

## **INDRA TECHNOLOGY MANAGES THE LONGEST TUNNEL IN SOUTHEAST ASIA AND SUPPORTS UNINTERRUPTED TRAFFIC WITH THE HIGHEST SECURITY STANDARDS**

- **The company has equipped the Chenani road tunnel in India with its Horus solution, integrating different traffic control and security systems, automating processes and offering operators a unique, real-time vision for reducing the risk of incidents and speeding up response when they occur**
- **Indra technology contributes to guaranteeing uninterrupted and secure traffic that this strategic infrastructure enables between the cities of Jammu and Srinagar, an area in northern India with frequent avalanches and complex weather conditions, reducing the journey by two hours**
- **With this unique reference in Asia, Indra reinforces its position in India as leading technology partner for air traffic management and has deployed its most innovative solutions in the metro systems of Mumbai, Kolkata and Delhi, in the Mumbai monorail system, and on three highways in different states across the country**

**Madrid, July 03, 2017.-** Indra has installed its smart technology in the control center of the Chenani road tunnel which, measuring 9.2 kilometers, is the longest in all of India and in entire southeast Asia, for €6.5 million. The company has been in charge of the design, development, implementation and launch of the tunnel's management system, based on its proprietary Horus solution, that facilitates maximum operability and efficiency in the infrastructure's operation and guarantees users the greatest security.

The project reinforces Indra's position as benchmark technology provider for the world's most ambitious transport infrastructures, and provides the company with an unparalleled reference in Asia, given that the Chenani tunnel, inaugurated last April by the Indian Prime Minister, Narendra Modi, is a strategic infrastructure for the country to reduce travel time between the cities of Jammu and Srinagar by two hours, along National Road 44, north of the country.

The tunnel has been designed, built and operated by IL&FS Transportation Networks Ltd, India's largest road toll company, which has counted with state-of-the-art tunneling technology and smart solutions like those contributed by Indra, with the goal of transforming this tunnel into the safest of Asia.

Therefore, Indra technology contributes to guaranteeing uninterrupted and secure traffic in this region, located 1,200 meters above sea level, at which adverse weather conditions, avalanches of earth and snow, and vehicle breakdowns are common.

The company's Horus platform enables centralized, integrated management of the various intelligent traffic systems (ITS) and security systems that will be deployed in the tunnel and guarantees compliance with the highest quality and security standards. Amongst those systems installed by Indra are the automatic incident detection, video surveillance, traffic control, signaling, fire detection, access control and emergency call systems, as well as other sub-systems supplied by local companies, such as lighting, ventilation, communication and energy systems, which Horus will also integrate.

### **Information in real time and high automation**

The unique view offered to operators by Indra's solution makes it possible to monitor the status of the road at all times and obtain real-time information for decision-making purposes, an aspect of vital importance in such a large-scale infrastructure.

The high level of automation of operations facilitates speedy and accurate management of everything that happens in the tunnel, both for routine management purposes and in emergency situations. The solution will also make it possible to offer real-time information to drivers and deliver optimal security and service quality, which will help to reduce the risk of incidents and optimize the use of resources in those situations.

In the last two years, Indra has implemented its Horus technology for controlling the 12 road tunnels in the city of London; the Marao tunnel in Portugal, the longest of the Iberian Peninsula; the Renacer tunnel located on the Bogotá-Villavicencio highway in Colombia; the Chamisero tunnel in Chile; and, the Bouira tunnel in Algeria, among others. The company also counts with references of these types of singular infrastructures in other countries, like Ireland, China, Mexico, Montenegro, Morocco or Spain.

### **A stronger foothold in India**

The Chenani tunnel project sees Indra making further inroads into India, a country that offers enormous potential in the transport infrastructure sector, with major investments planned for the coming years.

Indra is the leading ticketing system provider in Mumbai, where it has rolled out technology on the first, and as yet only, subway line in the city, as well as the Mumbai monorail, which is also the country's first ever monorail; and it will likewise equip the new Navi Mumbai subway line with access control and ticketing systems, once the line is built in the southwest of the country's financial capital. The Kolkata metro and the Delhi metro also count with Indra's ticketing technology.

The company has equipped different highways of the country with its traffic management and toll systems, and is the leading technology provider in the field of air traffic management. Approximately 80% of this country's skies are already controlled by Indra radars and 39 airports use its ATC systems.

### **About Indra**

Indra is one of the main global consulting and technology companies and the technology partner for core business operations of its clients businesses throughout the world. 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 client's needs. Indra is a world leader in the development of comprehensive technological solutions in fields such as Defense & Security, Transport & Traffic, Energy & Industry, Telecommunications & Media, Financial Services and Public Administrations & Healthcare. Through its Minsait unit, it provides a response to the challenges of digital transformation. In 2016 it reported revenues of €2,709m, had a workforce of 34,000 professionals, a local presence in 46 countries, and sales operations in more than 140 countries.