

AT GREENCITIES, INDRA DEMONSTRATES ITS LEADERSHIP IN THE DEVELOPMENT OF SOLUTIONS FOR SMART CITIES AND TERRITORIES

- **It will present its platform for the integrated operation of all services, with benefits such as reducing public energy and water bills, improving safety, decongesting traffic or forecasting the number of visitors**
- **It will present its solution for smart management of tourism, which enables monitoring of cultural heritage, monitoring and digital interaction with visitors and advanced analysis of behavior and spending patterns to improve tourist offerings and experience**
- **With Ecoembes, it is developing a platform for smart waste management to optimize recovery and recycling throughout Spain, significantly reducing the environmental and economic impact**
- **Indra is one of the few companies worldwide capable of providing an offer integrated with solutions that cover all areas of activity, from vertical services to the urban platform**

Madrid, April 24, 2018.- At Greencities (the Urban Intelligence and Sustainability Forum), Indra –one of the world's foremost technology and consulting companies– presented its most innovative solutions to address the needs of the cities and territories of tomorrow through technologies such as IoT, Big Data and Machine Learning. The company, which has become a global leader in the development of projects in this area, will demo its capabilities during this event on April 25 and 26 in Malaga.

Indra will present City Landscape Manager (CLM), the most advanced tool in the market for operating the different city and territorial services centrally and in real time, and monitoring the results obtained. This smart virtual center is able to provide integrated management of both scheduled and unscheduled events, cross-reference information from the various services and vertical solutions, and improve decision-making. This is possible thanks to its analytical and simulation capabilities, which enable it to predict what will happen based on the repetition of procedures used in similar situations in the past – these have been registered to generate public services that are increasingly better adapted to the population.

With this solution, it is possible to achieve efficiencies that result in a significant improvement in service management and positively affect individual quality of life. For example, this includes decreases of over 35% in the use of water for irrigation by cross-referencing information with the environment and weather service; and decreases of 45% in the electricity bill for lighting and public buildings. It also reduces the time spent by drivers in search of parking by at least half, thanks to the use of mobile apps connected to the solution.

City Landscape Manager is being implemented in the city of Logroño. Also, pilot projects are being run in several cities in areas such as simulation of the impact of pollution protocols, management of "heat wave" prevention plans and accident response.

Improved tourist experience

Indra will also explain the benefits of Smart Destination Manager (SDM), its Smart Tourism solution that offers a comprehensive response to all of the sector's needs through digital transformation. Thanks to its integration with City Landscape Manager (CLM), it enables cities to predict tourist traffic for the agile adaptation of services such as waste management, safety and public transportation. SDM offers a significant improvement in tourist management and experience and, as such, has a positive impact on the positioning of cities as tourist destinations as well as on local employment and economy.

Smart Destination Manager has several modules: Historic heritage management, which facilitates real-time control of the safety, energy efficiency and conservation of tourism assets; Smart Destination, which improves the tourist experience by customizing what is offered and providing a more individualized experience; CRM

tourist, which extracts information from all of the tourist's interactions with the city to improve the promotion of the tourist destination; and, finally, Destination Balance Scorecard, which provides a response to present and future needs in service management of the tourist destinations through the smart analysis of social data and digital interactions to detect points of interest in the visitor's experience.

Smart waste management

Indra has also invested in digital transformation to optimize the successful management model of Ecoembes throughout the Spanish territory and to effectively meet the challenges of the circular economy based on the rule of reducing, reusing, repairing and recycling in a continuous circle. The combination of their capabilities made it possible to design a platform for smart waste management called Smart Waste, which will help to optimize recovery and recycling in Spain, significantly reducing the environmental and economic impact. The initiative will allow any municipality to access this cutting-edge technological platform to improve the management of its resources and processes, while facilitating the fulfillment of the circular economy's challenges.

It facilitates the establishment of dynamic collection routes as well as the generation of estimations of increased/decreased waste by route and containers, depending on the time of the year or the demographic composition of the area, among other features. This model offers a response to one of the major challenges of the circular economy: "Pay As You Throw" as an incentive to improve reduction and recycling levels. Four pilots are currently being run in four management units in Spain, such as councils and associations, to incorporate the solution in their daily operations.

Finally, Indra will exhibit its Smart Home solution, which uses a cell phone or tablet to control all home consumption, comfort and safety events in view of improving energy efficiency and reducing the electricity, water and gas bills.

Leader in Smart Cities

Indra is one of the few companies worldwide capable of providing a comprehensive offering in the world of Smart Cities. This ranges from services to citizens, to transportation and mobility, to infrastructures and eco-energy, to security/safety and emergencies to the implementation of an urban platform to integrate and manage the city's information. The company has developed more than 120 projects in this field around the world and participates in the main international initiatives such as Ciudad 2020, CPSE-Labs, Transforming Transport, Arrowhead, e-Vacuate or Mobywallet. Additionally, it led the development of the pioneering and most innovative projects for a comprehensive governing platform in a Smart City in Spain, such as A Coruña and Logroño, which have become a global benchmark for their cross-cutting approach.

About Indra

Indra is one of the world's top technology and consulting and a technology partner for the key operations of its customers' businesses worldwide. It is a leading worldwide provider of proprietary solutions in niche areas in Transport and Defense Markets and the absolute leader in IT in Spain and Latin America. It offers a comprehensive range of proprietary solutions and cutting edge services with a high added value in technology based on a unique culture of reliability, flexibility and adaptability to the needs of its customers. Indra is a world leader in the development of end-to-end technology solutions in fields such as Defense and Security, Transport and Traffic, Energy and Industry, Telecommunications and Media, Financial Services, Electoral Processes, and Public Administrations and Healthcare. Minsait is Indra's digital transformation business unit. In 2017 Indra posted a revenue of €3,011m, employed 40,000 professionals, and had a local presence in 46 countries plus sales operations in more than 140 countries.