



## Press Release

### **INDRA WILL COMMISSION AN INTEGRATED CONTROL CENTRE FOR THE LIGHT RAIL TRANSIT AND MONORAIL OF KUALA LUMPUR, MALAYSIA, FOR A TOTAL OF €28 M**

- **Initially, the project includes the monorail and Ampang and Kelana Jaya lines, but it will be expanded until it controls all public transport lines operated by Prasarana**
- **Indra will implement an advanced integrated line management solution, a state-of-the-art data centre and communications technology and energy management systems, among other systems**
- **With this project, Indra is consolidated as a technological partner of Prasarana, the public company responsible for the modernization of public transport in Malaysia, and continues to strengthen its position in this country and the Asian market**

Prasarana (Syarikat Prasarana Negara Berhad), the public company responsible for the modernization of the public transport system in Malaysia and the operator of different lines in the country, has awarded Indra with the design, development and commissioning of a new integrated control centre for the Monorail, Ampang and Kelana Jaya lines of the Light Rail Transit of Kuala Lumpur, for a total amount of €28 M. The contract has a 48 month deadline with two years of maintenance warranty.

The project shall integrate all transport lines operated by Prasarana in the new control centre, adding the remaining contracts for the MRT lines (Mass Rapid Transit), the KTM Komuter railway line and other future transport systems for the country.

Such an ambitious and innovating project consolidates Indra as Prasarana's technological partner. Indra has already implemented ticketing and access control systems for this company in its Monorail and Light Rail Transit lines in Kuala Lumpur, after becoming the winning bidder of both contracts in 2011 and 2012. In addition, this strengthens the company's position in Malaysia and in Asian market.

The new control centre commissioned for Prasarana will have an advanced management system that can be used for the full integration of all network control and operation elements, integrated management of all lines and a greater operating automation.



With this technology, Prasarana will achieve a greater control over its transport systems in real time, achieve a greater efficacy in its operations and reduce the operating costs, while integrating the management of all lines in a single centre. Likewise, travellers will benefit from a transport service with a higher quality and safety, where the interconnection of different lines will be improved.

The solution implemented by Indra in Malaysia will include operational planning, traffic regulation and real-time train circulation monitoring sub-systems, it will integrate the existing signalling systems and allow the remote monitoring and optimisation of the rolling stock and staff schedules. It will also include a tool that will provide assistance during strategic decision-making processes and a statistical scorecard, which can be used to obtain service quality indicators, with the purpose of tailoring the system to the real citizen demand, increase the system's performance and reduce costs.

### **Advanced control centre**

In addition to Indra's rail tram traffic management solution, the new control centre will have a room equipped for 22 operator positions, as well as a large videowall that will display the operation of these lines, which can be expanded to other transport systems included in the future.

Indra will also be responsible for implementing a state-of-the-art data centre that will support the activity of the control centre and supply all necessary technologies. Likewise, it shall implement its voice communications terminals between the trains and control centre through its mobile networks deployed, TETRA and GSM-R; a SCADA energy management system and a SCADA control system for fixed installations, among other systems.

The new technology will be integrated in the control centre with the existing ticketing systems, which have also been implemented by Indra, including traveller information systems, closed-circuit television, corporate management systems, etc.

### **Progress in Asia**

With this new project, Indra strengthens its presence in Malaysia and in the emerging markets of the Asian continent. Aside from the aforementioned projects carried out for Prasarana, Indra has installed in Malaysia a simulator for the EC 225 transport helicopter for the nation's Eurocopter pilot training centre.

In India, the company is carrying out several contracts to implement its ticketing technology in Calcutta's subway, Mumbai's monorail and subway, and the new Light Rail Tram line to Delhi's airport.

In the air traffic sector, Indra has recently become the winning bidder of two contracts to supply radio-assistance systems to the air navigation service provider Airservices Australia. In China, Indra is also modernising the Xian and Chengdu control centres, which organise



the upper air space of eight Chinese regions that cover an area comparable to Western Europe. Likewise, the Chinese Civil Aviation Administration entrusted the company with the deployment of a surveillance network that will cover 60% of the country's airspace. On the other hand, the company is implementing nine radar stations and equipping 38 airports in India with its air traffic management systems, earning the largest contract awarded in recent years, in terms of number of systems in the entire world.

Indra is also modernising the Bank management systems of Bangladesh. In addition, it has been awarded a global technology outsourcing contract by Meralco, the largest electrical utility in the Philippines, and provides services to the leading companies in the Philippine energy sector, such as Visayas Electric Corporation (VECO), the second distributor in the country. The two companies providing sanitation and sewer services in Manila have also chosen Indra's technology, since they manage the commercial processes of Mayniland and such technology will be implemented in the Manila Water Company.

As regards other sectors, Indra has recently been awarded with a contract to implement its technology in three submarines of the Indonesian Navy. Likewise, the company is currently implementing a global health system in the most important hospital of the Philippine Islands, the Makati Medical Centre and it has completed the modernization of the Justice Administration in the Supreme Court of Justice of the Philippine Islands.

The company has subsidiaries in China, India, the Philippine Islands Indonesia and Australia.

Indra is one of the world's largest consultancy and technology multinationals, a leader in Europe and Latin America and is expanding in other emerging economies. Innovation is the cornerstone of its business, which is highly focussed on the customer and on sustainability. The multinational is one of the leaders in its sector in Europe in terms of investment in R&D and innovation, having invested more than €550M in the last three years. With sales approaching €3,000 million, it employs 42,000 professional and has customers in 128 countries.