

## INDRA'S TECHNOLOGY FACILITATES MAXIMUM SAFETY AND OPERABILITY ON THE NEW CHIRAJARA-FUNDADORES FREEWAY IN COLOMBIA

- **Through the Horus traffic and infrastructure comprehensive management platform, Mova Traffic now centrally manages the six new tunnels and open-air roads of the Bogotá-Villavicencio dual freeway final section**
- **Indra's technology thus controls all 27 tunnels of this Colombian mega infrastructure, facilitates the operation, automates processes, contributes to reducing the risk of incidents and streamlines their management, guaranteeing the highest international standards of service safety and quality**
- **Indra strengthens its position as one of the world's leading companies in technology for large transportation infrastructures, with projects in more than 50 countries**

**Madrid, October 19, 2022** - Indra, a leading global engineering technology company for the aerospace, defence and mobility sectors, has equipped with its innovative control technology, Indra Mova Traffic, the new tunnels and open-air roads of the Bogotá-Villavicencio corridor final section in Colombia, inaugurated by the President of Colombia, Iván Duque, who calls this infrastructure "a miracle of Colombian engineering."

Consorcio Vial Andino (Conandino), builder of the new freeway between Chirajara and Fundadores, entrusted the project to the Indra-COMSA consortium for approximately 20 million euros.

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

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

Apart from this, Indra has also upgraded and expanded the existing toll stations (Boquerón, Naranjal and Pipiral), implementing the Mova Collect toll system, which improves the travel speed through the toll stations, helping to reduce the congestion that previously occurred there.

Indra's technology facilitates freeway and tunnel operation, automates processes, contributes to reducing the risk of incidents and streamlines their management, facilitating compliance with the highest international standards of service safety and quality for drivers.

The Buenavista control center, together with the main control center in Boquerón and the center located in Naranjal, also implemented by Indra in previous projects, allow centralized monitoring and control of the entire concession with a single interface, facilitating maximum operability. Thus, Indra's Horus platform already handles the management of the 27 tunnels that are part of the Bogotá-Villavicencio dual carriageway, a highway with more than 12,000 vehicles per day. The new section will reduce travel time along this corridor, used mainly by the tourism and freight sectors, by an additional 22 minutes.

"We are proud to be part of this mega-engineering project as technological partners and to contribute to positioning it as one of the most advanced and modern infrastructure projects in Latin America. It is a good opportunity to showcase our advanced technology and Indra's ability to carry out the most ambitious and complex projects. But the true value of technology is to contribute to economic and social development and improve people's lives. In this case, we are sure that the freeway and its advanced solutions will do that," said Manuel López Villena, Director of Traffic and Infrastructures in Indra's Mobility market.

## **The most advanced platform**

Indra's Horus platform is currently considered the world's most advanced comprehensive traffic and infrastructures 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, thereby reducing its time to resolution and increases user safety. Likewise, air quality measurement systems and CO sensors are capable of detecting high levels of toxic gases in real time and, through the consortium's control system, automatically activate the fans, which expel this pollution to the 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.

Variable signaling systems provide drivers with real-time information on road conditions, safety distance between vehicles, speed limits and any incident.

## **Partner for major transport projects**

This project, one of the largest in Colombia, consolidates Indra as one of the world's leading companies in cutting-edge technology for transportation, with success cases in more than 50 countries such as the United States, the United Kingdom, Ireland, Israel and Australia, among many others.

In Colombia, in addition to the Bogotá Villavicencio dual freeway project, the company has implemented its solution for the comprehensive and centralized management of the 8,000-meter-long Oriente 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 has unique experience in Transportation, with more than 2,500 projects developed in more than 100 cities and in over 50 countries. Its Transportation Division, Indra Mova Solutions, covers the entire life cycle of its clients' projects and 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 vast experience of its team of professionals.

## **About Indra**

Indra ([www.indracompany.com](http://www.indracompany.com)) is one of the leading global technology and consulting companies and the technological partner for core business operations of its customers worldwide. It is a world-leader in providing proprietary solutions in specific segments of the Transport and Defense markets, and a leader in Digital Transformation and Information Technologies in Spain and Latin America through its subsidiary Minsait. Its business model is based on a comprehensive range of proprietary products, with a high-value, end-to-end focus and with a high innovation component. In the 2021 financial year, Indra achieved revenue of €3.390 billion, near 52,000 employees, a local presence in 46 countries and business operations in over 140 countries.