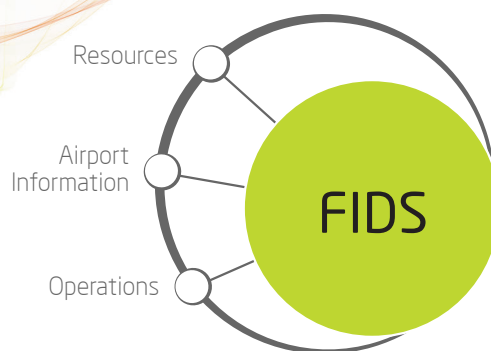


AIRPORT SOLUTIONS

FLIGHT INFORMATION DISPLAY SYSTEM



High configuration capacity system

Indra Airport

Indra has a wealth of experience in the Airport IT systems, providing solutions across airport operations: ATC-Tower, Ramp/Airfield and Terminal.

Indra solutions provides modularity, operability and scalability. These solutions are adaptable to different requirements, offering solutions for greenfield, expansion, and existing airport projects, as well as multiple airport networks.

FIDS general description

Our advanced airport solutions include the Flight Information Display System (FIDS).

FIDS is the terminal system that provides real time information to airport users. This information includes flights, assigned check-in desks, boarding gates, departure and arrival times, baggage claim allocation, etc.

This public information system, which is the essential communication tool

between the airport and passengers, is deployed all over the airport and requires high configuration capabilities and maximum availability.

FIDS is a modular system, allowing the airport to acquire strictly the required modules facilitating the systems architecture simplification and reducing investment.

Features and Benefits

Indra's FIDS Solution is highly adaptable and offers high integration capabilities, including:

- Ability to work as a stand-alone solution or as an application module in conjunction with an AODB system, thanks to its open standard technology and its tiered architecture (based on products such as Open-Source suites, Microsoft or Oracle products).
- Ability to integrate within existing airport systems thanks to the adapter dependant technology.
- Possible integration with existing physical equipment, including information displays or screens.
- Maximum configuration capability: Multiple information display devices, each one having its own characteristics, etc.
- Critical system. The system provides real time information to all customer and business partners (internal and external). With high availability and maximum reliability in all displays.
- Easy hardware and software upgrade, due to its open architecture which facilitates adaptation to airport IT preferences.
- Independency from the display device technology and manufacturer (LED-composed panels, LCD/TFT screens, others).
- No hardware, middleware or proprietary protocol dependencies.
- High level of screen configuration on-the-fly capability depending on location and on customer's (airline or passenger) requirements.
- Software architecture based on an information encapsulation principle: a core (implementing the main functionality) and a separated device-dependent library, thus providing easy hardware upgrade.
- J2EE - Independence between the application and the supporting IT (including hardware and utility software: database, application server).

Functional characteristics

The passenger is the most important customer for the airport and it is fundamental to provide him with the right information at the right time. The main purpose of the FIDS is to present operational information where and when it is needed by the passenger.

The different airport locations where the passenger can need the information and the diversity of graphical displays used to present information to the passenger makes customization the main feature to consider when choosing a FIDS for an airport. This system must support passenger information at check-in desks, boarding gates, baggage claim belts and all around the terminal with different flight information views.

Main modules of Indra FIDS are:

FIDS core

This is the main module of FIDS, enabling:

- To send information to the graphical devices deployed across the airport, according to the template and the configuration information stored in the database.
- Provide the services needed to administrate the entities involved in the system, such as: devices, templates, filters, flight lists, users, etc.

Scheduling/Carrousels

With the templates designed by the administrator, a scheduling can be defined indicating: the carrousel to be shown (group of templates), the dates/times to display the carrousel.

FIDS Template Designer Tool

This service allows the administrator to define the templates that can be applied to any physical device (including also templates for LED panels).

Through a graphical interface, the application provides the administrator with a palette of components used to compose the template in a free way. The palette of components includes the following:

- ▶ **Text.** Containing a fixed text or a text whose source is a field of a flight stored in the system database.
- **Tables.** Being able to indicate which fields will be shown on the displays.
- 🖼️ **Pictures.** Allowing static pictures (advertisement) or dynamic images (airlines logos, airport destination, baggage reclaim status).
- ▶ **Videos/Pictures.** For advertisement purposes.
- 📅 **Date/Time.** To show the system date being able to choose the final display format.
- ✳️ **Meteo.** Associated to a flight destination.
- 🕒 **Flight Time** to the airport destination.

All these item can be added, removed, configured (setting the object position, object size and the object properties) easily.

FIDS AODB Tool

The natural source of information for the FIDS system is the AODB, which is updated in real-time. However, due to the critical nature of the FIDS system to show the appropriate information in the right time, in case of communication disruption with the AODB, the operator may need to modify raw AODB data to be presented to the passengers. This case is covered by our FIDS AODB Tool.

FIDS-CUTE Tool

This tool provides the connection between the flight managed by the CUTE system and the information displayed in the display devices linked to the check-in desk or boarding gate. Through this tool, the company operator can indicate the moment where the flight information should be shown at the display devices.

FIDS Mobility

Providing passengers with updated real-time information about flights for the different existing platforms in the market (iOS, Android, Blackberry), showing the information in a concise way, giving, among others, the tracking functionality for a particular flight.

Other features of interest of Indra's FIDS are:

Integration Capabilities. Integration with external systems, such as external AODBs.

Security. Administration is protected, and only authorised persons have access to the systems.

Associated services

- Design and consulting services
- Product adaptation, product can be customized and adapted to fulfil any specific airport requirements
- Integration with external systems
- Deployment
- Testing & Comissioning
- On-site, Off-site Support and Maintenance
- Product new versions updating service, with no additional cost being Indra the maintenance provider

FIDS System



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

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