# ındra

# INDRA IMPROVES THE PASSENGER EXPERIENCE AND WILL MAKE IT POSSIBLE TO PAY FOR TRANSPORTATION VIA MOBILE DEVICES IN SANTIAGO DE CHILE

- Indra has renovated 1,120 turnstiles in the Metro de Santiago and Empresa de Los Ferrocarriles del Estado (State Railway Company), with an advanced validator, fitted with a bank card and QR code reader, which will allow the use of these new means of payment, and a screen that assists interaction with the user
- With this project, Indra places Santiago among the few cities in the world that have this technology and strengthens its position as a technological partner to offer new models of transport collection and payment and move towards mobility as a service
- Indra is a leader in ticketing and access control systems in Chile, with more than 15 years of experience and projects for Metro de Santiago and EFE in its three subsidiaries: Metro de Valparaíso, Tren Central and Ferrocarriles del Sur (Fesur)

**Madrid, March 3, 2022 -** Indra, a leading global technology and consulting company, is working on the modernization of the ticketing system of Metro de Santiago and the Alameda-Nos line of Tren Central to improve passenger accessibility and user experience and facilitate the transition to new payment models, which will allow payment via mobile devices.

The company has already renewed all of the 1,120 access units of the seven Metro de Santiago lines and the suburban train service Metrotren Alameda-Nos, with an advanced validator, designed and developed by Indra based on its Mova Collect line of solutions. In addition to being able to read the usual contactless transport cards, the new validator is able to interact with bank cards, QR codes and mobile devices to accept payment. It also allows the recharging of transport cards using the validator itself.

In this way, it facilitates cashless payment and faster access even for occasional journeys without a transport card and enhances the possibilities of fare integration and access to discounts. Indra's solution also improves the user interface thanks to a fully customizable seven-inch TFT screen and a speaker (as opposed to the more usual buzzer) which can be used to provide information and warn passengers.

Indra has designed a multi-purpose validator, which adapts electronically to any turnstile and is integrated in a unique way, so that the same control and interface electronics can be installed throughout the current and future network, thus reducing the variety of existing solutions.

In addition to the turnstile validators, Indra will deploy new ticket validators modeled after those installed in the bus network, which, placed on a pedestal on the access control line, offer an additional means of validation that allows Metro to reinforce passenger flow management in the event of a very high influx of passengers at certain stations and times of day. They have the same capabilities as the previous validators and support the reading of QR codes and bank cards.

The project for the Santiago Metro and Tren Central includes the design and development of all validator hardware and software, the renovation of the back-office system and station hubs, the installation and commissioning of the 1,120 new validators, as well as a warranty period.

The new means of payment have been designed according to the specifications of the Chilean Ministry of Transport and Telecommunications for their implementation. Indra's system is also integrated with a series of services of the Metropolitan Mobility Network (formerly Transantiago), the integrated public transportation system of Chile's capital city, which includes city buses and suburban buses, such as the clearing house system for the settlement of transactional records sent from the new validators.



## Bring your own device

With this innovative project for Santiago, Indra reinforces its position as a leading technology partner to offer new models of transport collection and payment and to move towards mobility as a service.

It represents an advance towards new models of interaction with the customer, more open and more convenient for users, who can pay with their own devices, consolidating the *Bring your own device* trend, which is rapidly growing in the new mobility.

Indra has already successfully implemented this type of technology in Spain, in Renfe's commuter train network in Malaga and Madrid, and is working on different projects to do so in Europe, the Middle East and Latin America.

## Leader in ticketing technology in Chile

Thanks to this project, in what is considered one of the best subways in Latin America, Santiago is at the forefront of new methods and models of transportation payment and becomes one of the few cities in the world to have this technology.

The city was already a pioneer in the world with the implementation of the current multi-modal system of the Metropolitan Mobility Network (formerly Transantiago), which uses contactless cards as a means of payment, and to whose development Indra also contributed. The new technology is a step forward in offering the best service to the passenger, facilitating cashless payment and faster access even on specific journeys without a transport card, and enhancing the possibilities of fare integration and access to discounts.

Indra has been a supplier of Metro de Santiago for more than 15 years and has also supported it in the development of the first Multivía contactless card, and in the implementation of all the sales and access control systems for lines 1, 2, 4, 4A, and 5. It has also developed and implemented point-of-sale (POS) systems, portable sales terminals (Mobile POS) and automatic contactless card loading, among other projects, throughout the Metro de Santiago network.

The company is a leader in Chile in ticketing and access control systems with projects not only for Metro de Santiago, but also for Metro de Valparaíso (Merval), Ferrocarriles del Sur (Fesur), Metrotren Nos and Metrotren Rancagua, operated by EFE Central.

#### Leadership in ticketing and urban mobility

Indra is one of the world leaders in ticketing. It offers its own solutions and has worked in projects for the underground in Madrid, Barcelona, Amsterdam, Calcutta, Mumbai, the light rail in St Louis, the railroad in Buenos Aires and the suburban railroad in Mexico City, among others.

Over 100 cities worldwide rely on Indra to improve their urban mobility and transport, including cities all over the world such as London, Amsterdam, Sydney, Madrid, Dublin, Medellin and Manila. The technology applied to traffic management and urban transport facilitates a more secure, efficient and sustainable mobility while contributing to reducing traffic and the costs involved, minimizing polluting emissions and promoting integrated urban transport services.

#### 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 worldwide. It is a world-leader in providing proprietary solutions in specific segments in Transport and Defence 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, end-to-end focus and with a high innovation component. In the 2021 financial year, Indra achieved revenue of €3.390 billion, with over 52,000 employees, a local presence in 46 countries and business operations in over 140 countries.