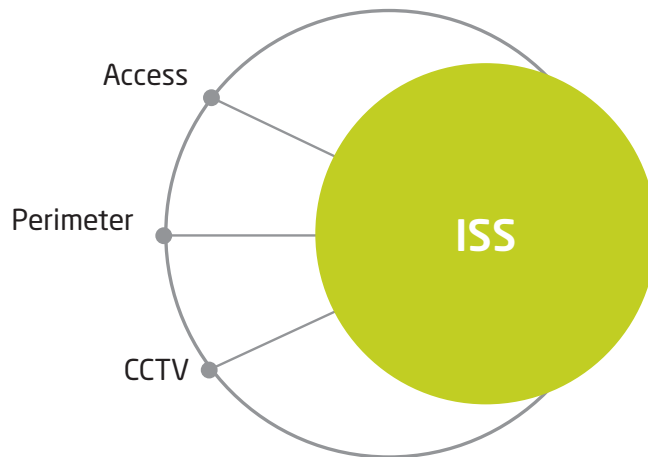


INTEGRATED SECURITY SYSTEM



Indra Airports

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.

Indra's Terminal systems include Integrated Security System (ISS) comprising all security related systems.

ISS general description

The purpose of the ISS system is to identify potential risk situations in order to avoid intrusions. In case of unauthorized access, the system analyzes causes, mistakes and intruder identification. ISS provides security and operations surveillance coverage through video recording cameras and intelligent surveillance systems. The integration and coordination of the security systems includes: Closed Circuit Television (CCTV) surveillance, Access Control (ACS) and Perimeter Security (PS). ISS is a modular system, allowing the airport to acquire strictly the required modules facilitating the systems architecture simplification and reducing investment.

Monitoring and Control Video System (CCTV)

Provides Image capture in diverse environments and presentation in the established clients. Including CCTV cameras, recorders, video monitors, etc.

Access Control System (ACS)

Provides access control for the staff and vehicles to the airport restricted areas. Includes different types of magnetic cards, readers, sensors, etc. A differentiating factor of Indra Security systems is their independence from particular models or suppliers of HW, whilst being compatible with any and in compliance with market standards.

Perimeter security

Control of critical security area between Air-side and Land-side.

Features and Benefits

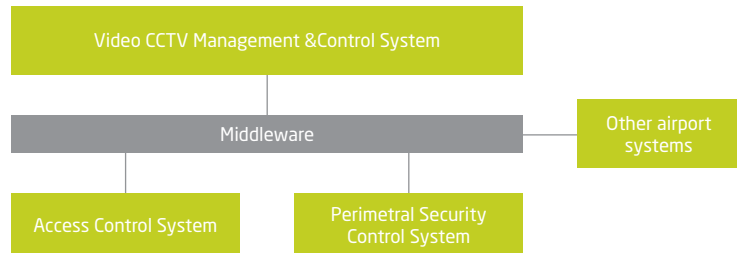
- Adaptability to any COTS HW through an Indra proprietary abstraction layer able to interface and deal with the complexity of the different vendor devices (i.e. eases integration of legacy devices with new interfaces for pure IP HW or HW add-ons for old analogical HW).
- Centralized events collection for the System but distributed CCTV & ACS management and control (i.e. a failure in one single element does not affect the rest of the system).

- Complete information system: events on one system can generate actions on the other (i.e. a door forced event in ACS may start a recording of a specific camera in the CCTV).
- Users profile capabilities through the definition of grants, blocks and privileges (i.e. each operator has its own profile, defining devices to be controlled and operations to be done).

ISS Deployment Advantages

- A single supply integrating the most common devices for the airport control security environment, guarantee compatibility and cooperation, taking advantage of the latest technical tendencies in individual components, as well as integration.
- Central environment management combined with zone segmentation, to local control and monitoring. Each zone has sufficient autonomy to ensure its function even when totally isolated from the rest of the installation.

Integral Security System



Functional characteristics

ISS main characteristics

- Identity Manager System. It allows a unique user identification in a desktop for the whole system (single sign on).
- Integrated Monitoring. It allows the grouping of alarms and events by geographical areas.
- Maps Management & Presentation. Graphical presentation of the airport elements and its updated real time status.
- Events & Actions Engine. Allowing configuration of events and actions over the system elements.

ACS & Perimeter

- Access control for staff and vehicles to restricted airport areas. Includes different types of elements including magnetic cards, magnetic readers, sensors, ...
- This system has full adaptability to HW provided by any supplier (cards, readers, sensors, cameras, etc.).

- Perimeter Control System encompasses perimeter control and the surveillance of airport areas. Includes several sensors which can advise the operator of events occurring in the airport.

CCTV

- Allows Image capture in diverse environments and presentation in the established clients. Including CCTV cameras, recorders, video monitors, etc.
 - Uses an IP network. Encoding capabilities are real-time and based in DCT or DWT algorithms
 - Simplified video signal distribution to potential clients (through Wi-Fi, Internet, ...)
 - Video display capability in different devices (PC, PDA, TV,..) without special software installation
 - Optimized use of communications infrastructure. Several clients for one camera, only one flow
 - Simplified record and play features implementation and deploy

- Allows Videowall integration enabling the operator to send any videowall-supported cameras to those devices.
- Intelligent image processing is available with the CCTV system. Thus images recorded can be used to trigger different activities (i.e. starting a recording when a motion detection algorithm detects movement).

ISS modules

- **Core:** The core module includes all the CCTV-related features listed on this brochure.
- **ACS:** Add Access Control System features to the core module, to obtain a fully integrated CCTV and ACS system.
- **Perimetral:** Increases the system abilities provided with perimetral information.
- **Reports:** Generate professional reports based on data maintained by the system, on formats including PDF, RTF or DOC.
- **External Systems Integration:** Connect the CCTV system to any other system inside your infrastructure.

Servicios Asociados

- Design and consulting services
- Product adaptation, product can be customized and adapted to fulfill 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.

Referencias

Security solutions have been deployed by Indra in many sectors during the last decade. These systems range from ACS systems to complex integrated systems combining all security areas. This experience is summarised in the following points:

- CCTV at new Terminal 1 in Barcelona airport for security, operations and maintenance. This project includes Intelligent Video Surveillance System for security and queue control purposes at Barcelona airport.
- ISS (CCTV + ACS + Perimeter Security) at

Castellón, Alguaire (Lleida), Lubango and Luanda Airports.
In other sectors, some examples of Indra ISS deployments are:

- Installation and maintenance of the Comprehensive Security Systems in European Commission Offices and Embassies.
- Installation of the video surveillance and recording Security System in the Barcelona underground stations.
- Installation of the video recording and surveillance Security System of the Damietta chemical plant in Egypt of Union Fenosa.