

# ProES

## Fully Electronic Station Interlocking System



- 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

ProES is a fully electronic station interlocking system that is used for sidings as well as for national railways.

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

The connection to outdoor components is provided by various types of interfaces. By the suitable choice of interface, it is possible to ensure connection to outdoor components of various suppliers, or to save costs by using the existing relay interface.

The system can be equipped with an integrated line permission, part of which is located in the neighbouring station.

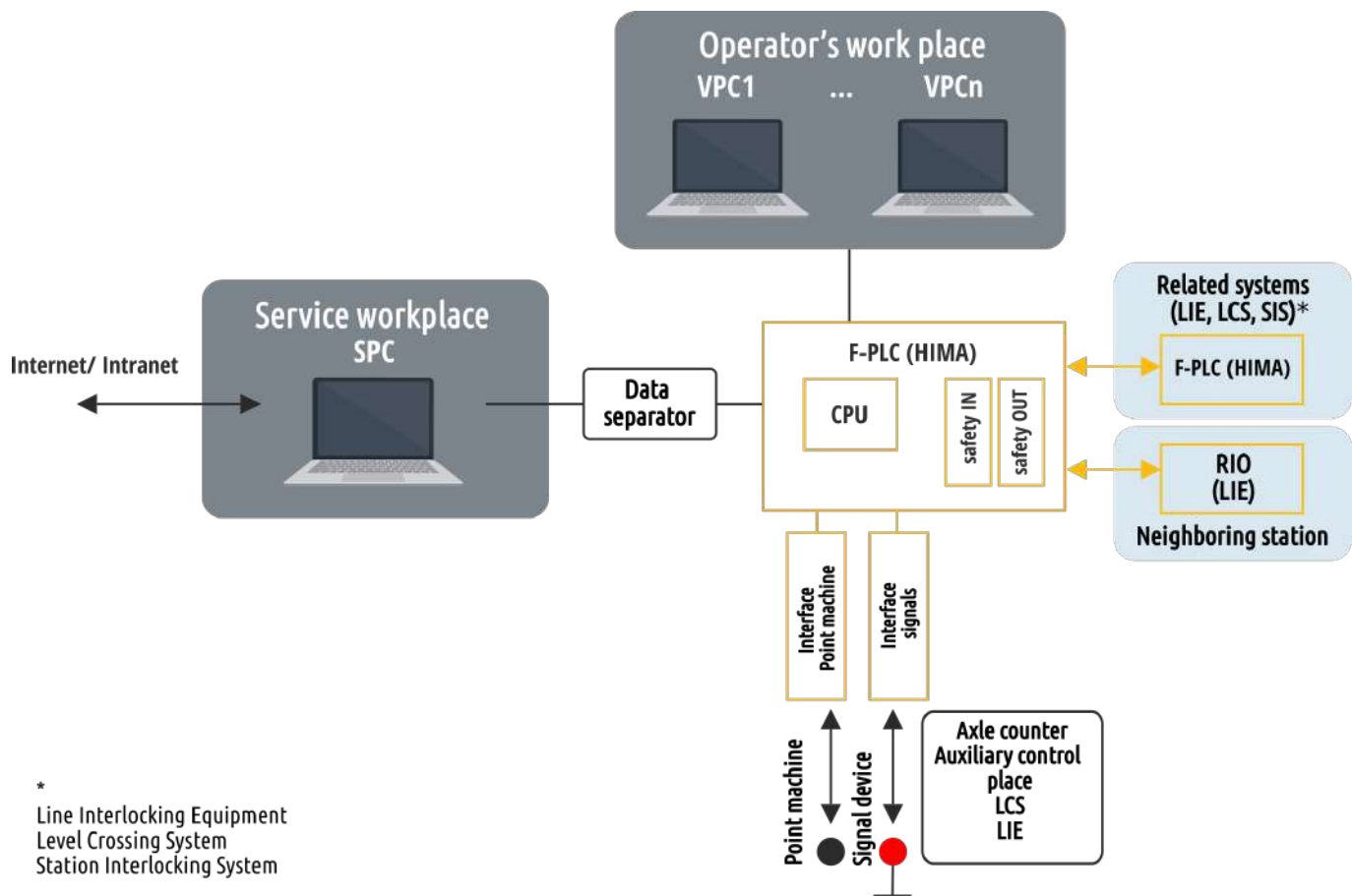
The system can be controlled from one or more operator workplaces. Each operator workplace is equipped with a visual computer VPC with corresponding number of monitors.

All the safe operations are solved through the safety PLC HIMA, which can also be fully doubled in case of increased requirements for availability. Safety is ensured at level SIL4. For the connection of the outdoor components electronic or relay interface can be used. This allows a connection of any outdoor component from any manufacturer.

For the connection to neighbouring systems data connections can be used. In the case of using the integrated line permission the modules of remote IN/OUT (RIO) are installed into the neighbouring station.

Optionally, the system can be equipped with a service computer SPC, which provides cybernetically secure data connection ProES 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).

## ProES 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 **INTERSignal** 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.



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