RAILWAY SOLUTIONS

PRODUCTS AND SERVICES FOR INTERLOCKING, LEVEL CROSSINGS AND TRAFFIC MANAGEMENT

WE PROVIDE OUR KNOW-HOW SUMMATION TO OUR CUSTOMERS BY DESIGNING, DEVELOPING, TESTING AND COMMISSIONING COMPLETE RAIL SYSTEMS AND SOLUTIONS

WE CREATE SAFETY PRODUCTS AND INTEGRATE THEM INTO EXISTING SYSTEMS

THE **ΣAFE** FAMILY PRODUCTS

ΣAFE-IXL   Electronic Interlocking System

ΣAFE-IXL is the product of **ΣAFE** family, which is designed, developed and manufactured to control railway traffic. Due to its low space requirements and its modularity and expandability, it is very easily modified and upgraded.

It is based on HIMax™ (*) safety PLC technology, SIL 4 track interface layer and railway certified network and ensures the highest safety integrity level.

It is easily adapted to any existing infrastructure and trackside equipment and is fully compatible with various technologies and open source products.

It provides functions such as route setting and cancelling, auto and manual point moving, train operated route release, signal aspect downgrading in case of lamp failure, management of level crossings and block sections, data base recorder, fully customized remote diagnostic information to any device according to end user needs and many more...

(*) HIMax is a registered trademark of HIMA Paul Hildebrandt GmbH

THE **ΣAFE** FAMILY PRODUCTS

ΣAFE-LX Electronic Level Crossing System

ΣAFE-LX is a modern Automatic Level Crossing System, developed and manufactured to manage and control stand alone or interlocked level crossings, enabling various traffic and operation modes. It is based on HIMatrix™ (*) safety PLC technology, SIL 4 track interface layer and railway certified network and ensures the highest safety integrity level.

Due to its open architecture, it is able to integrate various peripheral components such as train detection systems, rail and road signals and barriers mechanisms. Its openness, combined with the highest safety level, makes **ΣAFE-LX** a state of the art level crossing system.

Depending on each specific application, it is designed to acquire, process and manage all the data required for the safe operation of a level crossing. Digital and analogue inputs are processed, resulting in respective digital outputs which definitely comply with the components in use.


(*) HIMatrix is a registered trademark of HIMA Paul Hildebrandt GmbH
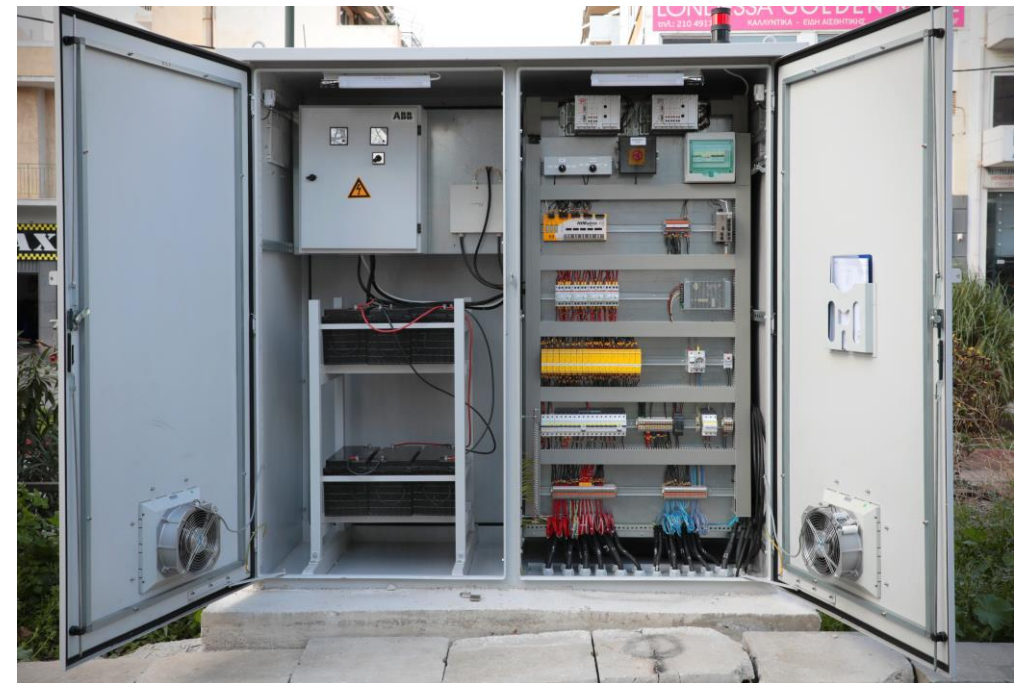
THE **ΣAFE** FAMILY PRODUCTS

ΣAFE-HMI   Human Machine Interface System

ΣAFE-HMI is a human-machine interface for Centralized and/or Local Traffic Control systems, which provides the railway exploitation with a global view of the circulation of the trains and of the track equipment status, through information acquired from the track equipment and displayed on dedicated images. It also provides remote commands of routes and maneuvers on the line and in the terminals, through dedicated images and commands.

ΣAFE-HMI incorporates Train Numbering Function and can be used to monitor both history and real-time events, such as train movements and conflicts on the selected track section. It also includes Event and Alarm Logging via the creation of a database for all the historical data in the system.

It is based on a windows style interface with an advanced support, including pop-up menus, drop-down menus, help and copy/paste utilities.
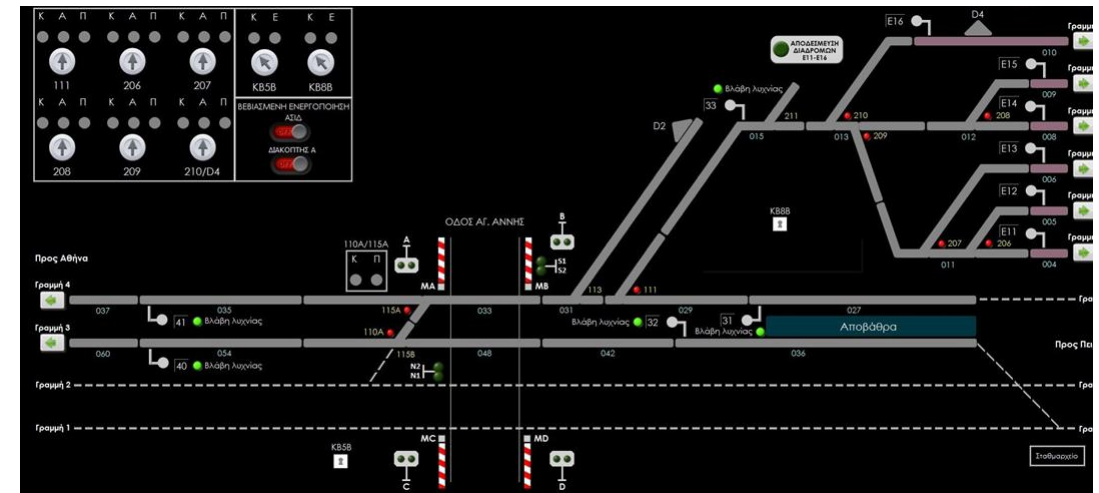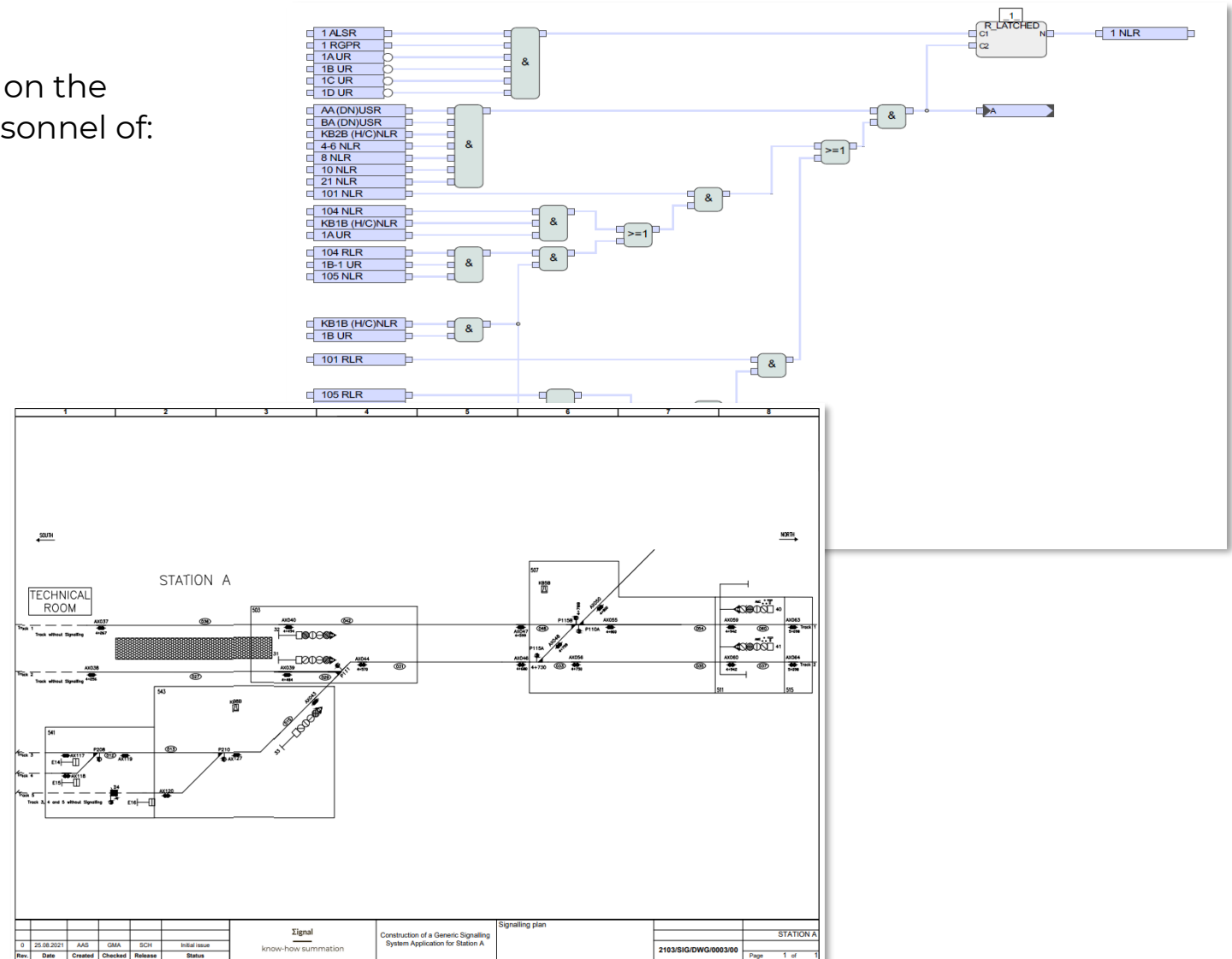
The engineering of any of our Systems is based on the exhaustive design by our highly competent personnel of:

- Engineering Principles

- Software Requirements and Design Specifications

- Hardware Requirements and Design Specifications

- Interface Requirements and Design Specifications

- System Architecture

- Signalling Plans

- Cable Routing

- Route Control Tables

- Point Control Tables

- Signal Aspects

- Track Detection System Connection

- Relay Cabinets (if used)

- Power Supply

- Signal and Head Circuits Control

- Link Analysis

- DI/DO