

## **A EUROPEAN CONSORTIUM LED BY INDRA DEMONSTRATES, AT ATHENS INTERNATIONAL AIRPORT, THE APPLICATION OF BIG DATA TO IMPROVE MANAGEMENT AND PASSENGER COMFORT**

- **The Smart Passenger Flow Pilot project studies how passengers move through terminals by analyzing large volumes of data**
- **This analysis results in the development of functions to help airport managers better plan operations and detect areas for improvement, which could generate double-digit savings**
- **Smart Passenger Flow Pilot is part of Transforming Transport, a European project led by Indra. Improving the continent's transportation efficiency by 10% would cut costs by €100 billion annually**

**Madrid, November 08, 2017.-** The partners in charge of the Smart Passenger Flow Pilot project led by Indra have carried out a demonstration at the Athens International Airport of the capabilities offered by Big Data technology for analyzing passenger flow in terminals and for improving infrastructure management, increasing passenger comfort.

This pilot project, framed within the Transforming Transport project led by Indra, is one of the most important initiatives driven by the European Commission in the framework of the Horizon 2020 R&D support program. Its goal: to take advantage of the enormous volume of data generated in the transportation sector to improve mobility and logistics in the European continent.

To achieve this goal in the airport sector, Passenger Flow Pilot combines the knowledge and experience of the Athens International Airport manager, AIA; Greece's leading airline, AEGEAN; the specialized consulting company, Airport Gurus; and the market's leading technology company in the fields of airports and air traffic, Indra.

During the demonstration carried out in Athens, the consortium presented representatives of the Commission and a board of experts the first results obtained from data analysis, as well as some of the initial functions developed during the inaugural six months of work, implemented in Indra's InPlan airport management platform.

Based on the data collected in real time, a descriptive model of passenger movements was demonstrated. This model detected, for example, how Business travelers always arrive with the same advance time, while the arrival time of tourist class passengers varies according to time of day and destination. It also calculated the high percentage of passengers who do not leave the airport during stopovers of several hours.

During a subsequent phase, the Smart Passenger Flow system will improve its capacity for performing estimates related with possible delays that may occur when passengers arrive late to their departure gate and for adjusting boarding times; the travelers who could lose a specific connection with another flight; or the resources required to handle passengers upon their arrival to security areas.

It will also provide advance information to commercial establishments of the profiles of arriving passengers, and data related with their preferences and needs. This information aids their detection of new business niches.

To produce these estimates, the pilot's partners previously study, with the help of Big Data technologies, each traveler's uses of a terminal, preferences, motivations and behavior according to flight departure time, destination and other factors.

To this end, historical data logs are used to create descriptive models and establish different passenger profiles. Predictions may be generated by crossing these models with scheduled flights.

**Double-digit savings**

Transforming Transport coordinates this initiative's consortium, with the participation of 47 partners from 10 European countries and with a budget of €18.7 million. Within it, 13 pilot projects are taking place -including, among these, Smart Passenger Flow Pilot- to address seven different transportation-related fields. Indra, in addition to acting as project coordinator, leads four pilot projects.

Big Data will have a profound economic and social impact on mobility and logistics, one of the economy's strategic sectors, which contribute approximately 15% of the GDP of the EU.

It is estimated that Big Data techniques will generate savings of \$500 billion in terms of time and fuel worldwide, and will reduce CO2 emissions by 380 megatons per year. In Europe, an improvement of 10% in efficiency may entail savings of €100 billion. Despite this fact, only 19% of European companies use big data solutions as part of their value chain and business processes.

The Transforming Transport initiative is itself framed within the European Big Data Value Public-Private Partnership (BDV PPP), with which the EU intends to consolidate its market position and data economy under development with Big Data.

**About Indra**

Indra is one of the world's top consulting and technology companies, the absolute leader in IT in Spain, and the technology partner for the key operations of its customers' businesses worldwide. It offers a comprehensive range of proprietary solutions and cutting-edge services with a high added value in technology, which adds to a unique culture that is reliable, flexible and adaptable to its clients' needs. 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. Through its Minsait unit, it addresses the challenges of digital transformation. In 2016 Indra posted revenues of €2,709m and had a workforce of 34,000 professionals, a local presence in 46 countries, and sales operations in more than 140 countries. Following its acquisition of Tecnocom, Indra's combined revenues amounted to more than €3,200m in 2016 with a team of nearly 40,000 professionals.