Press release

TRANSFORMING TRANSPORT, LED BY INDRA, THE BEST EUROPEAN BIG DATA PROJECT

- **This macro-project, with results that will revolutionize mobility, has been chosen as the "best success story" among the 42 projects that promote digital transformation based on data in Europe, within the framework of the Big Data Value PPP**

- **Improvements of up to 60% in the operational transport efficiency and 50% in asset management are just some of the results obtained thanks to the use of artificial intelligence and big data in the 13 pilots conducted in roads, ports, airports, railways and cities across Europe**

- **The solutions developed reinforce Indra's position as a leader in smart mobility. Moreover, the infrastructure managers and transport operators involved in the project want to continue using them due to their enormous advantages, and they are now ready for commercialization**

Madrid, July 22, 2019.- The Transforming Transport project, led by Indra, one of the leading global technology and consulting companies, has been awarded the prize for "best success story" among the 42 projects that promote digital transformation based on data in Europe, developed within the framework of the Big Data Value PPP, the public-private entity that directs the RDI strategy in big data to boost European leadership in this field.

This macro-project, in which Indra coordinated the work of 49 partners from Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, the United Kingdom and Spain, has achieved significant results that will mark a turning point in the world of mobility, transport and logistics.

This is evidenced by the fact that some of the main infrastructure managers and transport operators in Europe who have been involved in Transforming Transport, want to continue using the solutions developed, due to the enormous advantages they offer. By facilitating the automated support of decision making, from big data and artificial intelligence, the solutions allow to operation and maintenance to be optimized; increase efficiency and productivity; improve the passenger experience; reduce energy consumption and polluting emissions; as well as facilitating the creation of new business models based on data.

Improvements of up to 60% in the operational efficiency of transport and up to 50% in asset management are the main results obtained in the 13 pilots conducted in roads, ports, airports, railways and cities across Europe.

Thanks to predictive maintenance, it has been possible to reduce the maintenance costs of railway infrastructures by 34%, also minimizing service interruptions and improving passenger safety. The monthly number of interventions in maintenance was reduced by 15% and the monthly polluting emissions caused by rail was reduced by between 15% and 25%.

Ports have benefited, among other aspects, from a 10% reduction in running costs, by avoiding delays and having more efficient terminals. Furthermore, airports optimized their use of resources by 33%.

It was also possible to predict traffic jams two hours in advance, improving traffic management and reducing the probability of accidents; reduce travel times for truck routes by 17%, thanks to route optimization, and the number of delivery vehicles needed for distribution in cities was cut by 38%, thanks to new data-driven planning tools.

In order to measure the value generated by big data in terms of operational efficiency, customer experience and business models, Transforming Transport established 130 KPIs, comparing the value before making use of big data technologies and after they have been implemented. Indicators were taken into account by the

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transport sector, crossover indicators to all of them and indicators at a strategic level from a business perspective.

The importance of open data

Transforming Transport with a budget of 18.7 million euros, funding received by the European Commission as part of the Horizon 2020 program, has made use of a total of 164 terabytes of data from 160 different data sources. The project has shown that as tools are fed with new data, predictive models become increasingly polished, generating more effective solutions to detect and resolve possible problems and prevent them before they arise.

The quality of the data is fundamental to achieve the best results, with the largest variety of data being the most important factor (69%), followed by the volume of data (25%) and the speed of processing, so the key is to integrate more data sources, not larger quantities. In this regard, promoting open data policies could generate new business opportunities and innovation.

Furthermore, the project has shown that business knowledge and experience in commercial operations is as important as artificial intelligence techniques to obtain the best results.

Big data solutions prepared for real environments

The solutions developed in Transforming Transport have proven their validity in real environments offering the advantages indicated. They have clearly shown to the infrastructure managers and transport operators involved in the project the potential value of the data and the importance of their quality.

The solutions are specific for these end users, but they can be replicated to obtain customized solutions for different clients beyond the scope of Transforming Transport.

In Indra's case, the big data and artificial intelligence developments that the company has carried out for the four smart road , rail and airport pilots, which it has also led, have joined the range on offer and are ready for commercialization. In particular, Indra has deployed in its own Mova Traffic control solutions, a new module for data integration, analysis and modeling, which helps decision-making for the improvement of the operation, predictive maintenance and service provided to passengers in all means of transport.

In this way, Indra is reinforcing its position as a leader in smart mobility.

The company has a unique wealth of experience in Transport, with more than 2,500 projects carried out in more than 100 cities and over 50 countries. Its renewed offering for the sector, Indra Mova Solutions, covers the entire life cycle of its clients' projects and combines the new digital, integration, specialization and innovation capacities demanded by the market with the reliability, business knowledge, its proprietary technology for Indra transport and the unique experience of its team of professionals.

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 Consultancy 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 an end-to-end, high-value focus and with a high innovation component. In the 2018 financial year, Indra achieved revenue of €3.104 billion, with 43,000 employees, a local presence in 46 countries and business operations in over 140 countries.

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