Remote Maintenance System for Level Crossings

APPLICATIONS
Remote diagnostic and maintenance for relais based level crossing protection systems
With their remote maintenance system, Zelisko provide a technologically advanced solution for commonly used relais based railway crossing protection systems.

**Mass:** 19-inch rack with 3 height units
**Design:** 6 slots (plug-in card) each with its own front panel
**Interface:** 2 x Ethernet
40 x digital inputs
8 x relais outputs

**FOLLOWING AUTHORIZATION LEVELS ARE POSSIBLE**

- **Administrators:** may manage all master data on the server for the level crossings
- **Configurators:** may change all configuration parameters for all level crossings
- **Maintenance users:** may carry out remote maintenance on all level crossings
- **Guests:** may access the remote maintenance system and view current status of all level crossings

Any authorized person may also send orders for remote maintenance from their service workstation or service notebook via a Web application.
REMOTE MAINTENANCE SYSTEM FOR LEVEL CROSSINGS

**FUNCTIONS**
- Monthly maintenance activities at level crossing systems using relay technology can be implemented through a remote control according to § 80
  - Check for ground faults
  - Check for lowering on time
- All reports which are available at the position writer will be transferred to a central server and stored
- Detection and transmission of operating anomalies in a central server
- Service information system
- Remote diagnostic

**ADVANTAGES**
- Time savings for monthly maintenance (loss of travel time)
- Reduction of travel costs for regular trips to the level crossings
- Automatic documentation on the implementation of remote maintenance
- Automatic collection of information about operation of level crossings
- Support for early detection of irregularities
- Support for de-bugging
- Central availability of data from the local position writer

**COMPONENTS**
- Remote module for level crossings
- GPS Router (to connect to operators’ network)
- EKSA Server (including database server)
- Web application to service workstation
- Web application to service laptops

The memory in the local module allows a recording time of at least 6 months whereby the changes to the signal input with date and time are saved (to 1/10th second). Every user action is also logged for at least 6 months.

The current status is displayed for the selected level crossing, which also includes confirmation if the connection to the central server is available or if the level crossing is in remote maintenance status.

The WEB interface of the application software includes a graphical overview of the route with the corresponding state information of each level crossing. The user can integrate a level crossing for more precise status information.