GIJÓN CONNECTS ITS STREET LIGHTING NETWORK TO THE CLOUD

T-Systems understands an "Intelligent City" to be one that makes intensive use of Information and Communications Technologies to optimize the management of resources and make the life of its residents more comfortable and sustainable. After years on the path towards digital transformation and modernisation, Gijón has become a model example in terms of its commitment to intelligent sustainability, and its roadmap continues with a new project, this time introducing public space management technology to offer new, improved services to its citizens and optimise the efficient use of resources.

Intelligent management of public lighting and an IoT network

The objective of this project is the modernization of 1,150 public lighting points in the city centre with LED technology. Each streetlight will be monitored via a centralized management system that has been developed through an open model that allows a communication network for the Internet of Things (IoT) to be created in the city.

This intelligent city management system has been launched in the context of a private cloud that

T-Systems has already installed, which allows the streamlined collaboration between the various companies involved in the project, as well as the development of an integrated intelligent city management model. This is in addition to information that allows the sensorization of the city, as well as its integration into its management systems, to achieve a truly intelligent administration of the city's resources and services.

* The initiative has been awarded the prize for the "Best Smart City Project" in the
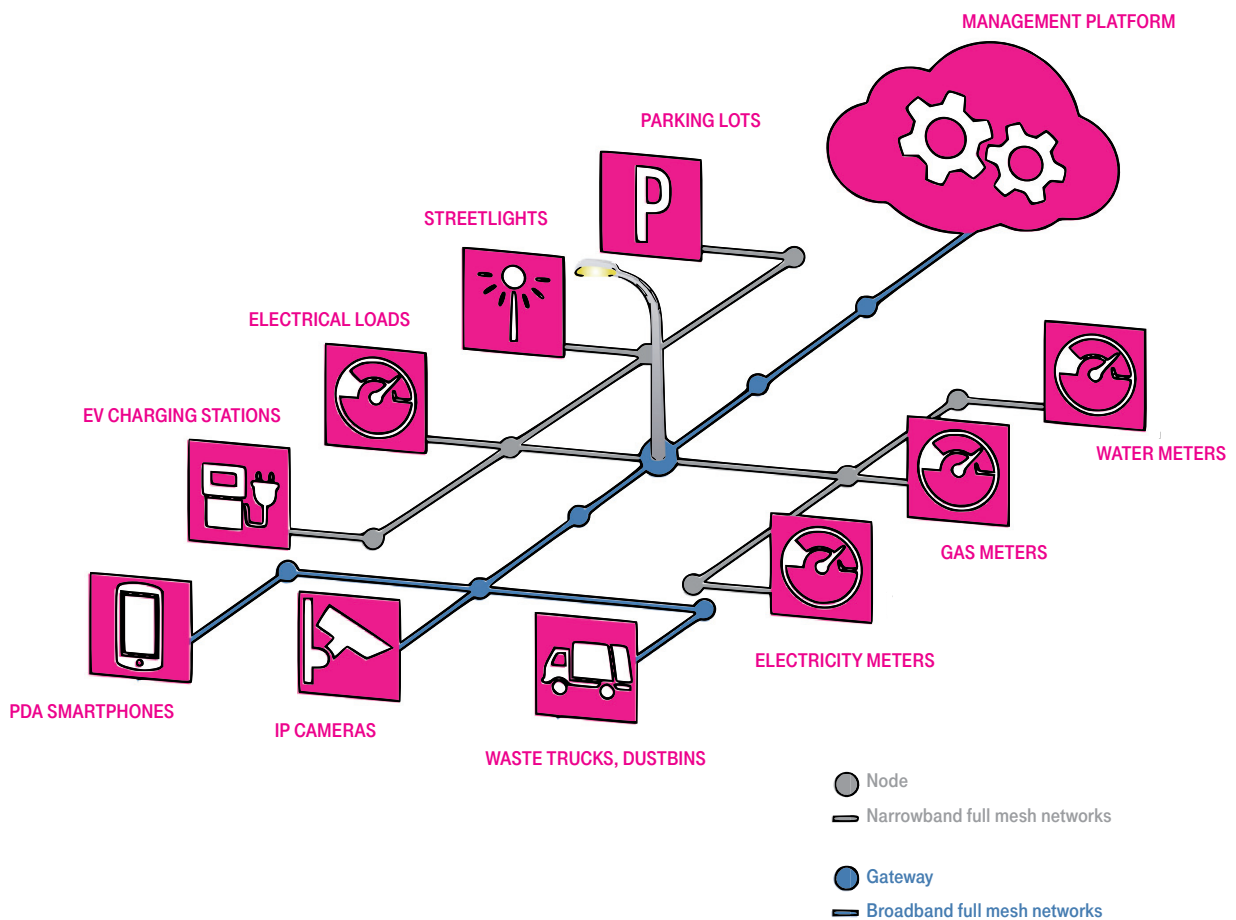6th edition of the National Congress for Innovation and Public Services (CNIS)

Benefits

- **Savings:** Double savings are achieved through this investment. On one hand, energy savings, showing a commitment to the sustainability of cities thanks to the efficient and responsible use of resources; and on the other hand, an important economic saving for the municipal coffers, valued at around €100,000 a year.

- **Integration:** This new network will allow the integration of new management services and information about public spaces, such as intelligent parking spaces, the monitoring of refuse containers and air quality measurements. All this new information – to be generated via new sensors - will be integrated into municipal management systems, improving the efficiency of the services provided.

- A Smart City **cloud model** of public- private partnership.

T · ·Systems·

A CONNECTED FUTURE

A city is a complex system, heterogeneous and in constant evolution, (demographic, technological, etc.) and therefore its passage to an Intelligent Management model is not simple, as it never starts from zero, nor is there any certainty about its future evolution. The proposal by **T-Systems** to manage these challenges is based on a model that fulfils the following requirements:

- **Un-intrusive**, allowing its incorporation into the current systems model, open to the city's innovation and entrepreneurship ecosystem.

- **Extendable and sustainable**, from both the technological and the financial perspectives.

- **On the cutting edge of technology**, to ensure its future use.

- **Brings new functionalities**, not provided by current systems and unique to intelligent and Big Data Analysis systems.

- **City platform integrated with the municipal ERP management system** providing exact data to its administrators.

MANAGEMENT PLATFORM

PARKING LOTS

STREETLIGHTS

ELECTRICAL LOADS

EV CHARGING STATIONS

WATER METERS

GAS METERS

ELECTRICITY METERS

PDA SMARTPHONES

IP CAMERAS

WASTE TRUCKS, DUSTBINS

- Node
- Narrowband full mesh networks
- Gateway
- Broadband full mesh networks

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