SMART CITIZEN AND SMART TOURISM

Public Administrations and private companies are committing to the development of new types of cities and travel destinations: *smart cities*. Or what's the same, more sustainable and greener cities that are interconnected with their citizens and the tourists visiting them.

In this new city concept, technology is the central axis to its development. In this sense, the use of information and communication technologies (ICT) allows for a sustainable economic development and an increase in the quality of life through by implementing the Internet of Things (IoT), optimizing the efficiency of the services rendered in the city.

ICTs provide an infrastructure that guarantees:

- Sustainable development
- Improvement of the quality of life of citizens
- Greater efficiency of available resources
- Active citizen participation

One of the main pillars of the **SMART CITIZEN** vertical is formed by the citizen information portals and/or applications. Here, all the information is managed from the different vertical processes providing direct services to the citizens, such as the one integrated in the Smart City Management Platform, which is made available to the citizen or visitor in real time.

Therefore, the main goal of the **SMART CITIZEN** vertical is the generation of participatory processes of people in cities. This is achieved by connecting data, citizens and knowledge, through the integrated management platform of al the smart systems of a territory developed by SICE, **KALIOPE**, which will serve a productive node for the generation of open indicators and distributed tools, and from there to the collective construction of cities by its own citizens.

KALIOPE thus becomes the core and fundamental piece that integrates all the services and systems of each project.

SMART CONCEPT BY SICE

SICE's new SMART CONCEPT seeks to break down the barriers of smart cities and commit to a broader concept, providing this same intelligence to a group of municipalities, a region, a community or even, in the future, a country. In short, regions or territories sharing common characteristics, their own identity, or certain elements or ties that bring them together somehow. These ties could be tourism, a shared natural environment, the same social strategy or structure, etc.

Many of the proposals included in SICE's **Smart Concept** have been implemented and have been providing services to citizens for a long time. The current goal is to provide these services with more intelligence and, above all, interconnect them with the goal of achieving sustainable development.

SICE has been developing an applying these technologies for years, thus becoming a benchmark pioneering company in the Smart concept.

SMART TOURISM

PUBLIC WIFI

Offering **free Internet connection** to citizens and visitors, allows cities to share basic information to plan a visit to a touristic destination (opening hours, ticket prices, events, etc.) while gathering information that allows to improve the competitiveness of the touristic location (for example, average visit periods, type of visitors, visitor behavior patterns, etc.).

INFORMATION FOR TRAVELLERS

Comprehensive management of multimodal stations based on SICE's software platform, **SISTATION**, which allows the operator to supervise and manage the elements of the station in real time. It integrates information systems for passengers, camera viewing, AP and intercom systems, as well as the Single Agent for drivers to gain total view of the curved platform.

TOURIST INFORMATION POINTS

Installation of digital information points (panels or totems) in strategic points of the city to offer useful information for tourists such as maps, public transport routes, museum opening hours, etc.

These information points become a public serve that is available to the citizens 24/7, becoming the perfect companion to the Tourist Information Office for any city.

They are placed on the street, in the center of the city, on beach promenades, transport stations, airports, etc. They offer a very demanded and valued service by tourists, citizens, SMEs and institutions alike.

INFORMATION ON SERVICE QUALITY

Public Administrations and private entities can establish a bidirectional communication channel to develop satisfaction surveys with their visitors and gain replies that help improve the quality of the services provided.

CONTROL CENTER

This is the neuralgic center of all the solutions proposed by SICE. Through the Smart City Platform by SICE, **KALIOPE**, one can manage each and every one of the services of a city, improving coordination and efficiency when providing such services.

KALIOPE establishes active communication channels with citizens through new technologies by means of a single interface.

APPS

SAIH EBRO

SICE has developed this APP to aid the search of the data published on the website of the Confederación Hidrográfica del Ebro regarding their SAIH system (Automatic Hydrologic Information System), using mobile devices.

AIRE DE MADRID

SICE has developed this APP to facilitate access to information on air quality of the city of Madrid regarding the prediction of pollution values, information on the activation of protocols, etc.

IRINA

SICE has developed this APP to inform clients/users of different parameters of the integral water cycle (supplied drinking water, total drinking water accumulated in tanks, volume of purified water, etc.). It also incorporated a private part, intended to operation and maintenance staff that receives real-time alerts from the SCADA alarms and confirm reception of those that have been defined as critical.

CITIZEN PARTICIPATION

The **KALIOPE** Smart City Platform will open another digital communication channel between the citizen and the administration, which will enable them to report any problem or need through a simple APP, while improving the coordination between the areas of government within a given city when an event or incident takes place.

TELECOMMUNICATION NETWORKS

Transversal solution that is an essential part of the rest of the systems. The goal is to provide connectivity between all the field elements and the control center, where the different solutions are managed.

The use of telecommunication networks improves the management of the main parameters defining the systems, by obtaining real-time data through reliable telecommunication channels.