



SMART
MOBILITY



INTER-URBAN TRAFFIC

Intelligent transport systems (ITS) can be described as a collection of advanced applications within information technology, electronics and telecommunications, aiming to improve mobility, security, maintenance and productivity of transport.

SICE is a company specializing in the integration of the different subsystems that make up an ITS, including management, maintenance and control of inter-urban traffic on the same platform, as well as existing environmental conditions.

The objectives of inter-urban traffic management are:

- Improving road safety.
- Improving general traffic conditions and access.
- Creating quick and efficient responses to actual traffic conditions.
- Providing real time information to the user (on traffic conditions, travel time and recurring and non-recurring events).
- Making it easier to operate and integrate with other systems.
- Reducing emissions.
- High energy savings and an improvement in maintenance tasks.

SICE is able to deal with all phases of a project with these characteristics, including design and conception, execution, preventative, corrective and ongoing maintenance, as well as providing system operation support.

Its solutions portfolio includes systems based on its own hardware and as well as integration of third party equipment, all managed by its own, scalable software which can be adapted to the needs of each client, job and project.

OVERVIEW

SICE has completed more than 30 major inter-urban traffic management projects, with more than 2,500 kilometers of road monitored and controlled and more than 20 years of experience in this sector.

Millions of people use traffic infrastructures managed by SICE technology on a day-to-day basis.

SICE management systems are modular, flexible and open, making it easy to integrate and control them. They also have systems to help with operation.

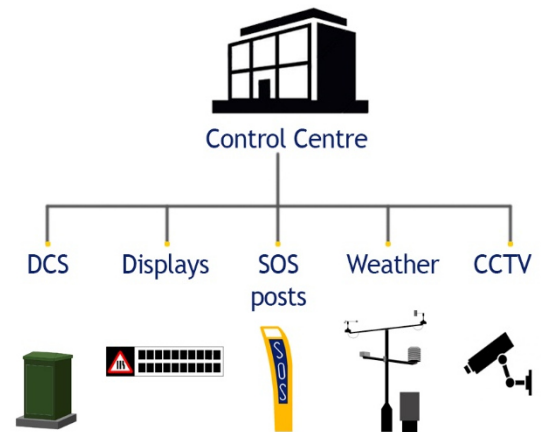
SIDERA complies with a wide range of standards (European, Australian and American).

INTER-URBAN TRAFFIC MANAGEMENT CAPABILITIES

Inter-urban traffic activities include:

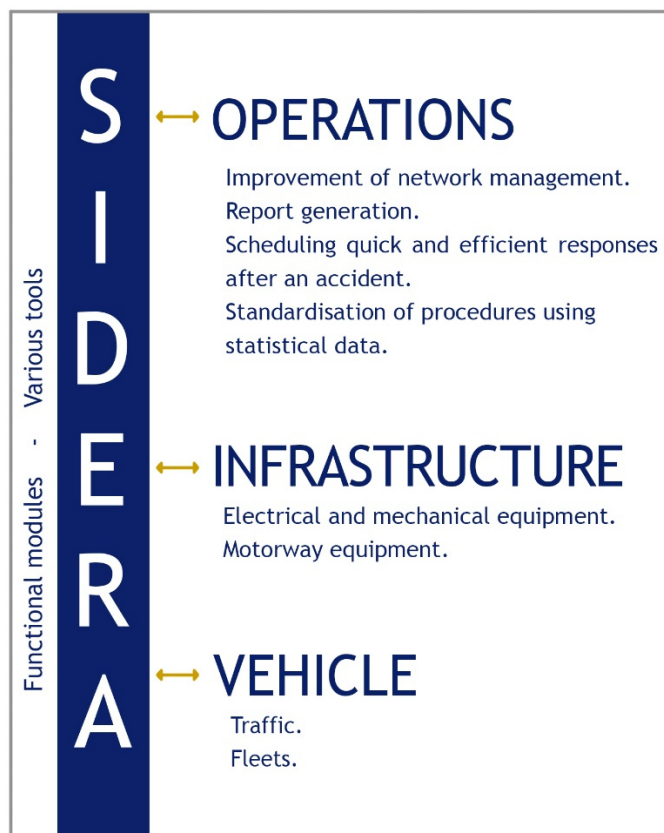
- Traffic engineering involving the development and implementation of traffic engineering modules in own or third party systems.
- Traffic infraction systems (red light detection, license plate reading, section average speed...).
- CCTV video monitoring and handling of video images (automatic accident detection...).
- BUS-VAO systems and reversible lanes.
- Automatic algorithms and systems for real time signaling of the current traffic situation.
- Information systems (Variable message signs, online, social networks, radio broadcast...).
- Remote Stations (ERU), Weighing Stations (WIM), Data Terminal Equipment (DTE), Weather Stations and SOS Systems.

- Construction and design of control centers.
- Integration with other systems such as pedestrians, tunnel control, urban traffic and communication with the police, civil protection...



INTER-URBAN TRAFFIC MANAGEMENT SOLUTION

The SIDERA control platform integrates the functionalities of the ITS system through different modules, making use of various own tools (Nautilus, SAETA, OpenRWIS), as well as third party tools.



The most notable functionalities of the ITS system which have been integrated in SICE's SIDERA system are:

- Journey Times (SAETA)
- Variable Speed
- O-D Matrices
- Traffic Information
- Capability improvement system
- Overall control systems
- Automatic accident detection (MASC1)
- Queue detection system
- Variable signaling management
- Prediction of traffic conditions
- Static and dynamic weighing (WIM)
- License plate reading (CELERA)
- Automatic weather information and the OpenRWIS weather prediction system which is able, amongst others, to predict the temperature and road surface conditions.
- Control of speed per section
- Artificial displays using DAI or gauges, i.e. a data collection station using cameras.
- Enforcement
- Connection with simulation tools
- Assistance in the operation and use of infrastructures with Nautilus: management of events and accidents, fleet management, inventory, preventative and corrective maintenance, shift management and works management.