ProEN
Extension for Relay Station Interlocking Systems

- The basis is safety PLC HIMA
- Safety on SIL4 level
- Enables connection to various types of outdoor components
- Support of the multi-operator workplace
- Integrated line signalling system

Description of the System

ProEN is an electronic extension for existing station interlocking systems.

The system is based on safety PLC HIMA, which ensures safety at level SIL4. HIMA, as a commonly available COTS component, allows the operator to significantly reduce initial costs and maintenance costs through the planned life of the system.

The connection to the station interlocking system is ensured via an interface, which is always customized to a particular station interlocking system.
The system can be equipped with an integrated line permission, which is located in the neighbouring station.

The ProET line signalling system can also be connected to the ProEN system using a data connection.
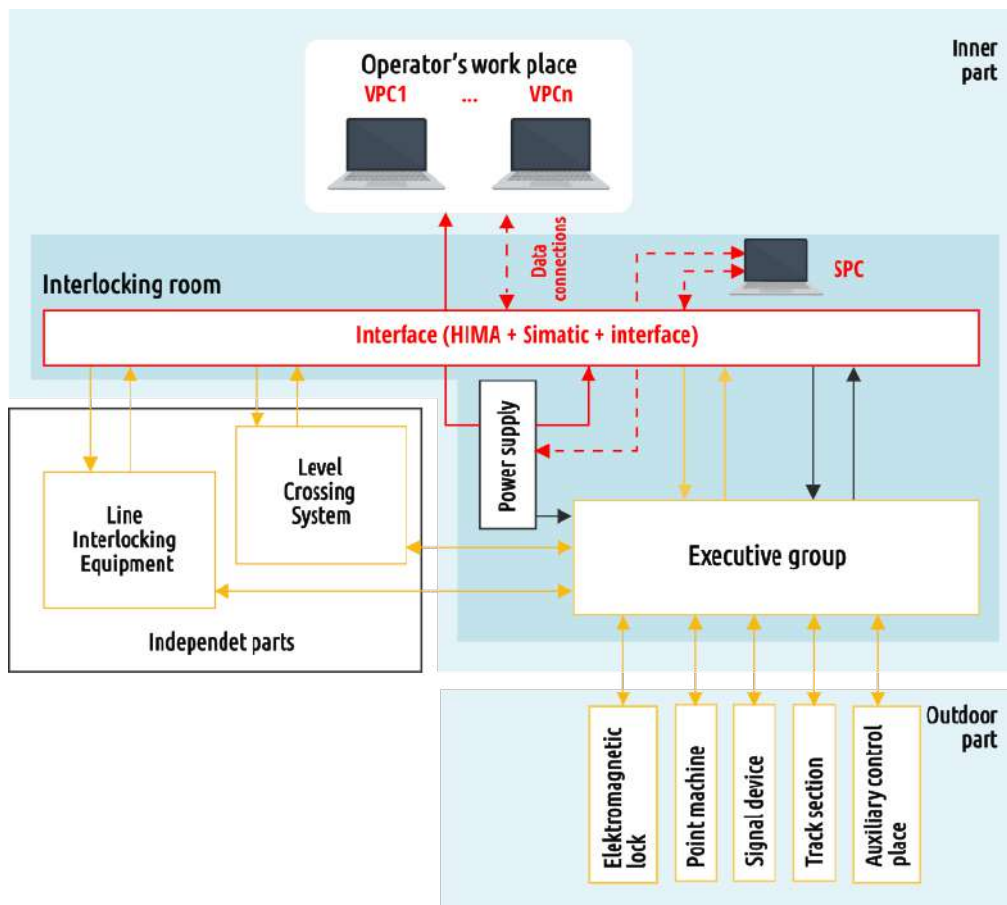

The system can be controlled from one or more operator workplaces. Each operator workplace is equipped with a visual computer VPC with corresponding number of monitors.

The system provides a full replacement of the existing control panel, in addition to which the functionality is supplemented by new functions, such as securing the protecting track, electronic warning and safety labels, blocking the setting of train routes over the traffic locked elements. All the safe operations are solved through safety PLC HIMA while PLC Simatic series S7 is used for the standard functions.

The safety of the functions associated with the registered operator, is ensured by SIL4 level. It is possible to use data links to connect to the neighbouring components. In the case of using the integrated line permission, the modules of remote IN/OUT (RIO) are installed into the neighbouring station.

The system can be optionally equipped with a service computer SPC, which provides cybernetically secure data connection ProEN with external (public or company) data network, through which it is possible to transfer information about operating data or receive data in a predefined scope (e.g. the number of the train).

ProEN System Architecture:

INTERSignal
... just safety

- **Customized solution**
- **Tradition & Experience**
- **Innovative approach**

We build on experience and background of the traditional supplier – company Kumat. We add an innovative approach to the projects and a new generation of IT systems.

We offer clever solutions in top quality for an unbeatable price on the market. Under the brand INTER**Signal** we supply comprehensive systems for securing railways using unique know how.

On the Czech market, we represent systems and individual components for railway infrastructure from renowned foreign manufacturers.