

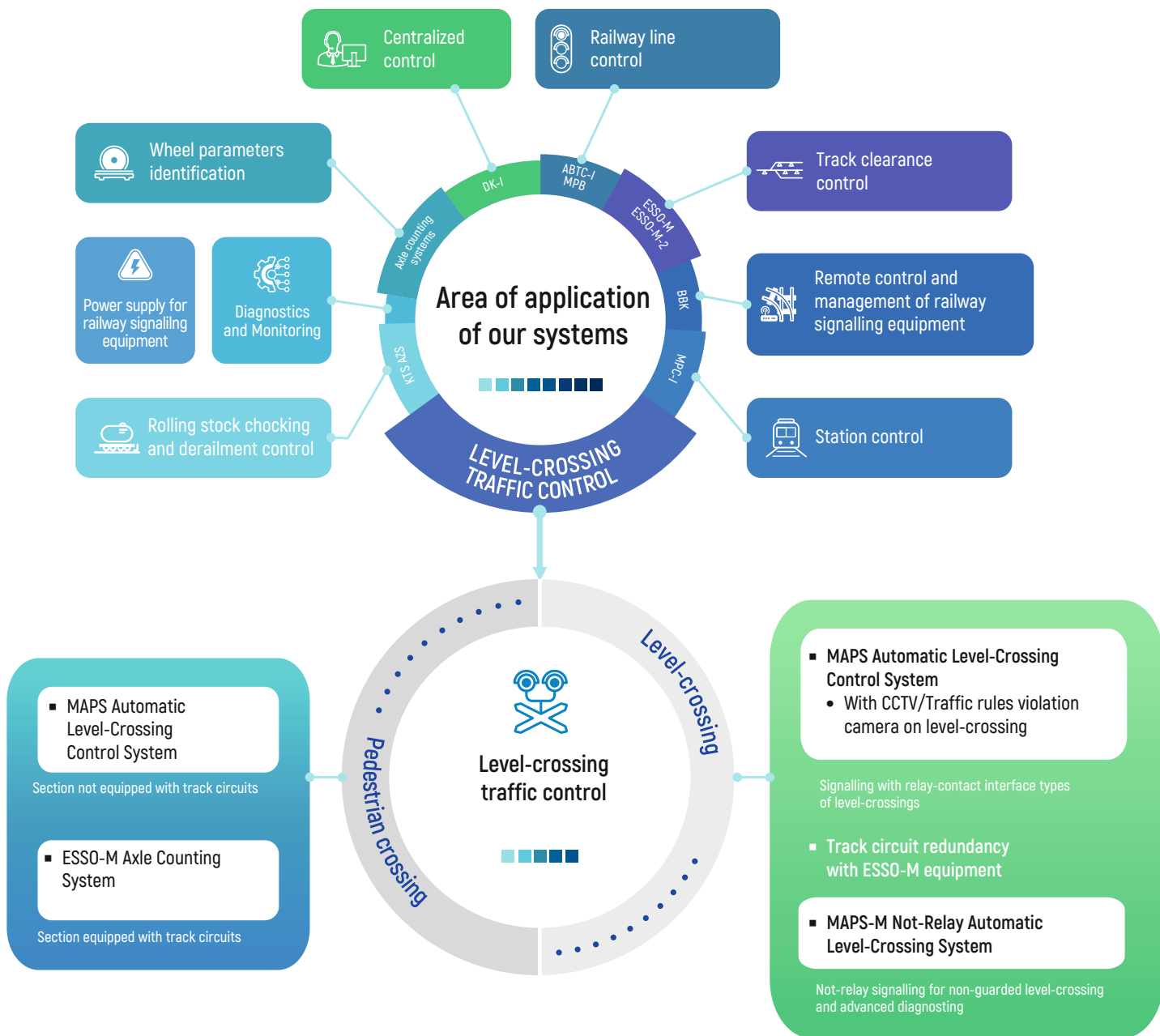


**Level-crossing  
traffic control**

**MAPS Automatic  
Level-Crossing Control System**

**MAPS-M Automatic  
Non-Relay Level-Crossing  
Control System**





## AREA OF APPLICATION

- ◆ MAPS: the system is designed to be used on guarded and non-guarded level and pedestrian crossings on railway lines with any traffic intensity and train spacing systems.
- ◆ MAPS-M: a non-relay system designed for guarded and non-guarded level-crossings on railway lines, fitted with any type of train spacing systems.
- Increasing of train and car traffic safety at level-crossings, as well as the safety at pedestrian-crossings.
- Improvement of work environment for maintenance personnel due to in-built diagnostic and event logging systems.
- Reduction of time and labour required for level-crossing construction.
- Depending on level-crossing conditions, the system equipment can be housed in a stationary building, a relay cabinet or MKM Mobile Equipment Container
- Reduction of running costs due to reduced quantity of relays and absence of track circuits.

ALREDY FITTED  
110 LEVEL-CROSSING

IMPLEMENTED IN  
5 COUNTRIES

TEMPERATURE PANGE  
-60... +85°C

SIMPLE  
INTEGRATION

Recommended for application  
on **Russian Railways**

**Protection** against lighting  
and surge overvoltages

**High reliability** even at failure  
of 2 counting post

## RELIABILITY AND SAFETY

**Award of Russian Railways** for quality  
of complex technical equipment

## USER ADVANTAGES



In-built diagnostics, event logging.



Factory ready solution.



Easy to install, low maintenance system.



User-friendly interface of MAPS-M indication panel.



ULIS MAPS Lab Set is available for personnel training.



# CCTV CAPABILITY



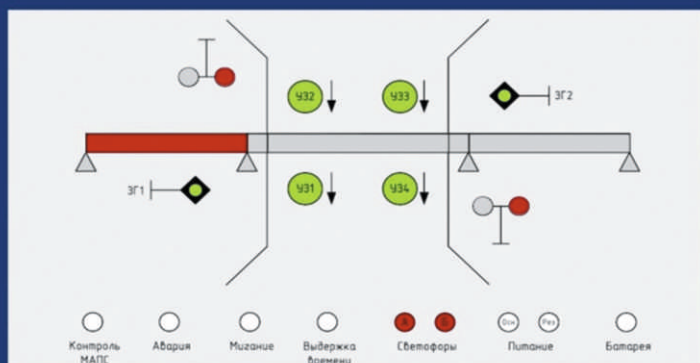
Increased traffic safety.



Recording of events on level-crossing and attendant actions.



Reliable evidence base.



14:18:25 проезд на запрещающий сигнал светофора  
гос.номер K100BK196  
14:18:22 проезд на запрещающий сигнал светофора  
гос. номер K300OM96  
14:18:20 проезд на запрещающий сигнал светофора  
гос. номер X036XB96  
14:18:18 переездная сигнализация включена  
14:18:18 занятие участка извещения  
14:05:54 освобождение участка удаления  
14:04:49 шлагбаумы в вертикальном положении  
14:04:49 переездная сигнализация выключена  
14:04:40 УЗП отпущены  
14:04:37 потеря контроля УЗП  
14:04:37 освобождение зоны переезда  
14:04:28 занятие участка удаления  
14:04:18 освобождение участка извещения  
14:04:09 занятие зоны переезда  
14:03:24 УЗП подняты  
14:03:20 потеря контроля УЗП



Дата/Время: 2018-07-25 14:18:26:01  
Коорд.: N59.880707.E29.904118  
Переезд ПК 160200 г. Екатеринбург, ул. Примерная, 99

научно-производственный центр  
**ПРОМЭЛЕКТРОНИКА**



# PEDESTRIAN-CROSSINGS

Pedestrian-crossings can be arranged both on single and multitrack sections with and without track circuits.

If a section is fitted with track circuits, the ESSO-M axle counting system is used to control pedestrian-crossing signalling equipment. If the section is not fitted with track circuits, the MAPS system is used in that case.

MAPS and ESSO-M systems use wheel sensors to detect clearance/occupancy of track sections. Boundaries of a section are fitted with counting posts, which are connected to the indoor equipment of the systems.



# MAPS AND MAPS-M COST-EFFICIENCY

INCREASED LEVEL-CROSSING  
SERVICEABILITY

NO FAILURES  
IN TRACK CIRCUITS

REDUCED  
CAPITAL CONSTRUCTION AND MAINTENANCE COSTS

RUNNING COSTS  
REDUCTION

YEARLY ECONOMIC BENEFITS  
OF INVESTMENT

**40%**



Research&Development Company  
**PROMELECTRONICA**



Watch the video about  
solutions for LC  
pedestrian crossings



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