

INDRA NAVIA DELIVERS TO ENNA SYSTEMS TO SUPPORT LANDINGS AT 20 AIRPORTS IN ALGERIA

- The project has been completed with the supply of navigation systems, which will help aircraft fly more accurately and save fuel
- Indra Navia's NORMAC systems are the most widely used in the world and have supported more than 100 million landings at 1,200 airports around the world
- The delivery occurs at a time in which Indra has strengthened its relationship with the supplier of navigation services in Algeria, ENNA. Last February, the company was awarded a contract to fully modernize all the country's air traffic management

Madrid, March 07, 2018 - Indra Navia, Indra's Norwegian subsidiary, has delivered to the Algerian navigation service provider, ENNA (Etablissement National de la Navigation Aérienne), Instrument Landing Systems to be installed at twenty airports in the country and navigation systems that will increase the precision of aircraft en-route and approach maneuvers.

The project was successfully completed in a year in which Indra's relationship with ENNA was strengthened following the signing this February of a new and ambitious project: the complete modernization of the country's air traffic management system, a 47-million euro contract for the renewal of control, communications and radar surveillance centers.

Indra's Norwegian subsidiary has supplied ENNA with NORMAC ILS (Instrument Landing Systems) and DME (Distance Measuring Equipment) installed at each runway heading to guide aircraft when landing. This equipment makes it possible to operate in low visibility conditions, such as those generated by the frequent sandstorms that are recorded especially in the south of the country.

This equipment ensures that airports do not have to reduce the number of flights, or even close, in low visibility situations, which would have a direct impact on their revenue and cause delays and inconvenience to travelers.

In addition, the company has also delivered DVOR systems that will enable aircraft to perform more precise en-route and approach maneuvers.

As part of the project, Indra has trained more than 50 ENNA experts at its facilities, who will be directly responsible for the installation and the maintenance and set-up of the systems.

ENNA's aim in this major program was to master rapidly the technology of the advanced systems delivered by Indra. Indra has responded by facilitating a transfer of technology during some in depth training sessions answering some very specific requirements expressed by ENNA.

Indra Navia's NORMAC systems are the most widely used worldwide. They have supported more than 100 million safe landings at nearly 1,200 airports in the last twenty years.

At the forefront of air traffic management

On February 22, 2018, Indra signed a contract with ENNA to renew the country's air navigation system, bringing the state-owned provider of navigation services to the global forefront in terms of safety, efficiency, capacity and environmental friendliness.

As part of this project, the largest of its kind in the last year in Africa, Indra will be responsible for modernizing the regional control center in Algiers and deploying a new center in Tamanrasset. It will also renew the systems of the approach control centers in Annaba, Constantine, Oran and Hassi Messaoud. To support the training of controllers, it will provide two air traffic management simulators.

The company will also strengthen surveillance throughout the country's airspace. It will deploy eleven radar stations, equipped with four primary radars and nine secondary S-mode radars, and thirteen ADS-B surveillance stations.

Additionally, it will equip the air traffic controllers' workstations with state-of-the-art 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.

Indra will accompany ENNA throughout the entire process of deploying the new system and will ensure ENNA's logistical support throughout its entire lifecycle, covering training, assistance and guarantees, spare parts, repairs and necessary 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 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 undertaking some of Algeria's largest projects in modernizing Public Administrations, including its tax management system, the toll systems necessary for 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 management systems and remote telemanagement of lighting in Algiers.

About Indra

Indra is one of the world's top technology and consulting and a technology partner for the key operations of its customers' businesses worldwide. It is a leading worldwide provider of proprietary solutions in niche areas in Transport and Defense Markets and the absolute leader in IT in Spain and Latin America. It offers a comprehensive range of proprietary solutions and cutting edge services with a high added value in technology based on a unique culture of reliability, flexibility and adaptability to the needs of its customers. Indra is a world leader in the development of 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. Minsait is Indra's digital transformation business unit. In 2017 Indra posted a revenue of €3,011m, employed 40,000 professionals, and had a local presence in 46 countries plus sales operations in more than 140 countries.