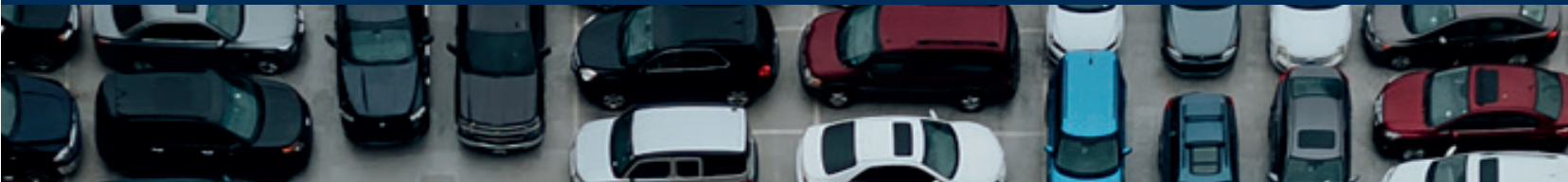**MUNICIPIA**
GRUPPO ENGINEERING

Smart Mobility

REQUIREMENT

One of the tasks of a modern local Public Administration consists in rescheduling mobility systems in a rational, efficient and sustainable way. Nowadays, mobility develops in a deeply dynamic context: technology and connectivity are taking on a central role and this also becomes a strategic factor for pursuing institutional tasks. In fact, cities see the need for Intelligent Transportation System/Cooperative ITS solutions based on the use of IoT for mobility monitoring and control and on governing systems for timely and widespread services and information to users. Means and people are increasingly interconnected, producing data collected in public and private silos, waiting to be integrated and used to tackle the challenges of mobility, improving quality of life and public service.

SOLUTION

Municipia designs and develops hardware, software and IoT technologies to help implement Smart Mobility, Smart Parking and City Logistics projects for a more effective management of business (BSS) and operational (OSS) mobility processes. An offer which has been strengthened by the acquisition of 100% of Kiunsys, an innovative start-up born as a spin-off of the University of Pisa. These solutions optimize access to services, road safety and the environmental impact of urban mobility through the organic evolution of processes, infrastructures and technological management and control services. Municipia also designs, builds and manages complex and integrated systems to create Low Emission Zones (LEZ), including through public-private partnerships and project financing formulas.

SMART MOBILITY, SMART PARKING AND CITY LOGISTICS

▶ **INES Cloud** is the platform used by many cities in Italy and abroad for a unified management of mobility and urban parking. It allows implementing city mobility policies (access, transit and parking rules, geographical areas of application, tariffs, transactions, digital, web and mobile sales channels) and operational processes (implementation and control of rules and services).

INES Cloud BSS

is the support system for mobility business processes which allows an operator to simply configure municipal ordinances and to centrally manage the citizen's desk and the main digital channels: the online reserved area and the mobile app.

INES Cloud OSS

is the support system for mobility operational activities. Hardware independent, it allows to unify the management of the various urban mobility field devices of different manufacturers: cameras, parking sensors, flow sensors, barriers, parking meters, automatic pay stations, LED displays, variable message panels, environmental sensors, on board units, AVM.

▶ **RFID Mobility Pass e RFID Mobility Gate:** electronic devices for the identification, tracking and automated control of vehicles and people with which to implement, for example, access control in Free Flow mode, access control in Fast Access mode, the enforcement of Access Control Schemes (Congestion Charge, RTZ, APU) based on types of vehicles, people and goods, etc.

ADVANTAGES

▶ Overcoming the fragmentation of silo systems, both hardware and software, and the integration of multiple technologies and applications, allow to provide citizens and businesses with more effective and targeted services, modeled on their actual needs

▶ The implementation of new models of city mobility management: from access, transit and parking policies - which take into account the social and environmental impact - to the digitalization of services for citizens and businesses, leading to the creation of a knowledge base and of analysis tools for spatial planning

▶ Thanks to IoT devices and networks and to integrated infoparking services, motorists receive real-time information on parking, drastically reducing search time and, more generally, urban traffic, with positive impacts from a social, environmental and economic point of view for commercial establishments

▶ **Parking Spot Sensor:** a multi-band wireless sensor (LoRaWAN, NB-IoT) for detecting occupancy of parking spaces, inforparking, booking and routing services for the various categories of users (blue lines, loading/unloading, disabled, electric vehicles, car sharing, etc.), innovative parking management and payment models (PayBySpace, PayByPlate, Dynamic Pricing).

▶ **Tap&Park, Smart Fines, mOBU**, three distinct mobile apps:
for end users to pay for parking and mobility services (season tickets, daily permits, bike sharing, etc.) and info mobility services
for road control officers for checking and sanctioning
for commercial vehicles for managing policies based on stopover time or on the kilometers traveled

MUNICIPIA - AUGMENTED CITY

Municipia,
a company of the Engineering Group, is the partner for the digital transformation of cities of all sizes. It provides the best technologies and creates services through private investments, absorbing the operational risk.

▶ We manage services for Authorities and their citizens, achieving greater levels of efficiency, effectiveness, transparency and sustainability through digital technology. We intervene also with **public-private partnerships and project financing** formulas with investments and risks borne by us and participation in the benefits deriving from the increase in revenue and the decrease in costs.

▶ We add value to existing investments and technologies, making available our experience and the technological solutions of the Engineering Group. We intervene both with vertical initiatives and with cross-cutting projects in order to improve the quality of life in the city and to simplify the relationship between public administrations and citizens.