

Press release

INDRA AND MICROSOFT MIGRATE AIR TRAFFIC MANAGEMENT TO THE CLOUD

- **Successful completion of the first phase to migrate one of Indra's air traffic management systems and training simulators to cloud platforms using Microsoft Azure technology**
- **This migration marks another step forward in our commitment to use cloud platforms, as a result of Indra's past successful achievements in private cloud solutions with our partners of iTec Alliance**
- **This solution will provide top-level services to countries where infrastructure is non-existent and will enhance safety in more developed countries in the event of a contingency or natural disaster**
- **A second phase will assess migration of other services including surveillance, communications and drone management**

Madrid, May 5, 2020.- Indra and Microsoft have successfully completed the first phase of the project to locate and operate from Microsoft Azure cloud platform.

This milestone strengthens Indra's strategy that already has solutions based on private cloud platforms in collaboration with iTEC Alliance, which is a membership of air navigation service providers of Spain, Germany, United Kingdom, Netherlands, Poland, Norway and Lithuania. Indra is the provider and technology partner of this alliance.

This new step taken jointly by Indra and Microsoft will enable air traffic systems to be transferred to a public cloud for the first time. It will enable air navigation service providers to benefit from the advantages of having their systems in the cloud together with infrastructure cost-saving and at the same time benefit from state-of-the-art cybersecurity protection available and updated at all times.

Air traffic management systems located in the cloud will enable a control center to take over from another center in a contingency and will ease the centralization of some functions, which will result in streamlining the infrastructure needed for the provision of the service.

Moreover, it opens the door to creating supranational control centers that provide temporary service for those countries where infrastructures are non-existent or damaged due to natural disasters, as has happened in the Caribbean or in Southeast Asia over the last few years.

In the present circumstances, it is of the utmost importance to have these alternatives available that allow system decentralization together with the highest safety standards. In the future, air traffic controllers might be able to provide their service remotely.

Cloud platforms have a direct effect on transforming controllers' training and certification. Access to training will become easier, increasing training hours and reducing costs by combining advanced virtual reality techniques, already in use in Indra.

Following the outcome of this phase, Indra and Microsoft are examining the applications offered by cloud technology for other flight management areas, including communication systems – surveillance systems (radars, multilateration systems and ADS-B), navigation systems (ILS, GBAS), and others recently developed by Indra such as digital control tower and satellite surveillance and communication.

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Currently, more than 160 air traffic control centers and hundreds of control towers across the world use Indra's air traffic management system. This system is at the heart of all navigation service providers' business.

Indra Air Solutions

With the launch of Indra Air Solutions, Indra becomes the only company in the world capable of providing a comprehensive response - with its own state-of-the-art technology - to the challenges presented by the sustained increase of air traffic around the globe.

It is the only company with the latest generation of systems to cover each phase of the flight. Indra Air Automation, Air Communication, Air Navigation, Air Surveillance, Air Information and Air Drones are the lines that make up this package.

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 a high-value focus and with a high innovation component. In the 2019 financial year, Indra achieved revenue of €3,204 billion, with more than 49,000 employees, a local presence in 46 countries and business operations in over 140 countries.

About Microsoft

Microsoft (Nasdaq "MSFT" @microsoft) drives digital transformation for the intelligent cloud era and for the Intelligent Edge. Its mission is to help each person and each organization on the planet to do more every day.