



SAFE
CITIES



SECURITY AND COMMUNICATION SYSTEMS FOR METRO AND RAILWAYS INFRASTRUCTURES

The ultimate goal of a system of metro or railway transport infrastructure is to provide a high capacity transport in order to boost the local economy and quality of life of commuters. The improvement in how citizens travel and move within a region requires a transportation system able to divert private transport users to the public environment.

In that context the security and communications systems must be efficient, safe and reliable, and at the same time affordable for the operator and easy to understand for users in order to provide an environment-friendly and engaging journey.

Security systems and communications systems integrate a set of functionalities required in railway operations:

- Centralized management
- Security system
- Communication system
- Passenger Information system

Functionalities have to be adapted for each project to the operational and exploitation transport model, requiring the analysis and definition of all processes and the proper understanding of railways operation.

SICE provides first-class security and communications solutions built on the solid foundation of 90-year industrial experience implementing comprehensive solutions to satisfied customers around the globe.

Solutions are flexible, scalable and configurable to fit each railways operator, allowing future extensions to ease the interconnection and interoperability with adjacent intelligent transport systems.

SPOTLIGHT

Over 400 stations and 500 trains have SICE's technology.

Metro de Madrid, Metro de Mexico, Metro de Santiago (Chile), Metro de Sevilla, Valencia Metro, RENFE, ADIF, TRAM of Barcelona, Ferrocarriles de la Generalitat Valenciana (FGV), Ferrocarriles de la Generalitat de Catalunya (FGC), Railways Spanish Narrow Gauge (FEVE) ... have counted on SICE.

SICE's proposal of Security and Communications for Railway Lines and Metro is based on its extensive experience implementing solutions that cater to the railways transport operation and have been tested in live operation.

CENTRALIZED MANAGEMENT

The Control Centre of a Metro or Railways line centralizes all information from many different systems that must operate and cooperate in an integrated and coordinated way to optimize resources.

SICE provides a modular management solution of control center called SISTATION, which is configurable and adaptable and includes tools for events management, reporting and auditing.

The centralized SISTATION platform integrates the monitoring and control of electromechanical installations, power supply, ventilation, lighting, escalators and air conditioning at stations and over the line.



It is likewise able to integrate security and information systems on a unified graphical user interface, which also includes an asset management and maintenance module.

COMMUNICATIONS SYSTEM

The communications network on a railway covers the needed connectivity over the entire transport system.

An optical fiber backbone through a multiservice IP-network supports centralized applications and operation management tools, and network security (CCTV surveillance and alarm monitoring), and passenger information system.

In addition to the wired network, a wireless network provides IP connectivity between rolling stock and the Core Network in order to provide on board connectivity and services.

Audio communications might be supplemented with analog radio (PMR) or digital radio communications (TETRA) that allow voice communication between drivers, control center operators and maintenance operators.

SECURITY SYSTEMS

SICE Seguridad is a certified company for the installation and maintenance of security systems, registered with the Ministry of Interior of Spain with the number 3,338.

SICE Seguridad provides expertise in design, engineering and implementation of tailor-made technical solution for the real needs of security on railway transport exploitation.



SICE solution enables management, monitoring and integrated control of distributed security facilities: CCTV surveillance systems in both stations and onboard, intelligent video analytics, access control, intrusion control, alarms monitoring, fire protection and platform doors.

PASSENGER INFORMATION SYSTEM

The passenger information system improves the user experience providing real time waiting times and optimized connections.

SICE's SISTATION solution integrates with real-time rail traffic, and provides an advanced dynamic information platform on: screens, information boards (departures / arrivals), information totems, mobile phones and website.

It also connects to the public address system to disseminate background music, advertising and audio messages (speech synthesis).

