Smart City Expo World Congress 2013

INDRA FACILITATES THE CLOUD INTEGRATION OF A CORUÑA'S URBAN PLATFORM SMART SOLUTIONS

- **The multinational consulting and technology firm has rolled out for the city government of this Galician city a cloud version of SOFIA2, its information integration and orchestration solution for smart cities**

- **SOFIA2 is the base of what will be the first comprehensive government platform for a smart city in Spain. Its development was awarded last spring by the A Coruña City Government to the consortium comprised by Indra Altia, Ilux and R**

- **The cloud version will facilitate the execution of the project pilots as of their assignment, speed up the integrations between subsystems and enable universities, technological centres and businesses to carry out development and perform tests autonomously and at no cost**

Indra has rolled out for the A Coruña City Government a cloud version of SOFIA2--its information integration and orchestration solution for smart cities--that will facilitate the execution, with all the benefits of cloud computing models, of the pilots and integrations between the systems that comprise the A Coruña urban platform. This past spring, the consortium, comprised by the multinational consulting and technology firm, the Galician companies Altia and Ilux, and the Galician communications operator R, was awarded the first phase of the Coruña Smart City project, which includes the development of what will be the first comprehensive government platform for a smart city in Spain. The aim of this initiative is to improve the quality of life of residents as well as the financial and business environment through technological innovation, positioning the Galician city as a reference for the efficient management of cities of the future.

The company announced this at the Smart City Expo World Congress, which takes place starting today through Thursday, 21 November, in Barcelona. In addition to this unique project, Indra will display at this edition of the prestigious event a selection of the solutions

that have positioned it as one of the few global companies capable of providing a comprehensive and integrated offering for facing the challenges of cities of the future.

Open source solution for building smart cities

SOFIA2 is the base of the A Coruña City Government's platform and it has been developed through the European R&D&i SOFIA (Smart Objects for Intelligent Applications) programme, in which Indra has participated activity and which had the aim of developing a middleware solution that facilitates the interoperability of multiple systems and devices, offering a semantic platform that enables making information about the real world available to intelligent applications (Internet of Things), with an open source and multi-language focus.

Indra has evolved this project towards an infrastructure solution for the development of smart cities with business capabilities, including cloud roll-out, Big Data (for storing and using information using analytical techniques), scalability (for adding new devices as well as capacity), and multi-platform, which means that it has been conceived so applications that use it can be created in any development language and for multiple devices (PCs, smartphones, tablets, iPads).

The InCloud version of SOFIA2 has enabled the A Coruña City Government to have a public infrastructure so the companies that will develop the 15 planned pilots may connect to it from the onset in order to integrate their solutions. The pilots are expected to be launched in early 2014. In fact, the first four projects in this area have been awarded recently. They are focused on creating a multi-channel events and leisure platform, launching a smart watering system in the city, energy efficiency in 54 municipal buildings and augmented reality applied to tourism. In addition, the partners of the temporary joint venture have also rolled-out their applications on the Internet in order to create a complete platform. Lastly, it will enable the City Government, university, technological centres and other businesses interested in executing projects for Coruña Smart City to begin their developments and tests autonomously and at no cost.

In order for this to be possible, Indra has integrated in this roll-out documentation and a collaborative website that manages all the elements and ontologies defined for the city; in other words, it models the city's elements and their attributes so they may be managed and to know their status. It also includes an SDK (or development kit) to build applications as well as an interoperability bus that is responsible for receiving and storing data from the sensor network in real time and for offering a mechanism to consult and subscribe to events based on the city's information.

SOFIA2 InCloud is available in the Azure cloud, it is operated via Flex-IT (the model that provides cloud services at Indra), and it enables improved and more efficient management of the infrastructure, which translates into lower costs. Anyone interested in testing SOFIA's

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capabilities can access it through the public URL: http://scfront.cloudapp.net/ and register in user mode, in other words, consuming public information that has been provided by the entities participating in the project.

Smart Agent for tourism and the remote management of home comfort

The company will also unveil other leading solutions in various areas.
It has installed a kiosk in the Smart Plaza so visitors may obtain a personalised smart card and interact with the lines of its comprehensive smart mobility solution, such as intermodality for single and flexible access to all the modes of transportation, including sustainable systems such as bicycles for last-mile transportation. This contactless smart card is based on RFID technology and its objective is to establish itself as the key for accessing services that require identification, access control or payment in order to integrate all citizen activities in a single device so information can be cross-referenced and the management of city services can be optimised.

Another major innovation that Indra will bring to the congress is the Virtual Tourism Advisor (Smart Agent), an expert system that provides tourists with recommendations based on their user preferences and other variables, such as the climate or past activities. Its main feature is its ability to implement a marketing plan that streamlines a certain region in terms of its monumental and commercial aspects using information obtained from dialogue and positioning applications. It is based on a smart services platform that includes an expert system and Big Data, mobility and Market Place technologies, and it interacts with citizens using natural language. The solution's added value lies in its integration capacity with corporate databases.

A tablet will also be available for visitors to experience the benefits of ZIGAMIT, an innovative solution developed together with Gas Natural Fenosa for monitoring and controlling energy consumption and home comfort services. ZIGAMIT makes it possible to view the electrical, gas and water consumption of a home or small business. It also includes additional elements for measuring the electrical consumption of specific points, connecting or disconnecting the power supply remotely, or adjusting the heating system. There are currently two pilot tests with actual users in Catalonia and Madrid.

Comprehensive and integrated solution for smart cities

Indra has completed projects in all the activity areas that comprise a Smart City, and it is also one of the few global companies capable of providing a comprehensive offering in this field, covering the entire range from the strategic and technological plan to the management and integration of information. As a leading urban technologies company, it has extensive experience in applying intelligence to mobility, transportation, security, communications, location networks, e-administration and the identification of individuals, among other aspects.

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The multinational has carried out successful projects throughout the world for the smart management of all the areas that comprise a city.

Indra is the leading Spanish multinational consulting and technology firm and one of the main players in Europe and Latin America. Innovation is the cornerstone of its business and sustainability. The company has allocated more than €550 million to R&D&i in the last three years, making it one of the leading companies in Europe in its sector in terms of investment. With sales approaching €3 billion, nearly 60% of its income is from the international market. The company employs 42,000 professionals and has customers in 128 countries.

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