Indra   **Press release**

INDRA WILL DEPLOY ITS CUTTING-EDGE TECHNOLOGY IN MECCA-MEDINA HIGH SPEED LINE IN €440 MN DEAL

- **The company will provide, among other technologies, the management, telecommunications, ticketing and security systems for what will be the longest railway line in Saudi Arabia, which will extend 450 km and have a capacity of 160,000 passengers daily.**

- **The Saudi Railway Organisation (SRO) selected the Spanish consortium's bid to equip, manage and maintain the high-speed line known as the "High Speed Train of the pilgrims" for twelve years.**

- **This project highlights the high level of Spanish technological innovation and its export potential**

Indra will be responsible for implementing the railway traffic management, telecommunications, ticketing and security systems for the High Speed line (AVE) joining Mecca and Medina, in a deal worth 440M€, under the framework of the tender awarded by the Saudi Railway Organisation to the Spanish consortium to equip, manage and maintain this line for 12 years. This is the largest international project ever won by a Spanish consortium, for what will be the largest railway line in Saudi Arabia, extending 450 km and with an estimated volume of 160,000 passengers daily.

This project highlights the high of Spanish technological innovation and its export potential. Indra's commitment to the railway sector and to innovation has vaulted the company's solutions to the global forefront of the sector.

The IT multinational will design, equip and put into service the line's operation and control centre located in Jeddah, as well as the back-up centre. Both centres will run under the DaVinci system, which was developed by Indra and is the intellectual property of Adif. This platform is considered the most advanced in the world for managing railway traffic.

Indra will also roll out a comprehensive telecommunications system, both fixed line and mobile, which will provide the necessary infrastructure to support all the other systems (signalling, ticketing, passenger information, etc.). This system will give the high speed lines the most up-to-date fibre optic infrastructure, as well as a leading edge mobile communications technology based on GSM-R, a crucial element for the implementation of the ERTMS Level 2 train safety systems. In addition, Indra will install systems in the rolling stock that will allow passengers to have internet access inside the trains.

Indra will provide this entire railway line, which will boast the highest passenger traffic in the country, with the latest "contactless" technology for processing and selling tickets (both automatically and manually), which incorporates electronic payment systems. The company will also install systems for controlling access to installations. Contactless ticketing technology speeds up the entire transit process, as these cards, which substitute traditional tickets, are validated via radio frequency using contactless access control systems. In addition, Indra will supply the systems for ticket reservations and sales through channels such as the internet.

The company will also be responsible for providing information systems for passengers, such as electronic displays and signs in the stations and trains, information via the web or SMS, loudspeaker systems, etc.

State-of-the-art simulators

Indra has developed a highly advanced integrated system for training drivers and circulation managers, which creates a simulated environment where users can test the new functions and technologies under real conditions. The environment is created through the combination of different types of simulators, depending on the user's position and functions in the railway system: train drivers, circulation managers for stations and other nodes on the network, and agents in the centralised traffic control centre (CTC).

To guarantee the security of an infrastructure of this size, Indra will install the security systems for the railway line. Of special note are the surveillance and security systems which use closed circuit television (CCTV) with digital IP technology, which will be deployed to monitor installations.

Lastly, a modular and adaptable maintenance management system will integrate, in a single solution, all the elements and systems of the railway line: infrastructure, telecommunications, signalling and interlocks, stations and buildings.

On the cutting edge of the railway sector

The best example of this commitment is the DaVinci System, the fruit of a substantial R&D&i investment and the hard work of 150 people over four years which has developed it into the world's leading platform for managing railway traffic. DaVinci manages Spain's high-speed railway line and a diverse array of other types of networks, such as the Medellin subway and the London underground. Furthermore, it was the solution selected by Morocco and Lithuania to manage their respective railway networks.

In addition, the company has made numerous advances in developing latest generation railway technologies under the ERTMS Level 2 and ASFA Digital frameworks, among others.

Indra is Spain's foremost IT company and one of the main players in Europe and Latin America. It ranks second in Europe in R&D spending, and has invested close to €500mn during the last three years. Sales in 2010 stood at €2.56 Bn, with its international business already representing 40%. Indra employs over 31,000 people and has customers in more than 110 countries.