I-AIRPORT

LEONARDO

THE INTEROPERABLE AND DIGITAL AIRPORT

Upon arrival, through customs, at take-off, en-route, and upon landing we are there to make your trip safe and comfortable.

In the global business environment, airports need to maximize overall safety and security , while improving passenger experience and optimising operational efficiency and profitability.

Technological innovation and domain knowledge make us an international leader providing airport stakeholders with integrated, intelligence-led solutions that improve efficiency and sustainability and enhance the passenger experience.

The goal for a modern airport, in fact, is to transform the airport experience into a world class customer experience, in order to deliver the best in class service to all customers whilst complying with international standards of safety and security and delivering a profitable business that provides stakeholder value.

Technology can play a vital role to achieve this objective, either to optimise the integrated management of operating processes, linking every area of airport operation, and to support the overall growing and evolving business, keeping safe the enivornment.

Airport is a Critical National Infrastructure to be protected and be safer and safer.

COMPLETE SOLUTIONS

With a 60-year heritage in both military and civil domains and a customer base spanning more than 150 countries, we cover most airport requirements.

The solutions result from the synergy between multiple competences in specific areas: Air Traffic Management (ATM), Baggage Handling Systems, Multi-technology Network Solutions, Cyber Security, Physical and Logical Security, Communications systems, ICT solutions, and leverage the long tradition in project management, design, engineering, development, installation and commissioning.

Thanks to its in-depth knowledge of the industrial processes and following the international standards, the company has the technological competence, the organization and the financial capability to provide global solutions for complex projects provided as turn-key solutions, aimed at supervising all critical infrastructures requiring sophisticated functions, high reliability, service continuity and certified security.
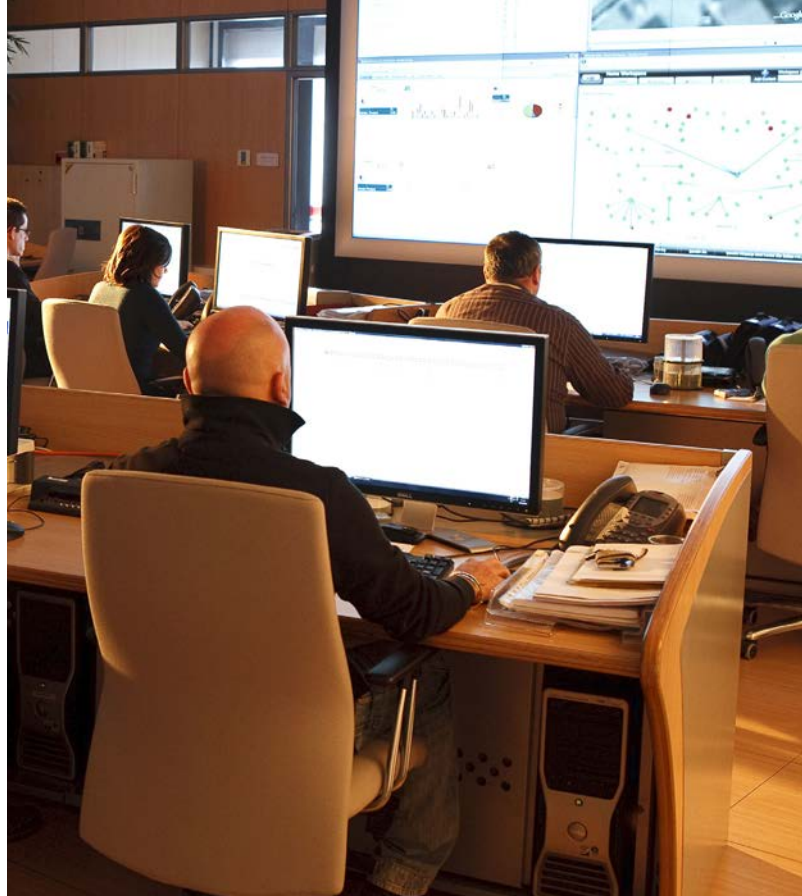
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BAGGAGE SECURITY AND SORTING

We provide a suite of products to foreseen integrated solutions from the management of both physical processes dedicated to Baggage Handling Solution, including check-in, routing, screening, sorting and claiming, and information flows, such as transport flow control, trace & tracking, flight schedule reporting, packing list production and reconciliation.

The innovative solution to save energy, costs, maintenance effort and baggage mishandling are the "sorters".

The Multisorting Baggage Handling System (MBHS®) is a "cross-belt" sorter, which is able to handle different size and surface objects. Some of the key benefits, adding value to its customers, include very high sorting throughput with ultimate precision, significant energy savings, very low maintenance, extremely high reliability, availability and configurability, which ensures lowest life cycle costs. The innovative technology ensures optimum and gentle handling for all types of baggage including that are fragile, have high friction or sticky surfaces, have prominent wheels or are irregular in shape, thereby enhancing passenger experience.

The Multisorting Tilt-Tray System (MTTS®) is a tilt- tray sorter whose main innovation lies in the patented tilting activation system, that applies the Direct Drive Motion Technology and is based on the

same transport system made up of a continuous train of cells moving around a closed loop.
The great controllability and high acceleration granted by linear motors reduces unloading time and improves unloading trajectory precision, making it possible to increase operating speed and reduce the space allocated for outlets. We also develop advanced software systems that can manage the entire baggage flow within the airport area and interface with the information systems used by airlines and other airport operators.

AIRPORT SECURITY PLATFORM

The Airport Security Platform is a platform to manage all the information coming from security and safety systems operating in an airport and give an integrated view of the situation in real-time by:
- Integrating data and information for understanding the real time situation
- Including models and workflows related to the management of safety & security
- Interoperating potentially with other control rooms needing information related to the monitored areas

The combination of these features allows the Airport Security Platform to be a management center for safety & security operations, offering a view of the situation using the information from services related to the field sensors and external systems connected through a potentially heterogeneous network.

The Airport Security Platform is the ideal tool to support the Control Room for the safety and security management and the coordination of emergency situations.

PERSEUS CSP infrastructure

Broadband (WiMAX, WiFi, LTE)
TETRA
Simulcast-DMR
Military radios

CONTROL LAYER

BASIC COMMUNICATIONS SERVICES
VOICE CALLS
SHORT MESSAGING
DATA OBJECT (e.g. AVL)
VIDEO STREAM

APPLICATIONS LAYER
CONTROL ROOM APP
INDUSTRY APP
OTHER PMR APP
TETRA-LIKE DISPATCHER APP

GROUND TO GROUND COMMUNICATIONS

Different stakeholders dealing with Airport Ground Operations need professional communications to handle turnkey multi-technology network solutions integrating a range of wired and wireless communication technologies – including TETRA, DMR and next generation wireless broadband radios – and guarantee transparent user connectivity in any situation, for safe and efficient operations.

Professional communication for the use of the voice, video exchanging via wide broadband are the future integrated solution managed by a unique handheld terminal for the operator use. Secure TETRA app for LTE users is available to make communications possible between LTE users (without a TETRA device) and TETRA users, providing same TETRA services in safe way.

Innovative and proprietary solutions support maintenance operators and security officers during their activities inside and outside the Airport, while being connected with the Security Platform solution enhance the safety and security.

CYBER SECURITY

The company offers expertise, tools, infrastructure and managed service solutions through a team of highly qualified certified specialists. Our approach includes a wide range of aviation specific cyber security services and solutions which will provide an ANSP or airport organisation with:
▪ An assured security strategy
▪ Assessment of the ICT estate
▪ Risk analysis and management
▪ Design
▪ Protective monitoring
▪ Training and assistance

We support the customer for safety evaluations, impact analysis and robust solutions to securize platforms and CNS networks from Identity and Authorization management to Open Source Intelligence to prevent inside and outside threats.

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INFORMATION AND COMMUNICATION TECHNOLOGY

In the ICT domain, the company has a proven capability to build, measure and apply to very large programmes "in an accomplished manner" from services to solutions.

We are continually addressing the evolution of network infrastructures and data centre architectures (cloud computing) to deliver new and improved ICT services to airport operators. At the same time, the company provides IT solutions, digital infrastructures and ICT services to improve business and optimise the processes of a modern airport.

MOBILITY

Smart mobility solutions are provided for improving different aspects of transportation systems inside the airport, and for the logistics management of multi and inter-modal transport connections. Automated Vehicle Monitoring (AVM) system provides transportation operators with realtime information on each vehicle in a fleet, and seeks to optimise the resources used.

The Mobility Management System (MMS) provides users - whether already travelling or planning to - with information and advice on the type of transport (private/public) to choose and route options for travel to the airport.

AIR TRAFFIC MANAGEMENT

With an installed base in over 150 countries, a wide range of systems and scalable solutions are provided for Air Traffic Management, including:
- En-route and approach
- Tower Air Traffic Control Centers
- Simulation and Training Centers
- Fallback and Disaster Recovery Systems
- Primary and Mode-S Secondary Radar
- Digital Datalinks
- Weather Radar
- ADS-B Ground Stations
- Wide Area Multilateration Systems
- Multilateration
- Surface Movement Radar
- Voice Communications Systems
- Navigation aids

A fully SESAR compliant solution moves us to lead the market with new products such as a new generation of Air Traffic Control System, important improvements in surveillance radars, new Air/Ground VHF Digital Link Mode 2 Networks and Ground/Ground ATN Networks, up to new technology as AEROMACS to provide Wide Band, Wireless, Safe and Secure connectivity in Airports surface (civil and/or military) towards fixed, vehicle and airborne users for ATC, AOC and Mission Planning Data.

SYSTEM INTEGRATOR FOR A TURN-KEY SOLUTION

System integration capability is driven by the demand for effective processes along with the growing airports demand for global security, encompassing infrastructure, physical and cyber elements.
Among the services offered by the company are Business Concept, Design and Engineering, Manufacture & Delivery, Support & Maintenance and all services oriented to designing and building operationally efficient environments.