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 greenfields, expansion, and existing airport projects, as well as multiple airport networks.

Indra’s Airport Services include the conception, deployment, testing, commissioning and support of complete Airport Management Centres (AMC).

The Airport Management Centre is the core of the airport, providing real-time airport operations management from a unique location.

AMC functions consist of:
- Airport process Management
- Resource Coordination and Optimisation
- Supervision of all airport systems

Indra’s AMC solution supports the Airport management enhancing the quality and efficiency of all airport services delivered.

**Features and benefits**

- Real-time coordination and optimisation of workflows in daily operations allowing an overview of all the airport processes: operational, maintenance / infrastructure management, security
- Resource management optimisation (staff, infrastructure, software, material) and optimisation of synergies among different airport areas
- Real-time monitoring and supervision of all airport IT systems

- Effective data management and information sharing, ensuring a consistent level of information around the airport
- Coordinated prevention and management of emergencies and contingency situations by the different airport business areas
- Improving communication, responsibility, motivation, team building and encouraging cross qualification

- Enhanced communication enhancement between different airport areas, enabling fast and efficient decision making between the airport and other stakeholders
- Ensures feedback from the execution phase to the planning phases
- Continuous improvement of client-oriented quality policies (airlines & passengers)
- AMC is the kernel for the implementation of future SESAR concepts: CDM and APOC
Functional characteristics

Indra AMC design is based on the following general principles:

Functional operating & Design principles
Significant incidents affecting airport performance:
- Early detection
- Decision making
- Action

Towards integrated management, facilitating interaction and coordination between all stakeholders

Monitoring continuously overall airport performance based on Key Performance Indicators

Creating a global vision, where all of the factors affecting real-time processes are considered

Focused on:
- Key critical points of common airport operation (apron, check-in counters, BHS)
- Control of all managed resources and services affecting airport operation

Visualisation systems & videowalls
Visualisation systems present all the necessary information and data to AMC operators. This data is presented through monitors at each operator’s position, as well as common overview displays (videowalls).

Workspace & ergonomics
The AMC design takes into account ergonomics and operating aspects, including:
- Viewable information
- Operator’s workspace & position
- IT management systems

Systems
AMC integrates within a centralised site management of several IT systems:
- Operational (AODB & RMS, FIDS, CUTE, BHS)
- Maintenance and infrastructure management (BMS, Fire stations)
- Security (ISS, CCTV, ACS) and others

Associated services

- AMC Design Consultancy for:
  - Organisational model
  - Layouts
  - IT System
- Systems integration
- Deployment
- Testing and Commissioning
- Training and knowledge transfer
- On-site support and maintenance
- Outsourcing services

AMC organizational structure

4 responsibility levels: Executive, Coordinator, Supervisor & Operator

References

The Control Centre solution has been deployed by Indra for customers worldwide. Main references are:

- 4 AMC: Barcelona (AMC & TIC), Madrid AMC, Aena NMC24h and 2 Operational Control Centres for Alicante and Lanzarote
- More than 30 ATC centres: Spain, Eastern Europe, Africa, China, India, Middle East, Latam, etc.
- More than 20 non-aeronautical Control Centres: Defence and Police (8), Nuclear plants (3), Public Administrations (2), Railway (2) & Traffic and Tolling (5)

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

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