



THE BARAJAS AIRPORT IMPROVES THE PERFORMANCE OF ITS OPERATIONS IN REAL TIME

WE REDEFINE AIRPORT PROCESSES



Context

Improved Airport Management Center

The Adolfo Suárez Madrid-Barajas Airport is Spain's leading airport in terms of passenger traffic, air cargo and operations, the fourth in Europe by number of passengers, and twelfth worldwide.

The role of airport management centers is undergoing transformation to comply with the new function of airports. This change across a diversity of levels implies new coordination processes, a redesign of the control spaces themselves and opening up to new actors.

The Airport Dashboard is one of these new tools for monitoring operational processes in airports in real time and for acting on any of these, as required.

The role of the airport management centers has changed: no longer do these merely prepare programming and assign resources. Now these must promote collaboration amongst the different actors and optimize diverse processes in real time.

Their main function is the ability to continuously have available the most relevant management parameters, increasing responsibility and transparency.

Control panel

The airport dashboard implemented by Indra graphically represents the most relevant KPIs and their relative positions with regards to the established goals. With a quick look, an operator may identify critical elements and detect deviations that occur. The system displays alarms to alert operators when certain conditions are met.

Beyond real-time management, the system logs everything that happens and is able

to analyze it. This way, inefficiencies and bottlenecks may be identified so that we may learn from errors, improve quality and, ultimately, redefine airport processes.

The implementation of the Madrid-Barajas Airport Dashboard has included data on air traffic, information about airport facilities (including an airport's resources, parkings and automated passenger transportation), airport slots and weather conditions.

Air Traffic Information is continuously updated using a direct connection with the ATM systems. Data presented by the system includes an airport's configuration, assignment of slots, NOTAMs, etc.

CONTINUOUS UPDATE OF AIR TRAFFIC DATA.

Benefits

Real-time reports, simple integration with remaining systems

- Web-based human-machine interface, granting access from any terminal as well as for projecting onto a video wall.
- Extracts the most relevant information from the different systems for analysis and obtains the desired KPIs.
- High-level, integrated graphic interface that is intuitive and simple to use.
- The dashboard's indicators and screens are adapted to operating requirements.
- The system used in Madrid also presents weather conditions and forecasts, thereby facilitating operator tasks.
- KPIs are shown in real time, and their progress is saved for later analysis.
- Simple integration with remaining, third-party systems through an EAI or middleware.
- Ready for the future: prepared for the SESAR APOC concept.
- Dashboard integrated with the airport's information systems, the AODB and the resource management system, designed by Indra (SCENA), and with other inherited and third-party applications using middleware.
- Capability for focusing on the required level of detail.
- The airport dashboard is prepared to grow with the airport, whether by including operational changes as these expand, adding new KPIs, or adapting to SESAR and NextGen requirements.
- Visual reports in real time.
- Displays can be personalized by each user, with different access levels to the desired information.

Indra in Airports

We at Indra offer technological solutions that significantly enhance the speed and efficiency of airport management, allowing airports to handle rapidly growing passenger numbers with every guarantee of success, while also driving down environmental emissions and general costs.

Our technology integrates all the information required by operators involved in managing flights on the ground. Our integrated InPlan solution provides a single situation overview, makes predictions and detects potential planning problems,

and features a system of alerts and recommendations to help operators deal with any incidents.



Avda. de Bruselas, 35
28108 Alcobendas
Madrid (Spain)
Tel. +34 91 480 50 00
Fax +34 91 480 50 80
indracompany.com
indra@indracompany.es

Indra reserves the right to modify these specifications without prior notice.