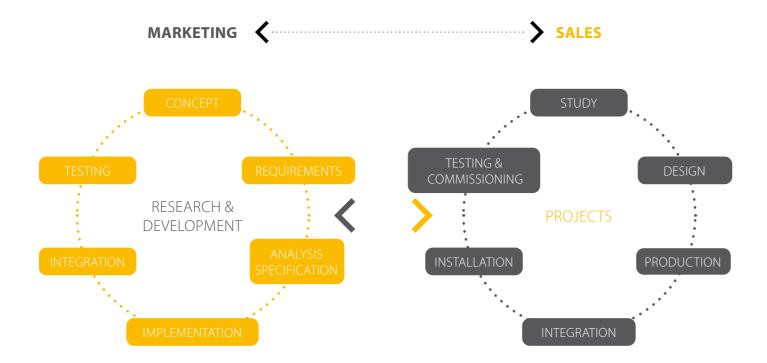
# Prvni Signalni **Key success factors**

- INNOVATIVE APPROACH
- ADVANCED TECHNOLOGY
- COMPLIANCE WITH THE NEWEST SAFETY STANDARDS AND TRENDS
- HIGHLY QUALIFIED AND PERIODICALLY TRAINED TEAM

- STRONG PROJECT MANAGEMENT COMPETENCIES
- FULL SYSTEM INTEGRATION CAPABILITIES
- INTERNATIONAL MARKETING

# Complete solutions

Prvni Signalni plans, designs, manufactures, installs and commissions signalling components, systems and integrated solutions for the management and control of new and upgraded Railway and Freight lines, Industrial and Mine sidings.

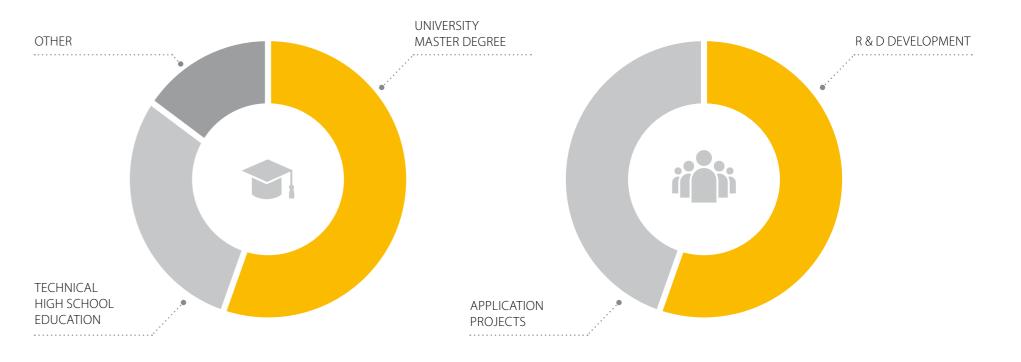


# Company Structure

At present, more than 80 employees work for Prvni Signalni, most of them with university education and almost all of them with technical background.

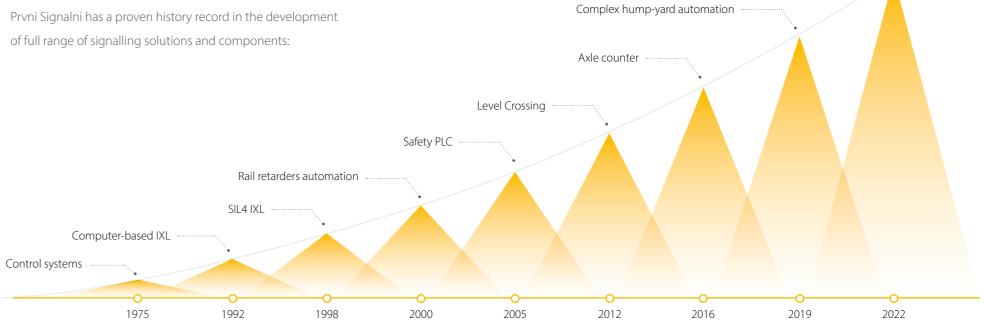
It has its own research and development teams which makes it possible to create state-of-the-art products and be flexible when responding to new technical trends and customer needs. For decades Prvni Signalni has been cooperating with leading domestic and foreign technical universities and research institutes.

## EDUCATION PEOPLE DEPLOYMENT





# **40+** Years History



1975 - Origin – Control systems development

**1985** - Start of interlocking development

**1992** - First computer-based interlocking MODEST

Formal programming language A++ for safety systems

**1996** - High-availability redundant system 2003

**1998** - Fully-electronic interlocking MODEST-PES (EI SIL4)

Hump yard automation MARSHAL (SIL3)

Safety PLC NEXUS - unified safety platform (SIL4)

**2010** - Local switch control SmartSwitch (SIL4)

2011 - The newest gen MODEST-GEMINI (SIL4)

2012 - Level Crossing

**2013** - Barrier Drive BARRID

2014 - Line Block

**2015** - Tram Controllers

2016 - Axle counter

2019 - Complex hump-yard automation MARSHAL 2 (SIL 3)

ETCS L2 ·

**2022** - ETCS L2 ready

# RAILWAYS \_\_\_\_\_



» Station Interlocking

» Regional Line Interlocking TAU

» Local Point-setting system SmartSwitch

» Line Block

**GEMINI** 

**VENTO** 

» Level Crossing **LEXIS** » Hydraulic Barrier Drive **BARID** 



» Hump Yard Automation

» Speed Controller for Retarders BrakeMaster

MARSHAL

TRAMS 👊



- » Tram Switch Machine Controller
- » Safe operation of single-track tram lines **LineMaster**

» Tram Depot Interlocking

SwitchMaster

TRIDENT

» Tram Data Radio Communicator

» Section Disconnector Controller

» Catenary Zero high-voltage Detector **ZEROX** DARAC

**SEDICO** 



# METRO 😃





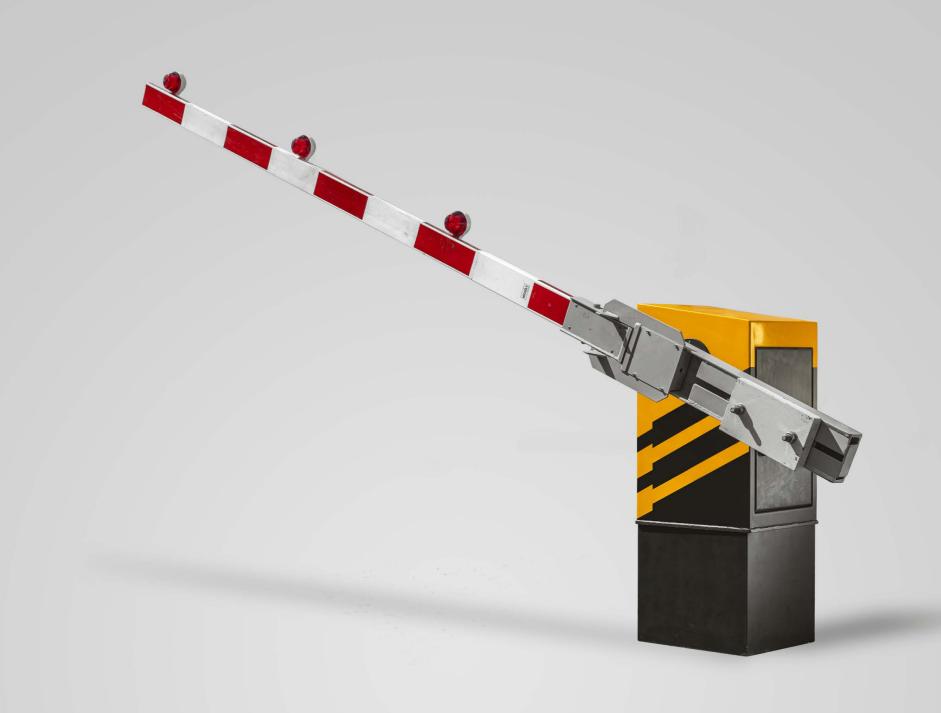




» Subway Depot Interlocking TRINITY

- » Universal programmable controller **REX**
- » Safety PLC
- » Axle Counter
- » Road flashing lights

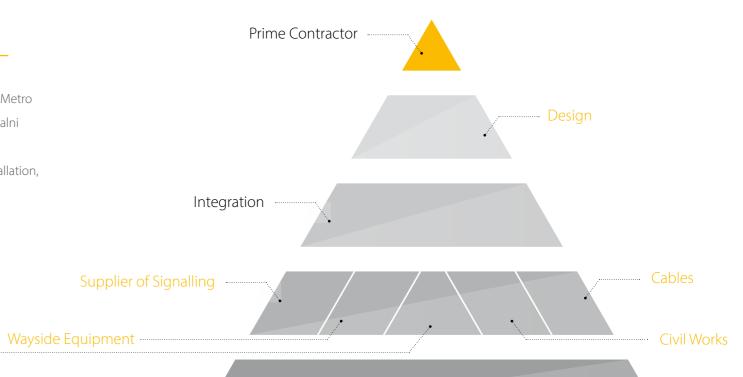
- **NEXUS** MAXIM
- **EDGE**





# Competencies

As an expert in Railway, Freight, Tram and Metro signalling and turnkey projects, Prvni Signalni manages all phases of the project, from the design to the manufacturing and installation, testing, commisioning and maintenance.



# References

Power Supply & Ohter

Technology







Maintenance & 24/7 Hot Line Support

































# World-wide Presence Projects Representants & Partners



# První**Signální**

### Ostrava

- Headquarters

Prvni Signalni, a.s.

Žižkova 712/4, (Contera Park D1) Slezská Ostrava 711 00 Czech Republic

tel.: +420 595 225 550 fax: +420 595 225 559 GSM: +420 777 170 606

e-mail: info@1sig.cz

### Zdar nad Sazavou

- Branch Office

Prvni Signalni, a.s.

nam. Republiky 21 Zdar nad Sazavou 591 01 Czech Republic

tel.: +420 566 621 450 fax: +420-566-621-465

e-mail: info@1sig.cz

### Slusovice

- Branch Office

Prvni Signalni, a.s.

Dlouha 232 Slusovice, 763 15 Czech Republic

tel.: +420-577-981-145 fax: +420-577-981-545

e-mail: info@1sig.cz

www.1sig.eu