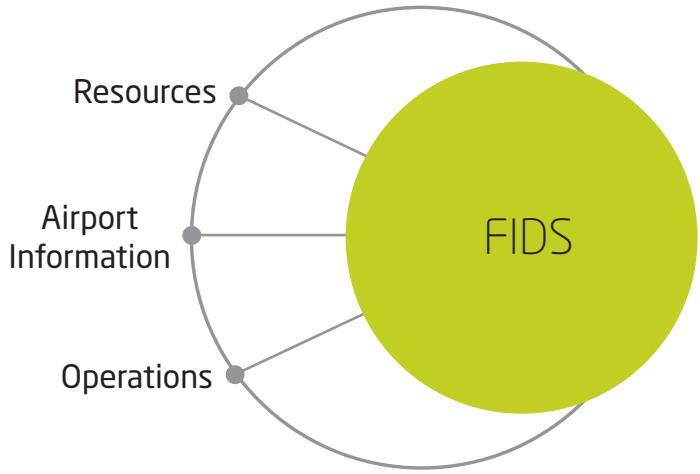
FLIGHT INFORMATION DISPLAY SYSTEM

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, existing airport projects, as well as multiple airport networks.

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

FIDS general description

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...

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 advanced integration capabilities, including:

- Ability to function as a stand-alone solution or as an application module in conjunction with the 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

Other characteristics are:

- Maximum configuration capability: Multiple information display devices, each one having its own characteristics...
- Critical system. The system provides real time information to all customer and business partners (internal an 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 manufacturer
- No hardware, middleware or proprietary protocol dependencies
- High level of screen configuration on-the-fly capability depending on location and 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
  - Mechanical presentation
  - LED-composed screens
  - CRT TV screens
  - TFT screens (standard display device)
  - LCD screens
  - Others

Functional characteristics

The passenger is the most important customer for the airport and it is fundamental to provide them 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 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, pages, filters, flight lists, users, user grants, etc.

Template designer

This service allows the administrator to define templates that are applied to physical devices.

Through a graphical interface, the application provides the administrator with a palette including all the components available to compose the template in a free way. All components can be static or dynamic. The following components can be added to compose the final layout:

- Text. Containing for instance the name of the airline, or the operation status ("Boarding", "closed"...)
- Tables. Including labels and configurable data
- Pictures. Allowing static (advertisement) or dynamic (airlines logos) images
- Videos. For example for advertisements purposes
- Time. Label with the current time

All these items can be configured (setting the specific properties for each component, added, moved and resized) easily. Saving the template in the database allows future upgrades or use as a base for new designs.

Operational Information Management

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 for Airport Operations, managers may need to modify displayed raw AODB data to be presented to passengers, usually as a consequence of communications failure.

Therefore, the FIDS system includes a specific interface to provide full access to the information stored in the database, allowing manual updates and the ability to block specific flight data to avoid direct update of AODB data.

Other features of interest of Indra'a FIDS include:

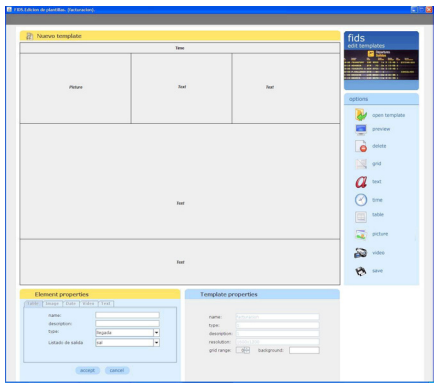
Security

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

Technology: J2EE

FIDS system is developed with J2EE (Java 2 Enterprise Edition). J2EE facilitates the independence between the application and the supporting IT (including hardware and utility software such as the database or the application server).

FIDS system



FIDS configuration display

Associates 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 & Commissioning
- On-site, Off-site Support and Maintenance
- Product new versions updating service, with no additional cost if Indra is maintenance provider.

Avda. de Bruselas, 35
28108 Alcobendas
Madrid (Spain)
T +34 91 480 60 04
F +34 91 480 60 41
infoairports@indra.es
indracompany.com

V.2 – 03-2010