

INDRA WILL COMPREHENSIVELY TRANSFORM ALGERIA'S ENTIRE AIR TRAFFIC MANAGEMENT SYSTEM IN A DEAL WORTH 47 MILLION EUROS

- **The state body responsible for managing Algerian airspace, ENNA, will be equipped with a state-of-the-art system whose capabilities far exceed the industry's most demanding international requirements, placing Algeria on a par with the world's most advanced countries**
- **Not only will Indra's new system enable more traffic to be managed, but it will do it in a more competitive and safer way while also providing both airlines and citizens with an enhanced and more environmentally-friendly service**
- **Indra will completely overhaul all Algeria's air traffic control centers, its air surveillance system and its air navigation communications. This project is the largest of its kind to be undertaken in Africa in the last 12 months**

Algiers, February 21, 2018. Indra will completely renew Algeria's entire air traffic management system within a project that, given its size and ambitious scope, will place the state air navigation service provider ENNA (Etablissement National de la Navigation Aérienne) at the forefront of global leadership in terms of safety, efficiency, capacity and respect for the environment. Its budget of 47 million euros and 18-month execution timeframe make it the largest air traffic modernization project to be implemented on the African continent in the last 12 months.

The project will transform ENNA into one of the world's most competitive air navigation service providers. It will have the technology to provide a navigation service on a par with the world's most advanced nations.

The program has been designed to equip Algeria with an integrated air traffic management system operated by ENNA with latest-generation tools and optimal capacities to plan and order the traffic in the country's airspace. The system will use the same technology and capacities as other systems implemented by Indra in Europe and will more than meet the strict demands of the International Civil Aviation Organization (ICAO), enabling controllers in Algeria to seamlessly coordinate with control centers in neighboring countries.

ENNA's Director-General, Mr. Youcef Safir, and Indra's head of International Air Traffic, Mr. Gonzalo Gavín, today signed the country's Airspace Management Development Program in a ceremony at the capital's Air Navigation Complex with the Minister of Public Works and Transports (Ministre des Travaux Publics et des Transports), M. Abdelghani Zalene in attendance.

Thanks to Indra's technology, ENNA will be able to manage more flights at a lower cost. It will also increase safety levels, amply exceeding the requirements of the most demanding international standards. This will allow Algeria to take full advantage of its privileged location as the gateway to Africa from Europe and to Europe from Africa, given that its airspace must be entered by most routes linking the two continents. This will boost the revenue it receives as airspace fees and strengthen its commercial position.

Indra's technology will also contribute to improving air traffic management at the country's airports, improving both flight punctuality and passenger comfort. These improvements will contribute to the revitalization of Algeria's tourism industry and the nation's economy. The tools included in the new system will also facilitate more precise routes for aircraft, consequently reducing CO2 emissions and helping protect the environment.

As part of the project Indra will be responsible for modernizing the regional control center in Algiers and building a new center at Tamanrasset. It will also renovate the systems of the approach control centers at

Algiers, Annaba, Constantine, Oran and Hassi Messaoud. The company will provide ENNA with two air traffic management simulators to facilitate adaptation to the new automation system and train its controllers.

The project also contemplates the improvement of surveillance throughout the country's airspace through the provision of 11 radar stations equipped with four primary radars and nine mode S secondary radars, in addition to 13 ADS-B surveillance stations.

Additionally, Indra will equip the air traffic controllers' workstations with Garex 300 digital voice communications supported by an extensive network of 27 VSAT satellite stations with two hubs for the space segment, in addition to 30 VHF stations and more than 20 HF stations. It is a digital communications network that will provide a ground-air link with the pilots, ensure the transmission of control and radar data to the centers and facilitate communications between the various control centers with high levels of redundancy, quality and reliability.

Indra will also provide ENNA with logistic support throughout the entire life cycle of the system, encompassing training needs, technical support, guarantees, spare parts, repairs and updates.

Indra is the world leader in the development of technologies oriented to air traffic management. The company has equipped more than 4,000 facilities in 160 countries. The air traffic controllers who manage the world's most complex and busiest airspaces use Indra's systems. Indra is also one of the world's leading suppliers of radars. Having invested more than a billion euros in R&D&I in the last five years, it is also one of the companies spearheading the preparation of the Single European Sky initiative and the development of technologies that will shape the future of the industry. The company is shaped by its culture of focusing on meeting the needs specified by each customer, providing advice about available solutions and trends with a view to increasing both their performance and their revenue.

Indra's leadership in the Algerian air traffic market is in line with its commitment to collaborating on the improvement of the country's infrastructure and technology. Indra is developing some of Algeria's largest infrastructure Public Administrations modernization projects, including its tax management system, the systems necessary for fair collection and exploitation of the the Algeria East-West Highway, tunnels in the Bouira province and the Sétif tramway. It is also part of the Mobeal public-private joint venture formed to install, operate and maintain traffic control systems and remotely manage lighting in Algiers.

About Indra

Indra is a leading global consulting and technology company, and the technology partner for the core business operations of its clients' businesses throughout the world. It is one of the world's largest providers of proprietary solutions in specific segments of the Transport and Defense markets and a bellwether in Information Technology in Spain and Latin America. The company provides a comprehensive range of high added-value proprietary solutions and cutting-edge services in technology, and a singular culture of reliability, flexibility and adaptability to the needs of its customers. Indra is a world leader in developing end-to-end technology solutions in fields such as Defense and Security, Transport and Traffic, Energy and Industry, Telecommunications and Media, Financial Services, Electoral Processes, and Public Administrations and Healthcare. Indra's Minsait unit addresses the challenges posed by digital transformation. In 2016 Indra posted a revenue of €2.709 billion, employed 34,000 professionals, and had a local presence in 46 countries with sales operations in over 140 countries. Following its acquisition of Tecnom, Indra's combined revenue amounted to more than €3.2 billion in 2016 with a team of nearly 40,000 professionals.