

INDRA WILL PROVIDE MAXIMUM SAFETY AND EFFECTIVENESS IN SEVEN TUNNELS OF COLOMBIA, FOR €20 MILLION

- **Indra Mova Traffic, through Horus, Indra's integrated traffic and tunnel management platform, will centrally control the seven new tunnels and open-air roads of the final section of the Bogotá-Villavicencio Corridor, a Colombian mega-infrastructure**
- **Indra's technology, which already controls all 22 tunnels of the other two sections of the highway, facilitates the operation, automates processes, contributes to reducing the risk of incidents and streamlines their management, guaranteeing the highest international standards of safety and quality of service**
- **Indra reinforces its position as a technological partner of this advanced Latin American highway and as one of the leading companies in the world in technology for large transport infrastructures, with projects in more than 50 countries**

Madrid, November 11, 2019.- Indra, one of the world's leading global technology and consulting companies, will supply the new control technology, Indra Mova Traffic, to equip the new tunnels and open-air roads of the final section of the Bogotá-Villavicencio corridor in Colombia, thus facilitating compliance with the highest international standards of safety and quality of service to drivers.

The contract, for an approximate amount of 20 million euros, has been awarded to Indra, in a consortium with COMSA Industrial, through the Andean Road Consortium (Conandino), responsible for the construction of the new road between Chirajara and Fundadores of what is also known as the Los Llanos highway.

Specifically, Indra will renovate the Buenavista control center and it will implement its Horus traffic and tunnel comprehensive management platform, part of Mova Traffic, to control the new section and its seven tunnels, including the Buenavista tunnel, which at 4,559 meters long is one of the longest tunnels in the country and in Latin America.

The company will also implement the necessary communications systems, Mova Comms; the safety systems, Mova Protect, and intelligent traffic systems (ITS): closed circuit television systems (CCTV), traffic counters, road signs, emergency call boxes, fire detection, lightning control and PA systems, among others.

This Indra technology facilitates the operation of the highway and tunnels, automates processes, contributes to reducing the risk of incidents and streamlines their management.

The Buenavista control center, together with the main control center in Boquerón and the local management center located in Naranjal, also implemented by Indra in previous projects, will monitor and control the entire complex run under a government concession in a centralized manner with a single interface, facilitating maximum efficiency. In fact, the Indus Horus platform already covers the management of the 22 tunnels that are already operational, and seven more will be added, completing the Bogotá-Villavicencio two-lane road, a highway through which more than 12,000 vehicles pass with an approximate traffic of 2,000 dangerous goods daily. When completed, it will connect the two cities, reducing travel times by an estimated 45 minutes.

With this new contract, Indra reinforces its role as technological partner of this mega engineering project, which it has contributed to positioning as one of the most advanced and modern infrastructure projects in Latin America.

Indra's Horus platform is currently considered the world's most advanced comprehensive traffic and tunnel management solution. It enables the integral and integrated management of the several intelligent traffic systems (ITS) and safety systems installed in tunnels, and offers the operator real-time information and a unique view of everything that happens in the tunnel, optimizing decision-making in everyday situations, but above all in emergency situations.

Horus has an Automatic Incident Detection System (AID), which integrates information from cameras and sensors, and sends alerts automatically to the control center in the event of an incident or emergency, in a way that reduces its time to resolution and increases user safety. In addition, the air quality measurement systems and the CO sensors are able to detect high levels of toxic gases in real time and cause the fans to be activated automatically and expel this pollution outside.

The Indra solution also offers the most advanced communications technology. An innovative radio system enables georeferencing of the exact location of ambulances, firefighters, police and operation and maintenance vehicles, both inside and outside the tunnels. This solution also has visibility sensors and an emergency and evacuation artificial lighting system, as well as power generators and backup power plants to guarantee the power supply of all safety systems.

At the same time, variable signaling systems provide drivers with real-time information on road conditions, the safety distance between vehicles, speed limits and any incident that may arise.

Partner for major transport projects

This project, one of the largest public works projects in Colombia, consolidates Indra as one of the leading companies in the world in cutting-edge technology for transport, with references in more than 50 countries and the capacity to carry out the most ambitious and complex projects.

The tunnels equipped with Indra control systems are the best rated in all EUROTAP studies carried out since the publication of the EC 54/2004 Directive on Road Tunnel Safety. Indra's Horus solution has been implemented in recent years in some of the most emblematic tunnels in the world, such as the tunnels in London, in the United Kingdom; the Dublin Port Tunnel, in Ireland; the Chenani tunnel in India, the largest in Southeast Asia; and the Marao tunnel in Portugal, the longest in the Iberian Peninsula. Indra's solution has also been chosen by Highways England, the authority responsible for the road network in England, for the integrated management of its tunnels. Indra has a track record in this type of singular infrastructures in other countries, such as China, Mexico, Montenegro, Morocco or Spain.

In Colombia, in addition to the Bogotá-Villavicencio two-lane project, the company has implemented its solution for comprehensive and centralized management of the Parques del Río tunnel in Medellín, as part of the city's most important sustainable urban development project. Indra also developed Medellín's comprehensive mobility solution and implemented its toll systems in Cundinamarca, Los Llanos and Autopistas del Café, among others.

Indra's renewed offering for Transport, Indra Mova Solutions, covers the entire life cycle of its clients' projects and it combines the new digital capabilities, integration, specialization and innovation demanded by the market, with reliability, business knowledge, Indra's proprietary technology for transport and the unique experience of its professional staff.

About Indra

Indra (www.indracompany.com) is one of the leading global technology and consulting companies and is a technology partner for the key business operations of its clients worldwide. It is a leading global supplier of proprietary solutions in specific segments of the Transportation and Defense markets, and a leading company in digital transformation and Information Technologies consulting in Spain and Latin America through its subsidiary, Minsait. Its business model is based on a comprehensive offer of its own products, with an end-to-end approach, high-value and a high innovation aspect. In 2018 financial year, Indra achieved revenue of 3.104 billion, with 43,000 employees, a local presence in 46 countries and business operations in more than 140 countries.