

INDRA IMPLEMENTS AN ADVANCED DYNAMIC TOLLING SYSTEM WITH ARTIFICIAL INTELLIGENCE WORTH 24 MILLION EUROS IN ISRAEL

- **It will equip the new express lanes on Highway 20 entering Tel Aviv with its Mova Collect free-flow tolling solution with deep learning and the automatic detection of high-occupancy vehicles, as well as intelligent transportation, enforcement and communication systems**
- **Indra's solution includes the back office platform and algorithms to adjust the tolls to the level of traffic so as to promote the use of public transport and car sharing, reduce congestion and facilitate more efficient and sustainable mobility**
- **Indra, which recently won another contract to implement the interoperability platform for all toll roads in Ireland, will strengthen its position as a leading provider of advanced electronic tolling solutions, with projects in countries such as the United States, Canada, Mexico, Chile, Colombia and the Philippines**

Madrid, May 12, 2022.- The largest private operator and maintainer of public transportation in Israel- DAN Public Transportation Ltd has awarded Indra, one of the leading global technology and consulting companies, a 24-million euros contract for the design, supply, installation, commissioning and ten-year maintenance of the most advanced dynamic tolling technology (Managed Lanes) on the new express lanes of Highway 20, which connects Tel Aviv with the rest of the country. Dan group transportation and Indra have formed a winning combination for the Fast Lanes project in Tel Aviv which is perceived as the most advanced and challenging project of its kind.

Indra will equip what's also known as the Ayalon Highway, the busiest road section in Israel, with its Mova Collect tolling solution with deep learning and the automatic detection of high-occupancy vehicles (DAVAO). More specifically, Indra will introduce 80 free-flow booths allowing cars to pass through without having to slow down, together with an operational back office platform based on micro-services architecture which enables real-time journey configuration and integrates algorithms that can adjust the tolls, depending on the amount of traffic.

Indra's technology will be able to detect the intensity of the traffic in real time, identify the type of vehicle and detects the number of occupants, the license plate number and other variables in order to calculate the toll dynamically, and is thus an advanced tool in promoting the use of car sharing and free electric public buses, Which will be provided and operated by Dan, that transport travelers from the parking lots built along the last stretch of road entering the city.

Indra's solution will thus help reduce tailbacks on one of the most congested roads in Israel, as well as the polluting emissions they generate and, in short, facilitate more efficient, safe and sustainable mobility in the metropolis.

By means of a mobile application, also developed by Indra, users will be able to declare in real time that they are traveling in a high-occupancy vehicle (HOV) in order to request exemption from the toll. As for the other vehicles, the toll will vary in accordance with the level of traffic; if it increases, the toll can be raised too, in such a way that the number of users willing to pay reduces, the traffic intensity decreases again and travel times are improved.

Indra's Horus traffic management system, part of the Mova Traffic family of solutions, will integrate the different Intelligent Transportation Systems (ITS) to provide operators with a single view of what's happening on the highway, while it will also be responsible for automatically updating the tolls associated with the different routes in real time, displaying them to the drivers on the variable signage panels so that they can choose between the free and payment lanes.

Indra's solution will allow the concessionaire to guarantee that users who declare their toll exemption for high-occupancy vehicles (HOV) comply with the minimum number of occupants required and, if this is not the case, claim the amount and the corresponding penalty by means of the enforcement systems. Indra will also design the fiber optic network that will support the project's communications.

Unique solution in the world

The result of its significant RDI endeavors, Indra's tolling solution is also one of the most advanced of its kind currently in existence around the world, incorporating Artificial Intelligence, deep learning and blockchain capabilities for its integration with connected vehicles and the company's automatic vehicle occupancy detection system.

Thanks to artificial vision and intelligence, the system can automatically detect the type of vehicle traveling on a road in real time, non-intrusively and with high reliability, as well as the front and rear occupants, thus helping the operators manage the payment process.

Indra's dynamic tolling solution is also able to improve its performance and "learn" through deep learning as more data are captured in real time during operations. In addition, it is scalable and has great flexibility to adapt to rule changes in the business and classification of vehicles required by the customer.

These capabilities have enabled Indra to implement this technology in the United States, where it operates the I-66 Outside the Beltway highway with an innovative dynamic pricing system.

With the Highway 20 project in Israel, Indra is taking a new step in the advanced dynamic tolls (Managed Lanes) model, which facilitates new and more sustainable mobility policies with great potential for the roads entering large cities around the world.

A global leader in advanced tolling solutions

This new contract comes in the wake of one recently won by Indra to implement the interoperability platform for all the toll roads in Ireland and strengthens its position as a leader in advanced electronic tolling solutions, with projects in countries such as the USA, Canada, Mexico, Chile, Colombia, the Philippines, Portugal and Spain.

Furthermore, thanks to this project, Indra will become a technological partner of Dan, the largest transportation company in Israel, consisting of a group of holding companies under the umbrella of Dan Capital. Dan transportation aim and objective is to be the leader in ITS and related transportation projects in Israel and in the European continent to include free flow toll roads, Light Rail Train and other Mass Transportation Projects to include design and construction, implementation, testing, commissioning, Operation & Maintenance. Dan is open to exploring new horizons and business opportunities in transportation in Israel and Europe, together with major companies such as Indra.

The company has already implemented the toll system for the Carmel tunnels in Israel and, with this new project, it is positioning itself for any new opportunities that may arise within the framework of the major transport infrastructure investment plan expected in the country.

Indra is a leading global technology engineering company for the aerospace, defence and mobility sectors. It is its clients' principal technology partner for digitization and key operations worldwide. Its team of experts and its in-depth knowledge of those businesses and the latest technology, and its leadership in major European innovation programs and projects to design the next generation of technological solutions, give it a differential offering and enable Indra to lead unique, highly innovative projects that will transform the future of these sectors on a global scale in the coming years.

About Indra

Indra (www.indracompany.com) is one of the leading global technology and consulting companies and the technological partner for core business operations of its customers world-wide. It is a world-leader in providing proprietary solutions in specific segments in Transport and Defense markets, and a leading firm in digital transformation and Information Technologies in Spain and Latin America through its affiliate Minsait. Its

business model is based on a comprehensive range of proprietary products, with a high-value focus and with a high innovation component. In the 2021 financial year, Indra achieved revenue of €3.39 billion, more than 52,000 employees, a local presence in 46 countries and business operations in over 140 countries.