









































































































FRENCH AIRPORT AND ATC TECHNOLOGY TRADE ASSOCIATION

www.proavia.com





- → AÉROPORT NICE CÔTE D'AZUR SA
- → AIA Life Designers
- → AIRBUS PROTECT
- → Airport Fluid Distribution Networks
- → ALE INTERNATIONAL
- → ALFYMA
- → ALPHA AIRPORT
- → AI PHA CIM
- → ALSTEF AUTOMATION SAS
- → APAVE
- → ARC INFORMATIQUE
- → ARTELIA HOLDING
- → AUGIER SAS
- → BODET TIME & SPORT
- → BOUYGUES BÂTIMENT INTERNATIONAL
- → CC-CONSULTING
- → CODRA

- → COLAS SA
- → CS France
- → DAIA
- → DASSAULT SYSTEMS
- → DEF
- → DEGREANE HORIZON
- → EGIS AVIA
- → FIFFAGE CONCESSIONS
- → EKIUM
- → ENIA architectes
- → ENVISA SAS
- → FRACS France AVIATION SERVICES
- → GROUPE ADP
- → GUINAULT
- → HUB PERFORMANCE
- → IDEMIA Identity & Security France
- → IER EASIER
- → INEO E&S

- → IN GROUPE
- → MASER ENGINEERING
- → ORNISEC
- → OSP HOLDING / ORBILITY
- → OTIS France SCS
- → OUTSIGHT
- → PIXYS SAS
- → RFSA
- SCHNEIDER-ELECTRIC INDUSTRIES SAS
- SETEC INTERNATIONAL
- → SMITHS DETECTION France S.A.S.
- → SYSTRA France
- → TG CONCEPT
- → THALES
- → VINCI Airports SAS
- → VISIOM
- → WaltR





REFERENCES

- → Tahiti Airport
- Corsica Airports
 (Ajaccio, Bastia, Calvi, Figari)
- French West Indies and Overseas territories
- → Cyprus Bot Project
- → Cameroon Airports
- → Cayenne
- → Dakar Airport
- → Sion Airport

Environment

Consultancy

Operation

Training

AÉROPORT NICE CÔTE D'AZUR SA

Provides consultancies, services and training, project management, safety and environment audits, route development, management contracts and concessions.









diagnostic facilities

network design

definition of markets

monitoring realization and commissioning installations

REFERENCES

- → International Airport Felipe ANGELES | MEXICO
- IVATO International airport | MADAGASCAR
- → ROISSY CHARLES DE GAULLE Paris international Airport | FRANCE
- → PARIS-ORLY Airport | FRANCE

AIRPORT FLUID DISTRIBUTION NETWORKS

Consultant in the field of hydrants (Jet-fuel networks) or other fluids (water, glycol ...)





risk management

safety

cybersecurity

sustainability

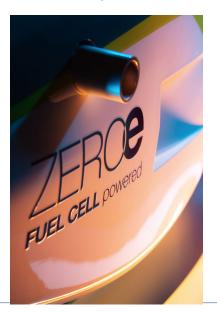
PROTECT

REFERENCES

- → DSNA
- → AIRBUS
- → NATS
- → NAV CANADA
- → EUROCONTROL
- > IAA
- → ENAC
- → ESSP
- → ENAV
- → LEONARDO
- → SOPRA STERIA
- → THALES

AIRBUS PROTECT

is an Airbus subsidiary bringing together expertise in safety, cybersecurity and sustainability-related services.











IoT # LAN networks # WiFi networks # cloud solutions

Alcatel-Lucent Enterprise (ALE)

provides the air transport sector with the technological building blocks to connect all transport subsystems.

ALE provides solutions for WiFi
networks, industrial LAN networks
for the IoT (Internet of Things), voice
and video communications subsystems,
as well as secure cloud solutions.

- → Lyon airport
- → GRU Airport São Paulo International Airport





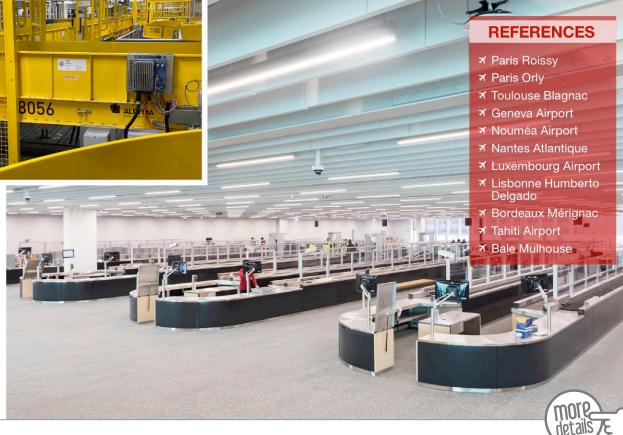






Alfyma can meet any airport's request, from passenger security checkpoint to baggage handling system and reclaim.

And our large flexibility allows us to suit any logistic process automation.





REFERENCES

- → French DGAC (control tower)
- → French Air Force (AGL)
- → Bulgaria (AGL)
- → Morocco (AGL)
- → Algeria (12 helistations)
- → Republic of Congo / RVA (Terminal Equipment, AGL)
- → Ethiopian Airlines (AGL, BHS)
- → Seychelles (SCAA Security systems)
- → Ivory Coast (Airport systems)
- → Senegal (AGL)



Airfield Lighting Solutions

Terminal Equipment

BHS

Helistations

Solar Systems

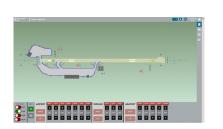
Security Systems

ALPHA AIRPORT: Landside and Airside solutions

From airport equipment assembly to airfield lighting system design and installation, ALPHA-AIRPORT is a leading integrator in the airport system industry.















REFERENCES

- → Paris Charles de Gaulle
- → Paris Orly
- Oslo International airport
- Mohammed V Int airport Casablanca)
- Orange military air-base
- Marseille Provence airport
- → Nice Côte d'Azur airport

Airfield Lighting

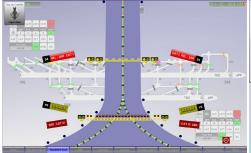
Baggage Handling # Fire System # Access Control

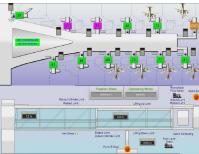
ALPHA-CIM

Leader in automation systems integration and industrial IT, ALPHA-CIM offers innovative and turnkey solutions in software, SCADA, Automation, network, cybersecurity for Airports. Our expertise covers audits, consultancy, design, development, MOC and training.

ALPHA-CIM solutions are based on standards, is open to interfaces, user friendly, expandable, multi-brands to propose the most efficient, cost effective and reliable results.







BAGGAGE HANDLING

AIRFIELD LIGHTING

PASSENGER BRIDGE



ALSTEF

ALSTEF GROUP

specializes in designing, building, and commissioning complete baggage handling systems, including innovative solutions with high-speed AGV and predictive maintenance, as well as air cargo systems.

REFERENCES

- → Mexico Felipe Ángeles Intel Airport Mexico
- → New Zealand Auckland Airport
- + France Charles de Gaulle Airport Paris
- > Canada Pierre Elliot Trudeau Montreal
- + France Nice Côte d'Azur Airport
- + Croatia Franjo Tudman Airport Zagreb
- + France Saint Exupery Airport Lyon
- → Mauritius Sir Seewoogasur Ramgoolam
- → Madagascar Antananarivo Ivato
- + Russia Sheremetyevo Airport Moscow

baggage handling systems

aircargohandling

maintenance and operation













monitoring software

CGV supervision

GTE surveillance

Safety

REFERENCES

- → Bacau (Romania) airport
- → Beyrouth (Lebanon) airport
- → Bharein airport
- → Bruxelles (Belgium) airport
- Dubai (United Arab Emirates) airport
- → Carasco (Uruguay) airport
- → Cotonou (Benin) airport
- → Luxembourg airport
- → Montevideo (Uruguay) airport
- → Moscou (Russia) airport
- → Niamey (Niger) airport
- → Oslo (Norway) airport
- → Tokyo Narita (Japan) airport
- → Yaoundé (Cameroon) airport

Pc Vue France

is a global player in monitoring software for the Power, industrial processes, utilities and infrastructure sectors







#RiskManagement #Certification

#Inspection

#Consulting

#Training

#Tests&Measures

Our 5 business activities are complementary and enable you to combine safety and performance at every stage of your projects.

Inspection

We check the reliability of your facilities, equipment, structures, infrastructures and buildings to keep them compliant during commissioning as well as operation.

Training

We are the leader in Risk Management and Safety training. Our unique model using trainer-inspectors enables 350,000 people each year to take part in training that culminates in certification, a real credential for their professional futures.

Tests & Measurements

We carry out testing of all types using simulators that reproduce actual stresses. We also take air, water and soil samples and measurements to monitor their quality and better manage your risks and impact on the environment.

Consulting and Technical Support

We help you improve the health and safety of people and property, preserve the environment and optimise the performance of your installations and equipment.

Certification & Labelling

We certifiy your systems dedicated to management, skills, products or services. We also define labels in line with a strict reference framework.



- → ADP
- → Marseille Airport
- → Lyon Airport
- → Alsteef
- **→** EMBROSS
- → Aviapartner
- → Menzies
- → Cameroon Airport
- → AFNA
- → Ivory Coast Airport







Design # Engineering

Consultancy

Project management



Top 1% of architecture & engineering companies

Artelia is a 6 000 staff multinational, multidisciplinary consultancy, engineering and project management group specializing in the construction, infrastructure and industry sectors.

« Our Missions: Design, Project Management, Construction Supervision, Independant Engineer, Climate Change Impact Assesment, Fuel Supply Systems, Automatic People Movers »

- → Roland Garros airport
- → Paris Airports ORY+ CDG
- → Marseille Provence Airport
- → Nice Airport
- → Copenhagen Airport : 50 years of PARTNERSHIP







Airfield Lighting

Visual Aids

Power Supply

Airside Services



OCEM Airfield / Augier Energy

We are partners to well over 1,500 airports on all continents with a clear focus to make the airfield safer, more efficient and more sustainable with its advanced airfield ground lighting and energy solutions.

- → Paris airports CDG ORY LBG
- → Honk Kong International HKIA
- Kuala Lumpur airport KLIA
- Guangzhou airport CAN
- → Fujairah airport FJR
- Yalencia airport VLC
- London City Airport
- → Roma airport FCO
- → Madrid airport MAD
- → Barcelona airport BCN











BODET

A long-established name in synchronisation and time display in the transport sector, including airports.

- + Adolfo Suárez Madrid-Barajas Airport, Spain
- + Lyon-Saint-Exupéry Airport, France
- → Milan Malpensa Airport, Italy
- → Lisbon Airport, Portugal
- > Budapest Ferenc Liszt International Airport, Hungary
- Warsaw Chopin Airport, Poland
- → Sofia Airport, Bulgaria
- Cairo International Airport, Egypt
- + Ankara Esenboga International Airport, Turkey
- + Algiers International Airport, Algeria
- > New Bangkok International Airport, Thailand
- → Soekarno-Hatta International Airport, Jakarta Indonesia







Financing Structuring

BOUYGUES CONSTRUCTION

AIRPORT CONCESSIONS

Airport infrastructure developer with a long-term understanding of the business and its stakeholders, to provide sustainable innovations and Carbon neutral value enhancement.

"An Airport is a real city in itself"

PPP REFERENCES

- → Antananarivo Airport (Madagascar)
- → Igaluit Airport (Canada)
- Larnaka Airport (Cyprus)
- Nosy be Airport (Madagascar)
- → Paphos Airport (Cyprus)
- → Zagreb Airport (Croatia)







Airport Design

Consultancy

Terminal Equipments

Airport Furniture

CC-CONSULTING provides engineering and assistance for Terminal equipments and supplies global solutions, from traveler departure to arrival and from aircraft take-off to landing.



- + Roissy CDG Airport France
- Cairo Airport Egypt
- > Bamako Airport Mali
- > Dushanbe Airport Tajikistan
- > Tripoli Airport Libya
- → Zagreb Airport Croatia
- → Belgrade Airport Serbia
- → Yaounde Airport Cameroun





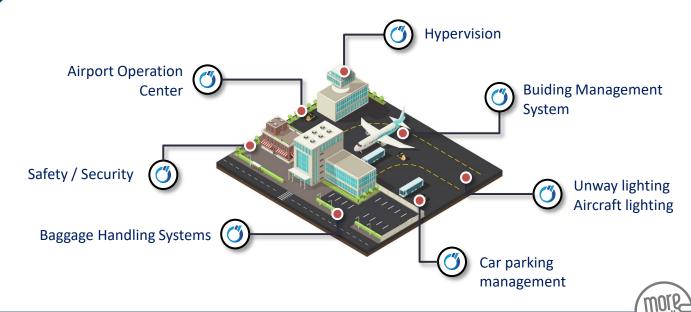


CODRA provides a real-time data platform to address the challenges of the smart-airports. Our technologies is the stepping stone to the next level of your innovation projects by being the backbone of your industrial information system.

REFERENCES

CODRA

- → Orly Airport
- → Roissy Airport
- → Lille Airport
- → Toulouse Airport
- → EuroAirport
- → Gatwick Airport
- → Dublin Airport
- → Birmingham Airport
- → Heathrow Airport
- Manchester Airport& DGAC







LAST REFERENCES

→ AGA Agadir

→ BKK Bangkok

+ CYS Cheyenne

→ LGW Gatwick

→ LUX Luxembourg

→ TNR Ivato

→ LAX Los Angeles

→ MSS Massena

→ NOS Nosy-Be

+ ORY Orly

→ CDG Roissy

→ OST Oostende

→ ORK Cork

+ YFB Igaluit

→ YXY Whitehorse

→ TTU Tétouan

COLAS | Aviation & Defense

Colas puts its know-how into action for your airport or air-base infrastructure projects. From refurbishing airfield pavement to more complex design and build, your projects can all benefit from the strength of the Colas Group's longstanding expertise, backed by a global network.









Building materials # JointCovers # Louvers # SunControls # WallProtection

HygienicWalls

Construction Specialties®



Construction Specialties France

With years of experience serving the aviation and transportation market, we understand the unique challenges facing architects, facility owners and their construction partners looking to build the next great destination.

REFERENCES

- > Roissy Charles de Gaulle
- → Orlv
- Larnaka International Airport
- Moscow-Domodedovo
- Bahrein International Airport
- → JFK International Airport
- → Washington DC
- CDIA Terminal A

View more projects: https://bit.ly/cs_aviation











virtual twin # 3D modeling # simulation # strategic intelligence

DASSAULT SYSTEMES

Airport Experience is an integrated solution powered by the 3DEXPERIENCE® platform, allowing you to create a virtual twin experience that provides insights into your airport operations, infrastructure and passenger experience.

- → Copenhagen Airports
- → Dubai Airports
- → Gatwick Airpport
- → Brussels Airport







DEF

Relying on its know-how as a builder and its network of expert companies, DEF offers a complete range of fire safety system solutions and services for Airport projects, around the world.

- → Algiers airport (Algeria)
- → CDG Airport (Paris)
- → Bagdad International Airport
- > Aimé Césaire International Airport (Fort de France)
- → Algiers Airport Domestic Terminal
- → Pochentong Airport (Phnom Penh)
- + La Tontouta International Airport (Nouméa)









AWOS

Wind profiling radars

High added value sensors

DEGREANE HORIZON

The Weather Sense: Turnkey projects in airport meteorology











- → Operations & Management Shareholder & partner of 20 airports
- Matarat Holding Consulting services and continual improvement support across 26 airports in Saudi Arabia





REFERENCES

- → Lille airport
- → Toulouse airport

EIFFAGE

Eiffage is one of Europe's leading construction and concessions companies. In 2019, Eiffage began operating the concessions for the airports in Lille and Toulouse. The airport sector allows us to strengthen our local roots in the regions where we are present, while following a low carbon strategy.











Engineering

Project management

Hydrant system

EKIUM

provides engineering and project management services for fuel farm and fuel supply systems firefighting, safety, security expertise, electrical and HVAC services.



- Bucarest Airport Hydrant system
- → Doha Airport Hydrant system
- Jeddah Airport Hydrant system
- → Dakar Senegal Design audit





#architecture

#design

#conception

#environnent

#airport

#sustainable







Founded in Paris in 2003, *ENIA architectes* is one of the top 50 architecture and design firms in France. The office is supported by a solid and enthusiastic staff of 80 collaborators from 17 different nationalities and delivered projects across a wide range of industries varying in both and scales and building types most notably in the transport sector.

Since 2005 *ENIA architec*tes actively develops an international activity with projects in Asia, Africa, South America and Europe. The firm has partnerships in Tunisia, Brazil, Japan, several west and central African countries and an indian subsidiary with 30 collaborators based in Delhi since 2015.

- → Lille-Lesquin, France
- + Pune, India
- → Ouagadougou, Burkina Faso
- → Guadeloupe, France
- → Carcassonne, France
- + La Réunion, France
- → Diermaya, Republic of Tchad

- → Gassim & Al Jouf, Saudi Arabia
- → Saint Kitts and Nevis
- + Bâle Mulhouse, Switzerland
- → Bordeaux, France
- → Tahiti, French Polynesia
- → Cayenne, French Guinea
- → Geneva, Switzerland







#carbon management

#air quality

#noise

#research

.

#ESG

#environment

#sustainable

#roadmaps

Supporting major airport groups and European Institutions for more than 20 years with unique expertise in understanding environmental impacts and sustainable practices, developing realistic pathways to deliver on ambitious goals for the future.



- → ADP
- → Vinci
- → Eiffage
- → Egis
- → Riyadh King Khalid Intl Airport
- → Narita Airport



#ATD Analytics | #Digital | #Strategy | #Green Aviation | #Elvira | #Diademe | #AirTransportData



REFERENCES

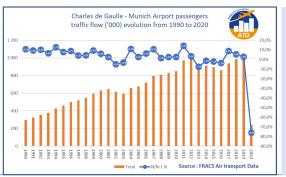
- → AIR TRANSPORT DATA:
 - « 30 years of history »
 - « 3 databases Airlines -Airports - Traffic flows »
 - Civil aviation regulations
- → ATD Analytics :
 - « e-platform »
 - « Air Traffic worldwide »HAITI:
 - Safety Oversight Authority
 - Safety Management System
 - ATCO manuals
- → SUDAN: Restructuration of Sudan's Airspace
- → AIRBUS CGX EGIS •INNOV'ATM • METSAFE • ADP • VINCI • SNCF
 - Jeune Afrique

FRANCE AVIATION CIVILE SERVICES (FRACS)

Expertise & Consultancy Office of the French Civil Aviation

- Tailor-made solutions
- Proven operational expertise
- Agile and flexible approach
- Worldwide consultancy activities











#Airport design

#Consulting & Engineering

#Architecture

GROUPE ADP

Groupe ADP is a world leader in airport design, construction and operation.

REFERENCES

- → Beijing-Daxing International Airport,
- → Chile-Arturo Merino Benitez international airport,
- → Chengdu-Tianfu International Airport









Groupe ADP - Working together with our customers (parisaeroport.fr)



REFERENCES

- → Airbus
- → Fraport
- → Munich Airport Ground Services
- → Aéroports de Paris
- → Nice Airport
- → DNATA (Emirates)
- → Swissport
- → United Airlines
- → UK MoD
- → ETIHAD Airlines
- → Saudi Ground Services
- + Abu Dhabi Airport
- → DHL Express



ASU # ACU

APU OFF

PCA





GUINAULT SA

Manufacturer of aircraft APU substitution solutions on ground: Aircraft Ground Power / Air Conditioning / Air Start Units and distribution (Cable retriever, Air Hose retriever) Electric - Diesel - Battery









Bagage handling simulation # Capacity planning # Optimization

HUB PERFORMANCE



- → Paris CDG 2E S3
- → Paris ORLY Junction
- → Lyon,
- → Bordeaux Billi
- → EuroAirport
- → London Heathrow Q6 T1, T2 & T
- → London Gatwick South terminal
- Athens International
- → Geneva
- → Liège





Biometrics

Border Control

OneID

Identity

API/PNR

IDEMIA



- The world leader in identity management and biometric technologies
- Supporting Governments and Airports operators to secure borders and facilitate the passenger journey

- +250 airports use our biometrics solutions wordlwide (incl. Paris, Bogota, Los Angeles, Abu Dhabi, Changi, Delhi, Sydney...)
- +30 Governments secure their borders with our solutions (incl. eu-LISA, France, USA, UAE, Singapore, Australia, Chile...)









Self-service # Check-in # Boarding # CUSS # Post-Covid Solutions

REFERENCES

- → Self-service check-in kiosks

 Air New Zealand, Aéroports de

 Paris, Aena, Hermes Airport Ltd,

 Royal Air Maroc...
- → Automated Border Control

 Abu Dhabi Airport, Montréal
 Airport,
 Switzerland Airports, Aéroports de
 Paris (PARAFE), Tampa Airport,
 Entebbe Intl. Airport ...
- → Self-boarding gate

 Los Angeles Intl. Airport, Sochi
 Airport, Split Airport, Quito
 Airport...
- → Gate reader

THE EXPERT OF SELF-SERVICE SOLUTIONS

Actively engaged in the evolution of technologies, EASIER provides a comprehensive range of high-end products and services to airports and airlines, ground transportation operators and public Institutions.









ATC and Runway Technical Installation

and airfield lighting.

Airport Technical Installation, Supervision

- REDDIG = VSAT Network ICAO
 / South America
 AERIA = Airfield lighting,
 ATC, Energy of Abidjan
 International Airport
- → ASCENA = VSC, ATIS, ATM, MET, AMHS, System Provision ATC Simulators







Identity # Biometrics # Contactless # OneID # EES

Innovation

IN GROUPE

Trusted provider for:

- Physical and digital travel documents : Passport, ID Card, Crew Member card
- Biometric authentication of passengers : Face, fingerprint, Iris, Voice
- Border control : eGate, OneID, EES/ETIAS

REFERENCES

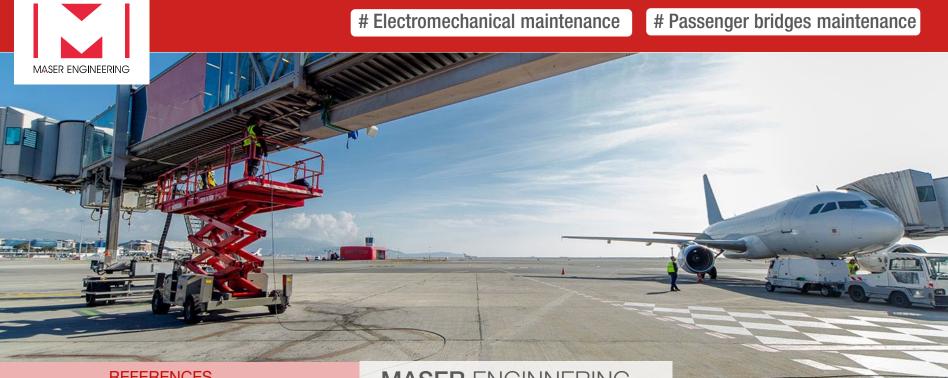
Main references for eGates & Immigration Border Control:

- → Nice Airport
- → Marseille Airport
- → Lyon Airport
- → Bordeaux Airport
- → Basel Mulhouse
- → CapTown (South Africa)
- → Myanmar
- → French/Uk sea ports (Calais, Coquelles, Folkstone)









REFERENCES

- → Paris CDG
- → Orly airport
- → Mauritius island airport
- → Nice Côte d'Azur airport
- → Nantes Atlantique airport
- → Toulouse Blagnac airport
- → Brest Bretagne airport
- → Strasbourg airport

MASER ENGINNERING

Full-service, preventive, corrective and improving maintenance of airport installations and also ensures all the work associated with equipment of all types: electronic, electromechanical, hydraulic, mechanical PBBs retrofit









- → Geneva
- → Toulouse Blagnac
- → Roland Garros La Réunion
- → 7 Saoudi regional airports
- + Atlanta
- → Phnom Penh
- → Cyprus Airports















AÉROPORT

RODEZ



AIR AUSTRA







Aéroport **Strasbourg**





"Ornisec offers cyber expertise combined with a perfect knowledge of the airport environment. "CISO AEROPORT MONTPELIER

Leader in cyber security for airline industry

ORNISEC is a leading company in the field of aviation cybersecurity. Its consultants, based in France and Morocco, work with the IT and technical departments of airports and airlines to strengthen their level of resilience in terms of cybersecurity and to comply with the legal and regulatory framework for the protection of aviation infrastructure.

Security audit

Architecture audit. configuration audit, code audit, penetration testing

Consulting

Security policies, expertise, risk management, security programs

External CISO

Chief Information Security Officer as a service, security management, Reporting

Training & Awareness

Phishing simulation, traingin, awareness adapted for airoports

Regulatory compliance

Compliance with: LPM, RGPD, NIS Directive, ISO27001, OACI, EASA

Incident response

Business Continuity, Crisis Management



Phone: +33 6 35 29 16 23



#Global Leader

#Elevators

#Frenchmanufacturer

#Maintenance

OTIS France

Manufacture of elevators, escalators, moving walkways Installation, maintenance, repair, modernization.

- → Abu-Dhabi Airport UAE
- → Kuwait Terminal 2
- → Istanbul Airport TURKEY
- → Charles de Gaulle France
- → Orly- France
- → Manchester Airport UK
- → Faro Airport Portugal
- → Detroit NW Terminal USA







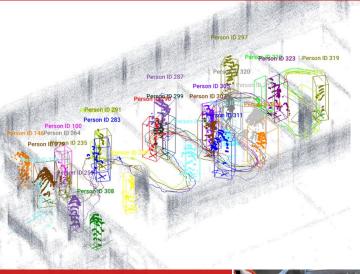


outsight

3D LIDAR

Passenger flow

Full Passenger Journey



OUTSIGHT

Advanced People Flow & Crowd Management solutions at airports

LiDAR-based Software Solutions

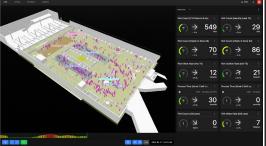
Throughout airport terminals and at all key touchpoints from curb to gate,

the software leverages the unique value of 3D LiDAR data to anonymously track passengers and monitor queues in real-time.

REFERENCES

Hundreds of customers in 5 continents use Outsight technology to monitor the flow of People and Vehicles









PIXYS

Experts in Airport Total Operations Management and Airport Operations Centers (APOC/AOCC) engineering.

Global Airport Systems Integration with AgiWare® TOPS and Total Operations Management with AgiWare® TOMS.

REFERENCES

- → Nice Airport
- → Geneva Airport
- → Paris-Orly Airport
- → Macau Airport
- → Toulouse Airport
- → Marseille Airport
- + Lyon Airport



APOC / AOCC Engineering





Global Airport Integration DashBoard



Total Operations Management





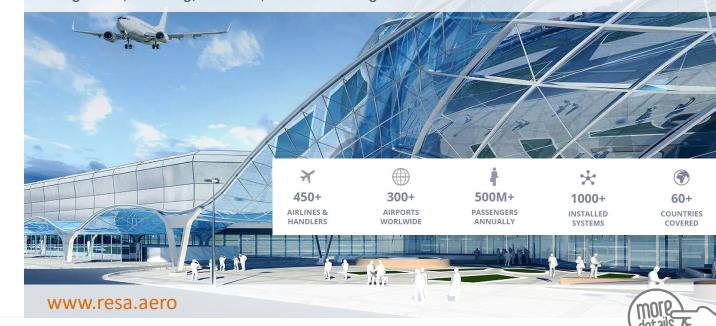
REFERENCES

- → Montreal
- → Paris
- → Vilnius
- → Roma
- → Luxembourg
- → Lagos
- → Santo Domingo
- → Mexico
- → Bangkok
- → Tunis
- + Karachi
- → Naples
- → Bamako
- + Kilimanjaro
- + Luanda
- → Mauritius
- → Riga
- → San Salvador

CUPPS # BRS # PassengerTracking # SelfBagDrop # eGates # Biometrics # BusinessIntelligence

RESA develops, markets, and maintains a wide range of integrated software solutions covering all airport IT needs in 60+ countries:

Passenger check-in and boarding, baggage tracking and reconciliation, passenger tracking, automatic gates, self-service kiosks and biometrics, self-bag drop, flight and resource management, invoicing, statistics, business intelligence and information broker

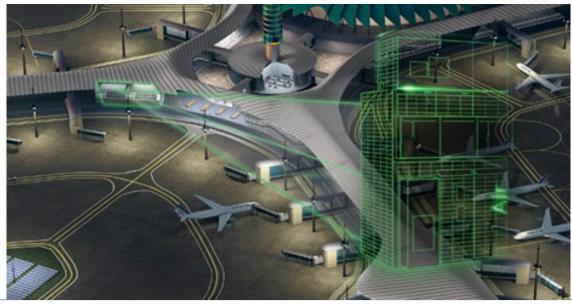




SCHNEIDER ELECTRIC

Digital transformation of energy & automation for reliable electrification, efficient operations and decarbonized airports of the future.

- + Changi Airport Singapore
- → Barcelone El Prat Airport
- → Geneva Airport
- → Calgary Airport Canada
- → JFK Terminal 1 microgrid -USA









Project management

Airport Design

Consulting and Engineering

- → Airport of Ouagadougou, Burkina Faso
- → Airport of Tahiti, French Polynesia
- Airport of Sihanoukville, Cambodge
- → 11 Airports in Brazil
- + Airport of Santiago del Chile, Chile
- → Airport of Tananarive, Madagascar
- + Airport of Conakry, Guinea
- → Airports of Marrakech, Agadir, et Tangier, Morocco
- + Airport of Dubrovnik, Croatia
- → Airport of Mayotte, France
- → Airport of Maldives







Detection

Airport security

People screening # Covid 19 response

SMITHS DETECTION

A global leader in threat detection and screening technologies for aviation, ports and borders, urban security and defence markets.

"90% of world's busiest airports rely on our solutions"







CTX 5800









- → 40+ years of experience in aviation security
- → 25+ years in CT technology
- + 4,000+ hold-baggage solutions
- → 2.000+ multi-view X-ray
- → 26,000 explosive trace detection





Terminal

Systems

SYSTRA

SYSTRA is a consulting and engineering company, specialist in mass transportation and mobility. Our dedicated aviation business line provides consulting & advisory support, design and project management services to airport owners, regulators, operators and investors.

Our aviation experts apply their global knowledge and airport operational experience, working with our local teams and tailoring solutions to every client.

We work worldwide with airport planners, architects and engineers to design passenger and cargo terminals, ground transport facilities, airport people mover, road networks, car parks, runways, taxiways, aprons, baggage systems and many other airport specialist facilities.

For any further enquiries please contact Mathieu CAPERAN - Commercial Director:

contactfrance@systra.com

+33 (0)6 19 38 88 91

- → ADP Aéroports de Paris
- Vinci Airports Belgrade Airport
- AMP Aéroport de Marseille-Provence
- Aéroport de Bordeaux-Merignac
- → DGAC / STAC





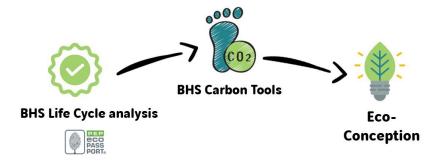






TG CONCEPT

From engineering to implementation, we support our customers from the conception to the installation of baggage handling and checkpoint systems by providing low carbon comprehensive solutions





- → Geneva Airport (Consultant)
- → Toulouse Airport(Consultant)
- → Nice Airport (Consultant)
- → Beirut Airport (Integrator)

- → Rennes Airport (Integrator)
- Lyon Airport (Integrator)
- → Basel-Mulhouse Airport (Checkpoint)
- → Nantes Airport (Consultant, CheckPoint)





For a smoother passenger journey Thales is your best partner today and tomorrow.

Discover our full range of solutions & services for Airport Operation Centres, self-service live passenger experience, safe and quick baggage screening and overall airport management.

REFERENCES

- → More than 300 million passengers managed by Thales airport solutions per year
- Cybersecured by design

World leader in airport operational efficiency & security providing smart airport solutions with major references:

- > John F. Kennedy International Airport, USA
- Changi Airport, Singapore
- Dubai International Airport C3, United Arab Emirates
- → Muscat International Airport and Salalah Airport, Oman
- Bahrain International Airport
- Doha International Airport, Qatar

- → Lyon Saint-Exupéry Airport, France
- Charles-de-Gaulle Int. Airport, France
- → King Shaka Int. Airport, Durban, South Africa
- Barajas International Airport, Madrid, Spain
- Pisa International Airport, Italy
- Madeira Funchal Airport, Portugal.







Airport Management # Operation and PPP # Airport Construction #PositiveMobility

VINCI Airports

World's leading private airport operator, manages the development and operation of more than 50 airports worldwide, with a core focus on performance and environment.

- → London Gatwick
- → Kansai & Osaka airports
- → Salvador Bahia
- → Lisbon
- → Lyon-Saint Exupéry





VISIOM – Technology and Service, Our DNA

Global technological security solutions meeting the needs of Air, Sea and Surface Transports, as well as Private and Public Facilities













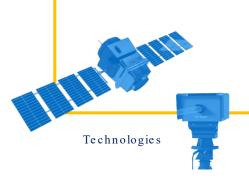
- → French regional airports installation and service of multiplexed Xray, EDSCB & **EDS Standard 3 integrated** solutions.
- ONDA Airports in Morocco Installation and service of ProVision 2 body scanner units and EDS Standard 3 equipments.













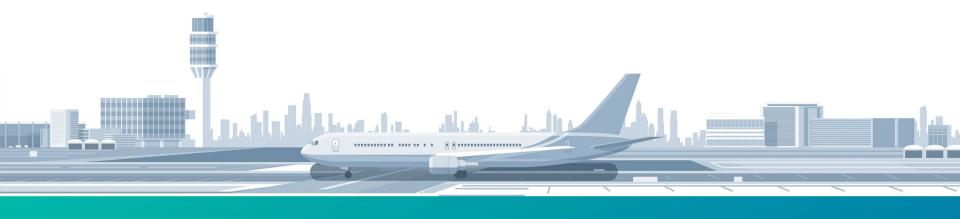


- → 10 years in managing and developing in the fields of atmospheric chemistry and climate
- → 8 PhDs & 16 experts

#Emissions tracking | #Air quality | #Imaging technologies | #Climate change adaptation







Efficient Airports@PROAVIA

Our latest «case studies»



BAGXone

Automated guided vehicles (AGV) designed for baggage handling

BagXone High Speed AGV



The Solution

BAGXONE is a high-speed AGV (Automated Guided Vehicle) designed to handle individual bags.

AGV can cover

short distances

- check-in to screening machines or
- from the screening machines to an Early Bag Store (EBS)
- reconciliation room
- make-up carousel

long distances

(i.e. link between two terminals) and are easily adaptable to suit scalability and redundancy requirements.



Benefits

- Easily interfaces to load unload from BHS
- Speeds of up to 7.5m/s for long distance connections
- Mixed zone speeds of 2m/s
- Capable of horizontal transfer or dynamic transfer from above
- Dynamic unload to chutes
- Opportunity charging to maintain fleet performance



Optimizing stand and gate capacity





The Solution

DELMIA Quintig interfaces with the central airport operational database (AODB),

It is able to automatically update plans with any new information from BAC's various partners.

For example, if updated flight plans for incoming aircraft cause a stand assignment conflict, DELMIA Quintig resolves it automatically.

Changes to stand the stand and gate plan are immediately communicated back to all relevant partners.

The solution supported planners in coping swiftly and effectively with gate changes by enabling them to:

- Forecast, analyze and prepare for possible change scenarios
- Create flexible plans two days in advance
- Receive immediate alerts of last-minute changes and quickly calculate best responses to minimize delays





Benefits

- Higher planning efficiency
- Better utilization of the available resources
- More transparency and visibility of aircraft locations during the parking period
- More accuracy in invoicing airline clients for using the stands





"The system is very user friendly and the planning tool is easily and quickly familiarized with.

In addition, it is good to know that the user interface is flexibly and easily modified, allowing each planner to work with his or her own preferences without making the planning any more complicated."

Tim HERMANS, Resource Optimization Officer at BAC

"Since we have been involved with DELMIA Quintig, the number of complaints regarding the calculation of parking fees has gone down by 90% This reduction has also freed up a full-time member of the finance team to concentrate on other issues.."

Roland COPPIN, Head of operational control at BAC





by



LAX INTERNATIONAL AIRPORTAutomatic Biometric Boarding Gate



The Solution

EASIER was awarded through a competitive RFP process an ongoing contract to deploy and maintain biometric e-gates connected to the TVS verification system of the CBP, the US border agency, to verify the identity of travelers on outgoing international flights via facial recognition in response to a congressional mandate.

EASIER deployed over 125 Skylane e-Gates throughout the Tom Bradley International Terminal (Terminal B). Passengers can board in 1-step, without having to show boarding pass or passport, with response given in less than 2 seconds. EASIER software connects to the airlines' Departure Control Systems via the common use platform. Over 50 airlines currently use the biometric technology, making LAX the largest deployment of biometric e-gates in the US.



Benefits

- Improved passenger experience, contactless by design
- Faster boarding time A380s board in 20 minutes
- Improved safety with positive passenger match
- Integrated and tested with most of the world's leading airlines
- Compliant with US Customs











by



and



MonaBiometric journey through a mobile-controlled digital Identity



The Solution

IDEMIA, biometric security solutions, and **RESA**, editor and integrator of I.T. airport systems, have joined forces to supply Lyon Saint-Exupéry airport operator **Vinci Airports** a contactless solution that runs exclusively on passenger biometric data from registration right through to aircraft boarding.

Facial recognition technology coupled with latest-generation automatic gates provides for a smooth, seamless and secure airport experience that factors in social distancing whenever required.



Benefits

- Rapid and safe passenger flow solutions for the airport
- Time saving, safe and contactless solution for the passenger
- Compliant with airport health and safety measures







We are thrilled to launch MONA today, a world first, at a time when airports need game-changing innovations so they can give passengers an even safer, more enjoyable and personalized experience. I warmly congratulate all staff involved including IDEMIA and RESA people, who managed to overcome tough restrictions these last few months and deliver a great trial in barely a year

Valérie Vesque-Jeancard, Vinci Airports France & Americas Area Director







by



Automatic Border Control solution Accessible for more international travellers



The Solution

IN Groupe, expert in identity, smart border and traveller experience solutions has worked closely with the French Interior Ministry to upgrade the current ABC gates for Nice, Marseille, Lyon, Bordeaux, Bale-Mulhouse airports with new biometric checks and improve the process for data collection & matching.

Facial recognition, anti-spoofing & unicity detection alert are merged in our solution to offer the smoothest journey to cross the border.



Benefits

- Combination of software and hardware upgrade on existing eGates with a limited impact daily passengers workflow
- From 40 to 93 nationalities eligible to ABC gates
- Secure & fast option to cross the French border in Entry and Exit of the territory





We are very proud of joints efforts done by IN Groupe, the French Air Police and our team to be ready for the kick off of the Rugby World Cup 2023. We improved flow management process and increased the eligibility for our international supporters by enabling them to use automatic border control eGates. A faster process to cross the horderand by welcome in Borderand.

"

Stéphane LOUNE, IT Projects Director at Bordeaux Airport

















Newcastle International Airport

by



Express Car Park "pay on exit" system



The Solution

Orbility is the provider of the car park management system for Newcastle International Airport, which includes equipment, the system itself, and a ticketless passenger drop-off solution.

Specific equipment configurations include a successful pay-on-exit solution. Here, customers can pick up and drop off their passengers directly outside the terminal before proceeding to the exit points to make payments using either coins or credit cards. Cameras record vehicle entries and exits through automatic number plate recognition (ANPR), ensuring high accuracy in reading license plates and facilitating a speedy exit from the car park.



Benefits

- Cost-effective and efficiently high levels of reliability and performance
- Simple to integrate into existing airport systems and infrastructures
- Reliable performance, accurate financial reconciliation capabilities, and the resilience of equipment exposed to, at times, severe wintery weather conditions



A NIAL spokesperson said of the project



"Our investment in Orbility's car parking solutions has afforded us the ability to offer a range of reliable parking options which our customers demand from us when visiting our airport. Air travel can at times be stressful and we are working hard to mitigate this by offering a positive customer experience which for many starts in our car parks".









Optimize HVAC systems for better control and management

Connected, digitized HVAC equipment



The Solution

The EcoStruxure™ solution building management system (BMS) is now at the heart of Bristol Airport's 24/7 operations.

Connected, digitized HVAC equipment.

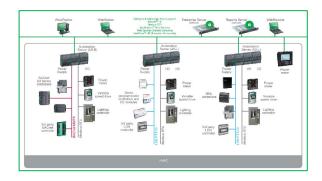
IoT technology, like sensors and metering, provides real-time updates on system performance, enables condition-based monitoring, and uses predictive analytics;

Many airports are a round-the-clock operation and there is no time to shut down HVAC systems for a major repair. They are also high-traffic areas and any operational failure could be unsafe for those in the vicinity.

The data analysis from sensor information takes into account the many factors of heating and cooling a large building with a constantly changing occupancy level.

Airports can use variable speed drives (VSD) to control the speed of pumps and fans, thus only using as much energy as needed.

System integration and remote access give facility personnel anytime/anywhere access to systems, while helping ensure that its all-important energy goals are the priority.





Benefits

- Software is available through web services
- Graphical interfaces and seamless third-party integration
- Perfect to control both from the main terminal building and via smart devices both on- and off-site
- Engineering efficiency improved
- Better control and management of their systems
- Minimized wasted energy, optimized system performance and improved airflow



JFK International Airport, NYC 2023

bv



JFK New Terminal - One Microgrid **Alpha**Struxure



The Challlenge

- Transform NTO into a resilient airport that can function off-grid during power disruptions
- Deliver on aggressive NY State and City sustainability laws
- Deliver energy reliability and resilience with guaranteed system-level uptime
- Produce lower carbon intensity, more efficient, locally generated energy
- Stabilize energy costs over the long-term



The Solution

Integrated 11.34 megawatt microgrid comprised of 7.66 MW rooftop solar, 3.68 MW fuel cells, 2 MW/4MWh battery energy storage, and a circular waste heat to chilled water system



- Consists of four power islands: each an integrated energy system with sources of generation, storage, and automation
- The AlphaStruxure Integrate digital platform manages the microgrid performance and operations in a cyber-secure environment
- The Energy as a Service business model provides JFK NTO with longterm, predictable operating costs and guaranteed performance without upfront capital expenditures





and on any airport terminal in the U.S. 13,000 solar panels cover all viable roof space



38% decrease

in immediate greenhouse gas emissions over source energy



100% airport operations

during power disruptions and the first fully resilient airport transit hub in the New York region



Compliance

with ambitious New York State, City, and Port Authority sustainability mandates



Long-term cost predictability of energy supply









Greenhouse Gas (GHG) footprint calculator

Design-build BHS system



The Solution

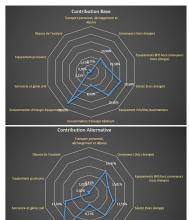
This GHG calculator was designed by TG Concept to assess the amount of GHG emissions emitted from a project, from cradle to grave.

- Each stage of the life-cycle of every equipment installed (Production, Distribution, Usage (maintenance and exploitation, including energy consumption), End of life management)
- For each equipment of the system
- Estimation of the impact of project management (travelling, movement on the job site, temporary equipment etc.)
- Based on verified data (Life cycle analysis of a conveyor, vetted by footprint experts)



BASE	Empreinte carbone	ALTERNATIVE	Empreinte carbone	Réduction	Comparatif empreinte
APPROFONDIE	(tonnes CO2)	APPROFONDIE	(tonnes CO2)	(en %)	carbone
TOTAL	326,5 tonnes CO2	TOTAL	496,8 tonnes CO2	-52,15%	plus forte





111

Benefits

- Raise awareness on the impact of the project
- Gives an indicator to compare the impacts of different projects or options
- Helps in choosing the best environmental and technical solution
- Better understanding of the system and its biggest impacts
- Provide keys for continuous improvement, eco-design and energy savings solutions

