

CYBER & SECURITY SOLUTIONS

AIRPORT SOLUTIONS



Airport concept is more and more transforming into a new multiservice and multifunctional environment that moves passengers, baggage and goods and offers both traditional services as travel and transport, and new services like business centers, shopping, events, and cultural life.

In this global business environment, airports need to maximize overall safety and security, while increasing passenger facilitation and improving operational efficiency and profitability. The goal of a modern airports is to transform the airport experience into a world-class customer involvement, in order to deliver the best in class service to all customers whilst complying with international standards of safety, security and sustainability and delivering a profitable business that provides stakeholders value.

COMPLETE SOLUTIONS

Leonardo develops solutions to optimise the integrated management of operating processes, linking every area of airport operation, and to support the overall growing and evolving business, keeping the environment safe, secure and sustainable:

- Integrated security management to monitor and control all aspects of the perceived safety and security.
- Critical Communications to provide a common, reliable, secure and effective radio network for all the needs of an airport.
- Supervision Control and Automation of any asset and system of the infrastructure to monitor, command all systems and control they are working properly.
- Cyber security solutions to guarantee the monitoring and predictive, proactive protection of strategic data and assets against cyber threats.
- Global monitoring to have a complete and real-time overview of the status of the infrastructure from any perspective: security, operations, business”

BENEFITS

Leonardo solution can provide relevant advantages in airport security and operations:

- Strong expertise in security control centers and safety procedures for airports and critical infrastructures
- Advanced system integration capabilities with flexible platforms.
- Scalable security solutions with integrated operator alerting.
- Integrated operational communications using mission-specific technologies.
- In-house R&D in communications, sensors, and command-and-control systems.
- Proven experience in industrial automation and process control.

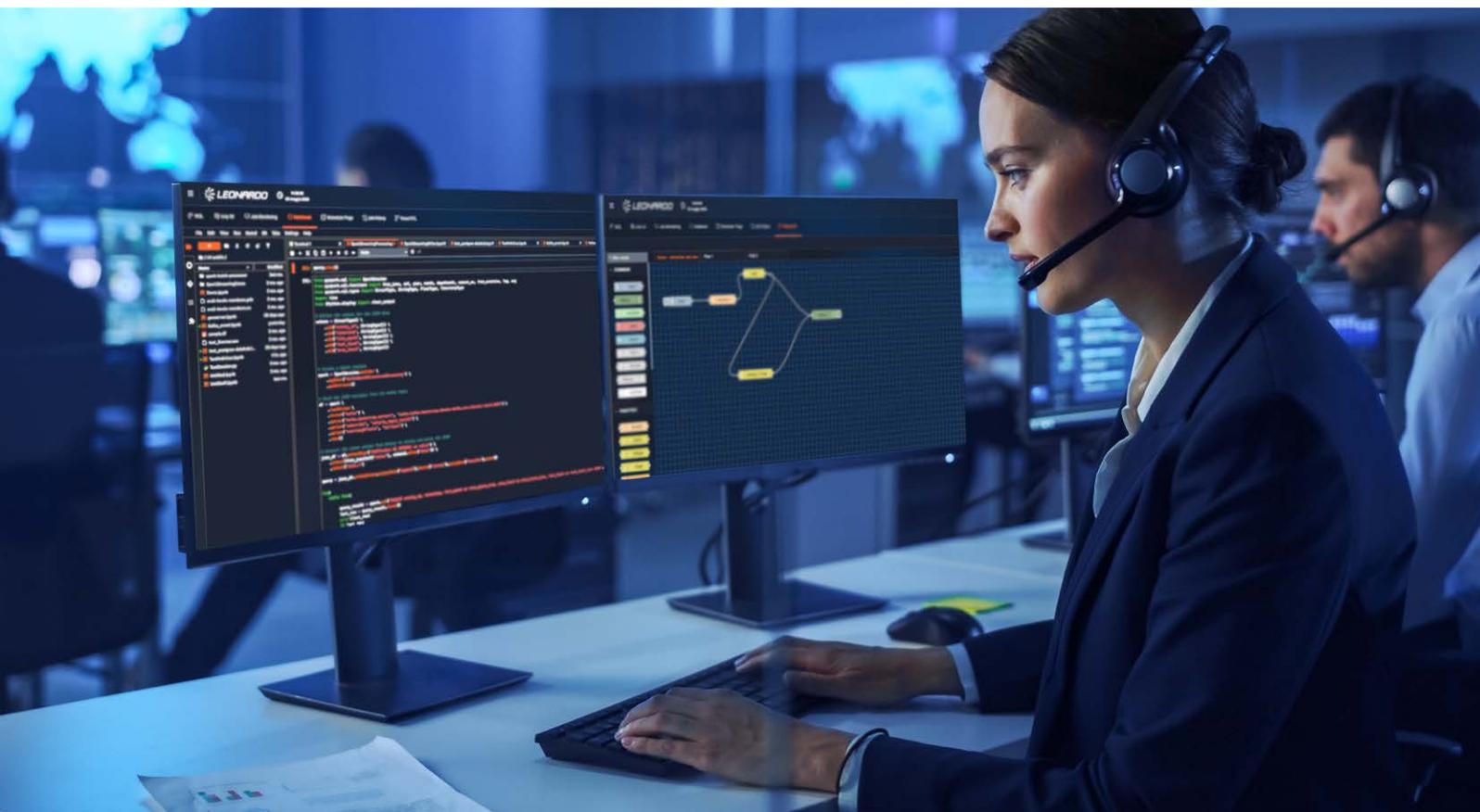


SECURE DIGITAL: GLOBAL MONITORING & SECURITY

Global monitoring and data valorization are essential for airports to ensure safety, security, and operational continuity. Continuous, real-time monitoring enables early detection of security threats, system anomalies, and operational disruptions across complex airport infrastructures. Data valorization transforms information from multiple sources into actionable insights. This supports faster decision-making, improved passenger flow, and optimized resource management. Ultimately, it enhances resilience, efficiency, and the overall passenger experience.

Capitalizing on the power of artificial intelligence and synergic integration of heterogeneous systems, Leonardo's global monitoring solution provide superior situational awareness, complete coordination and control of operations in the management of day by day or emergency conditions.

<p>genesiX</p>	<p>genesiX is the new Leonardo web platform which in the different operational domains exploits available data and systems to generate information and provide knowledge and decision-making superiority”..</p> <ul style="list-style-type: none"> → Collection of information from structured (data bases, archives) and not structured (video, sensors, media) data sources. → Data processing, correlation and analysis with the support of AI, dashboard and context specific indicators. → Geolocation of all information on multilayer map (digital twin), events and resources management (safety, operation, maintenance), decision support through procedural workflows → Coordination of field operations with mobile app and comms (MC_linX).
<p>Forge2Know</p>	<p>Forge2Know is a Big Data analytics platform designed to ingest, store and analyze both structured and unstructured data, turning them into actionable insights. It provides advanced AI/ML, governance and real-time processing features, scalable to large amount of data to support data-driven decision-making.</p>



Leonardo security platforms are designed to provide a common operational picture for Command & Control, security management, situation awareness and resilience, creating a handling center for airport safety and security.

Leonardo can provide an integrated control centre solution where security authorities can benefit from situational awareness to easily supervise the infrastructure, quickly assess, and proactively respond to an incident, with a high level of cooperation between all the entities involved and the embedded support of AI to improve detection and reaction capabilities exploiting all the on field sensors and cameras

SC2	<p>A very flexible, scalable and reliable PSIM (Physical Security Information Management) solution to manage security with a high level of configurability and the possibility to create a federate architecture connecting different sites. The solution allows complete situational awareness with all info, resources and alarms, actionable on a geo-localized map. Different systems of various brands can be included and operations can be also enhanced by AI Video analytics.</p> <p>Dozens of brands for many different security systems are integrated. The solution also provides the possibility to command and control drones and robots, body worn camera and voice communication to coordinate on field resources.</p> <p>We design, integrate, install and deliver a complete range of protection systems (access control, perimeter protection, cctv cameras, intrusion detection, UAV and robots, smoke & fire detection, public address and evacuation, ...) to guarantee quicker and more effective threat prevention, detection and response. Subsystem integration at command and control level increases the situational awareness and the effectiveness of the solution provided</p>
Ganimede	<p>Ganimede is Leonardo advanced framework for managing AI-based algorithms for analysis of audio/video sources, live or recorded..</p> <p>A single platform with more than 20 algorithms easily configurable and applicable on already existing multi-brand video sources. Possibility to apply multiple algorithms on the same streaming.</p> <p>Implementation and training of algorithms in Leonardo labs specialized in AI, scalability on projects up to 10,000 cameras with 20 different algorithms</p> <p>Natively integrated in Leonardo platforms, Ganimede provides interfaces for integration in third party systems.</p>



Airports are complex ecosystems where multiple systems work together to support operations. Depending on their size, location, and passenger volume, airports can exhibit a high degree of complexity and energy consumption comparable to that of a small or medium-sized city.

Monitoring systems and energy consumption is therefore essential to achieve emissions reduction targets while improving operational effectiveness, safety, and efficiency. Leonardo's platforms and solutions can support these critical tasks in airport management.

VBrain

A software suite to monitor, manage and control the automation and security systems of buildings, critical infrastructures and heterogeneous and spatially distributed networks.

Featuring the characteristics of a powerful SCADA platform (multi source data acquisition with different industrial communications protocols, highly interactive synoptic, command execution, web client application) VBrain provides real-time monitoring and control of operations, networks and facilities, ensuring cost effectiveness and timesaving for maintenance and management processes.

Furthermore, VBrain provides complete situational awareness in order to reduce and prevent system failures, as well as ensure business continuity.



CRITICAL COMMUNICATIONS

Airports manage highly complex operations involving multidisciplinary teams, including aircraft on the ground, gate agents, security personnel, operations staff, vehicles, customs officers, and more. Leonardo develops integrated and interoperable, state-of-the-art telecommunication solutions that ensure reliability, security, and seamless coordination across all operations and stakeholders in this complex environment.

Leonardo acts both as a technology provider (TETRA, DMR, MCX broadband applications, and hybrid networks) and as a system integrator, delivering turnkey mission-critical communication infrastructures.

<p>MCX (broadband)</p>	<p>MC_linX is the next-generation mission-critical broadband communications platform based on the 3GPP MCX standard, designed to support secure, real-time voice, data and video services for safety and security and critical infrastructure operators.</p> <p>The solution includes a mobile client app, a web-based dispatcher and management tools for seamless push-to-talk, multimedia messaging, location services and situational awareness over LTE/4G/5G networks as well as WiFi.</p>
<p>TETRA / DMR (narrowband)</p>	<p>Adaptanet is a complete modular, scalable suite of TETRA products, satisfying requirements of high performance and secure encrypted communications of a transport network. The solution provides all the essential core equipment and services for voice and data calls, as well as a comprehensive range of supplementary and enhanced services (Core network, Base Stations, terminals and cab radio, Network Management System, dispatcher, and more).</p> <p>ECOS DMR solutions are characterized by a high degree of scalability and flexibility that allows selecting the most suitable configuration for Customer's requirements. The same radio base station can operate in DMR Tier II, with simulcast option and dynamic analogue FM, or DMR Tier III in simulcast or cellular configuration.</p>
<p>Hybrid networks</p>	<p>Leonardo Hybrid Network Platform is a solution designed for long lasting integrated narrowband-broadband infrastructure supporting professional network evolution. The core network provides coordination and control functions for the integrated network and core network services for TETRA, DMR and MCX components.</p>



CYBER RESILIENCE

Airports process data from millions of passengers and cargo shipments every year, handling customers’ personally identifiable information, payment details, as well as employee data and biometrics. As airports are part of a country’s critical infrastructure, cyber breaches can have significant and far-reaching consequences beyond financial loss and reputational damage.

Leonardo supports airports in strengthening their cybersecurity posture and in developing robust, risk-based cybersecurity strategies through a comprehensive portfolio of solutions and services.

Furthermore, Leonardo positions itself as a point of reference for Zero Trust solutions, combining the technological expertise of SSH, Arbit, and Axiomtics with Leonardo’s advanced technologies and solutions, assets and services, and specific knowledge. In a rapidly evolving environment where threats are becoming more stringent and regulations are becoming more stringent, organizations increasingly require advanced, future-proof solutions.

<p>Cyber resilience & Consulting services</p>	<p>Leonardo’s Cyber Resilience & Consulting services help organizations protect critical systems and ensure business continuity against evolving cyber threats. Through a multidisciplinary, end-to-end approach, Leonardo supports clients in risk assessment, security strategy definition, and incident response. The goal is to strengthen digital resilience while ensuring reliability, regulatory compliance, and protection of strategic assets.</p>
<p>Global Cybersec Center and Advanced Managed security services</p>	<p>Leonardo’s Global Cyber Security Center and Advanced Managed Security Services provide continuous monitoring and protection of critical digital infrastructures worldwide. Operating 24/7, the centers leverage advanced technologies, threat intelligence, and expert analysts to detect, prevent, and respond to cyber threats in real time. Through proactive security operations, incident management, and advanced analytics, Leonardo ensures rapid response and threat mitigation.</p>
<p>Cyber security platforms</p>	<ul style="list-style-type: none"> → Leonardo’s GC Platform is a cyber defense platform that integrates services, technologies, and data into a single AI-multiagent ecosystem, ensuring end-to-end cyber management. It offers continuous observability, advanced automation, and predictive capabilities, ensuring resilience, risk reduction, and operational continuity (Cyber Mission Assurance). → LX Range provides a realistic, high-fidelity environment for cyber training, simulation, and testing of complex attack and defense scenarios. → C-THINK (Cyber Threat Intelligence) delivers actionable intelligence through continuous analysis of threats, actors, and vulnerabilities. It supports proactive risk mitigation and informed decision-making. → LENS EDR Innovative and flexible Endpoint Detection & Response platform, based on distributed agents and probes, allows the early identification of anomalies/intrusions on endpoints and the implementation of response and containment actions of cyber threats also based on fully customizable rules.



HIGHLIGHTS

Leonardo designs and deploys effective, secure, and reliable solutions tailored to the demanding requirements of the airport sector.

By combining in-house developed technologies with selected third-party products, Leonardo supports its customers in protection, security, communications, control, and automation across the entire solution lifecycle.

Strong technological innovation and deep domain expertise position Leonardo as a leader in delivering integrated, intelligence-led solutions that enhance operational efficiency and sustainability while improving the overall passenger experience.

For more information:
cyberandsecurity@leonardo.com

Leonardo Cyber & Security Solutions Division
Via R. Pieragostini, 80 - Genova 16151 - Italy

This publication is issued to provide outline information only and is supplied without liability for errors or omissions. No part of it may be reproduced or used unless authorised in writing.
We reserve the right to modify or revise all or part of this document without notice.

mm09146-0126
January 2026 © Leonardo S.p.A.

