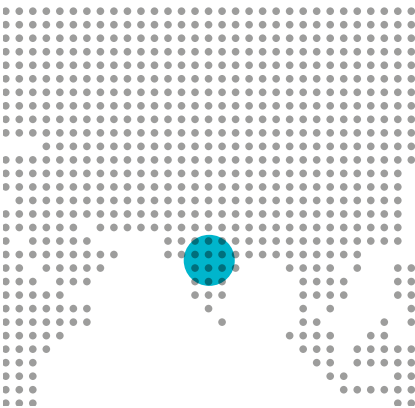




# NEW AIRPORT MANAGEMENT CENTER FOR THE INDIRA GANDHI AIRPORT IN DELHI

SIMULTANEOUS ACTION  
ACROSS PROCESSES,  
PERSONS, SYSTEMS AND  
INFRASTRUCTURES



## Context

### Modernization of AAI infrastructures using state-of-the-art technology

The Airports Authority of India (AAI) planned the modernization of Delhi's air control center, one of the most important centers in the country, which manages one of the busiest air traffic areas in India, including operations in Indira Gandhi international airport (New Delhi).

The surveillance area covered by these systems corresponds to 80% of the Indian air space, a very high percentage. This coverage increases security and the capacity for air traffic management, reducing costs.

Airports must enhance their dynamic nature and must involve all actors through collaboration and continuous improvement, sharing goals and increasing flexibility.

The AAI faced the enormous challenge of managing and maximizing the benefits obtained of greater operating complexity based on a new concept of Airport Management Center (AMC), an essential tool.

The AMC is the meeting point for this new shared focus, allowing for global improvements. Here is where the airport's different areas come together to work, overcoming previously existing institutional barriers, including external actors and Air Navigation, to together manage and resolve problems in real time.

## Airport Management Center (AMC)

Indra has a broad experience in the design of control centers, highlighting two different implementations of the AMC concept. The same AMC model can never be copied. An AMC is only useful if it is in full harmony with an airport's operating model, including its goals, resources and environment. For this reason, whether in Europa or in Asia, the AMC concept must adapt to different business models, cultures and work methods.

The AMC is much more than a control room. Its design is based on an airport's processes, providing each department's managers and roles clarity.

Improved visibility and traceability. Key indicators and new coordination processes are defined, based on collaboration.

The Delhi center was designed with enough flexibility for it to support multiple work configurations: at peak times, during reduced operations or in emergencies. Furthermore, its scalable design guarantees future growth.

Information systems are aligned with AMC requirements, making sure the systems adapted to the new way of working and preventing the former's conditioning of the latter.

Technological integration of systems guaranteed that any application could generate an alarm or image, in real time, to the correct console or corresponding section of the video wall.

## Benefits

### Improved process and systems management

- Coordination of actors. Improved horizontal and vertical communications.
- Providing information for better decision-making.
- Offering operational improvements to increase performance.
- Improved hub operations.
- Optimized resource management.
- Improved passenger experience.
- Impact on cost containment.
- Capacity for crisis management using key information and involving the affected actors.
- Prepared for the future: adapted to the SESAR APOC concept.

#### Processes

- Processes in real time and new coordination processes.
- Optimization of capacity.
- Efficiency. Faster response time.
- Higher income, profits and improved return on investment (ROI).

#### People

- Breaking down barriers between areas and fostering collaboration.
- From blaming to sharing goals.
- Greater quality = higher satisfaction = increased productivity.

#### Systems

- From fragmented systems to a global vision.
- New capacities for real-time sharing and management.
- New dashboards and indicators.

#### Infrastructures

- From dispersed control centers to a centralized infrastructure. Versatile infrastructures adapted to different operating modes.
- Physical spaces that reinforce a new culture of collaboration.

## Indra in airports

According to estimates from the International Air Transport Association (IATA), passenger numbers are set to surge by 31% between now and 2017. To cater to these passenger numbers, airports need more efficient management systems.

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 solutions are designed to cater to the needs of each and every airport, regardless of size, organizational structure or function.



**indra**

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.