



Welcome to Viarium

Open technology since 2010

Where Innovation Meets Infrastructure

Our History

Viarium – Airport Engineering Evolution

Viarium in the World

Our Services

Aviation

Planning & Design

Projects & Construction Management

Consulting & Airport Management

Innovation & Technological Development

Expertise that drives every project



viarium



Where innovation meets infrastructure

Airport Projects Designed or supervised:

+2,500

M2 Airside Development:

+5 M

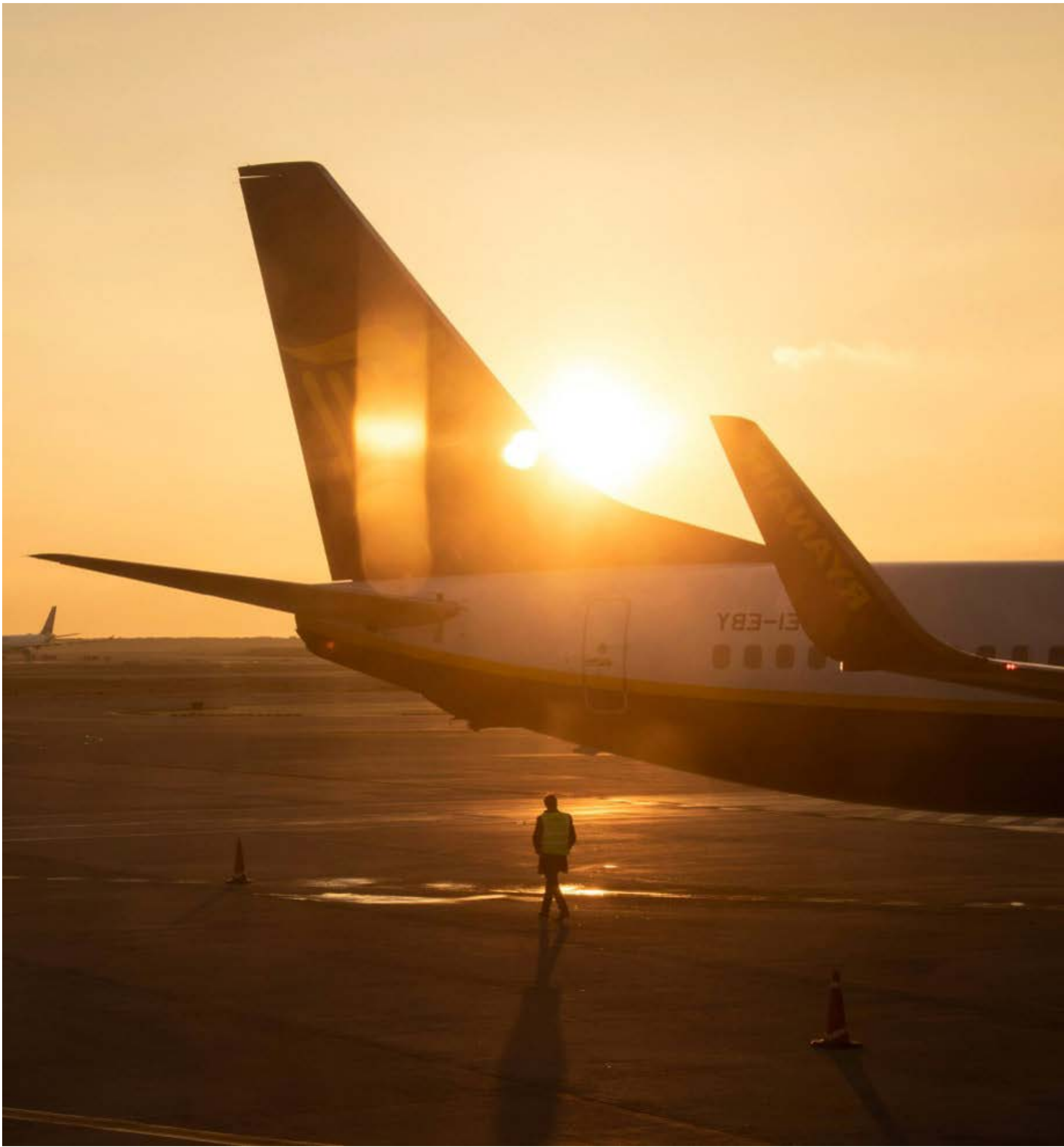
Km of Runway and Taxiway Infrastructure:

+400

CAPEX Programmes Managed (€):

+3 bn





Viarium is an international engineering and technology consultancy group specialising in airport and transport infrastructure, supported by a team of more than **200 aviation experts** across a network of **25 offices worldwide**.

Since its foundation in 2010, the company has delivered integrated, high-value solutions across the full lifecycle of complex infrastructure assets, from strategic planning and design to project management, supervision and asset optimization.

With a strong focus on innovation, operational excellence and long-term asset performance, Viarium partners with public and private clients to develop resilient, efficient and future-ready infrastructure systems.

200

Aviaton experts

25

Offices worldwide





Our history



Founded in 2010, Viarium has evolved into an international engineering and technology consultancy delivering integrated infrastructure solutions.

Over the past decade, the company has experienced sustained and structured growth, strengthening its technical capabilities and expanding its geographic footprint while maintaining a strong commitment to quality and innovation.

Our development has been guided by **three strategic pillars**:

Engineering excellence, ensuring rigorous technical performance across all projects.

Service integration and diversification, enabling end-to-end solutions throughout the infrastructure lifecycle.

International expansion, extending our expertise to complex and demanding markets worldwide.

Viarium – Airport Engineering Evolution

From Foundation to 360° Airport Lifecycle Management



Engineering the spaces where innovation and people take flight

Our team

Viarium is composed of a **multidisciplinary team of infrastructure specialists**, integrating expertise across aeronautical, civil, industrial, environmental and telecommunications engineering, as well as architecture, digital systems and business management.

Our professionals combine **deep technical knowledge** with rigorous project governance standards, enabling the delivery of complex infrastructure programmes with precision, efficiency and accountability.

A strong culture of commitment, collaboration and **performance excellence** underpins every project, ensuring reliable execution and long-term value for our clients.

Internationalization

Since 2014, VIARIUM has taken a step forward by carrying out a process of **international expansion** that has led us to have a presence in **18 countries**, developing both engineering and technological projects.

● Engineering Projects

● Viarium Offices

Offices

- **Viarium Spain (21)**

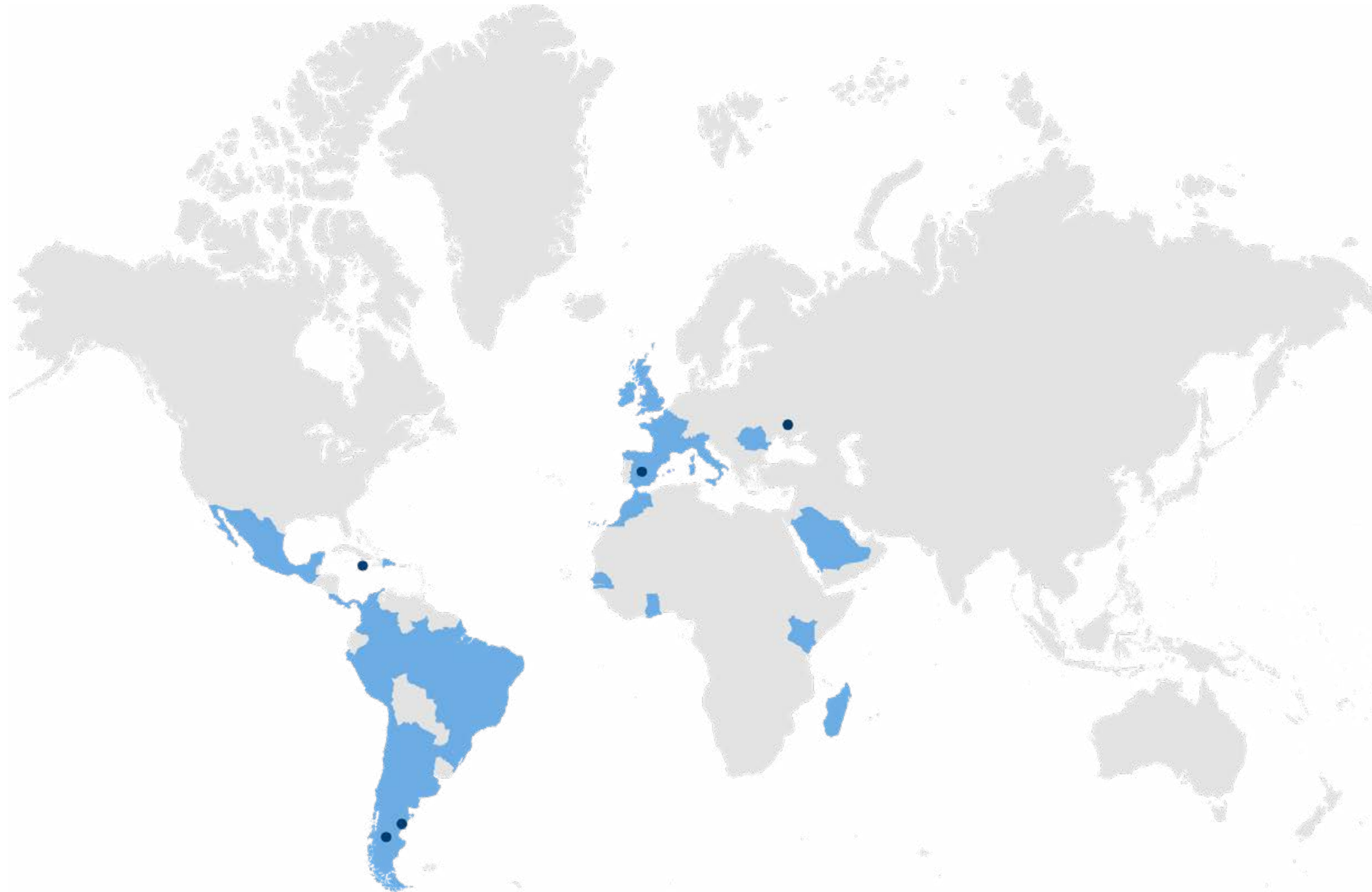
- Madrid
- Barcelona
- Bilbao
- Sevilla
- Valencia
- Palma de Mallorca
- Tenerife

- **Viarium Chile**

- **Viarium Argentina**

- **Viarium Caribbean**

- **Viarium Eastern Europe**





Our Services

- 01. Studies and Planning.**
- 02. Engineering Design.**
- 03. Architectural Design.**
- 04. Construction Management.**
- 05. Project Management.**
- 06. Infrastructure Management.**
- 07. Technology and Innovation.**
- 08. Tenders.**





We design and deliver **fully integrated airport ecosystems** from iconic terminals and advanced runway systems to seamless operational services.

360°





Bespoke, end-to-end

We make tailor-Made airports from end-to-end with highest quality and professional standars.



Planning and Studies

Infrastructure planning plays a fundamental role in sustainable and long-term development. At Viarium, we combine strategic foresight with practical implementation to design interconnected and resilient environments that support mobility, economic growth and environmental balance. With strong expertise in airport planning, we develop dynamic frameworks capable of adapting to traffic growth, technological evolution and sustainability requirements, ensuring infrastructure systems that are both efficient and future-oriented.



Engineering Design

Viarium has consolidated its position in engineering design through technical excellence and adaptability across diverse and complex projects. Our broad range of services includes infrastructure, transport systems, sustainability and advanced technology, covering all project stages from Front-End Engineering Design (FEED) to detailed design and optimisation.



Architectural Design

At Viarium, our architects and design specialists combine creativity with technical expertise to shape spaces that go beyond functionality, becoming meaningful experiences. We design sustainable, context-aware environments that are efficient, attractive and economically viable. Through multidisciplinary leadership and integrated architectural and engineering services, we deliver innovative solutions that enhance communities and improve quality of life.



Project Management

Viarium delivers efficient project management across all phases, ensuring optimal technical and economic outcomes. Guided by PMI standards, our certified professionals lead cross-functional teams through strategic planning, risk mitigation and scope control. We provide integrated design and construction management, BIM coordination, cost control and permitting support, combining technical rigour with proactive decision-making to ensure successful project delivery.



Works Supervision

As construction projects grow increasingly complex, effective coordination and technical clarity become essential. Viarium ensures on-time, on-budget delivery through rigorous oversight and seamless stakeholder alignment. Our services include construction planning and supervision, document review, quality and compliance verification, contract administration and commissioning support, guaranteeing precise execution and consistent performance across every stage of the project lifecycle.



Infrastructure Management

Viarium provides technical and economic oversight of infrastructure assets throughout their lifecycle, ensuring optimal quality standards. We develop asset and maintenance strategies, implement management systems and optimise operational processes. Through forecasting, performance control and advanced technological solutions, we enhance commercial value and efficiency, transforming infrastructure into strategic assets that deliver long-term profitability and sustainable performance.



Technology and Innovation

Viarium combines core infrastructure expertise with advanced technological capabilities to develop applied, innovation-driven solutions. Our business model integrates engineering and technology across infrastructure, transport, energy and space sectors. We deliver comprehensive, end-to-end solutions covering every project phase, from analysis and design to implementation, commissioning, testing and maintenance, ensuring technical excellence and long-term operational performance.



Tender management

Viarium provides expert support in the preparation and submission of competitive bids for tenders and requests for proposal. We guide clients through complex tendering processes with a rigorous and strategic approach. Our services include requirements analysis, proposal development, project planning, risk assessment and quality assurance, enabling the delivery of accurate, competitive submissions that strengthen positioning and increase contract award success.



Aviation





Aviation firm Leader

Currently, Viarium is the leading private provider of airport engineering and consultancy services in terms of business volume for AENA: the world's leading airport operator, both in terms of number of passengers and number of airports.

Viarium is a leading company in the airport sector in Spain, with a solid track record that includes more than 2.500 Airport Infrastructure Projects Delivered or Supervised, with a total investment exceeding 800 million euros between 2020 and 2025.

The company leads project management, technical design oversight and construction supervision across 23 Spanish airports, supporting the planning, design and delivery of airport investment programmes. It is currently involved in the expansion of Terminal 1 at Barcelona Airport and the expansion of the Lanzarote Airport.

In addition, it delivers major airport infrastructure management contracts, providing services in terminal security, maintenance and network wide technical oversight.

Viarium also manages the implementation of electric vehicle charging points and special air navigation facilities across AENA's network of 47 airports, including ILS, VOR, radar, remote control towers and communication systems.

2.500

Projects

3 bn €

Capex Programmes
Managed

+5 Million m²

Airside
Infrastructure



Aviation



Planning & Design



Planning & Design



Our Aviation Planning & Design team delivers comprehensive airside and landside engineering solutions throughout the full airport asset lifecycle, from early, stage master planning and feasibility studies to detailed design and construction support.

We combine strategic airport planning with high-performance airfield engineering to deliver integrated solutions for runways, taxiways, aprons, airfield pavements and supporting infrastructure.

Our approach integrates operational efficiency, regulatory compliance (ICAO / EASA standards) and long-term asset resilience, ensuring airports remain safe, scalable and future-ready.

Expertise includes:

- Airfield master planning and capacity analysis.
- Airside geometric and pavement design.
- Airfield operational simulations.
- Airside works phasing under live operational conditions.
- Technical advisory and design management for multi-airport programmes.
- Air navigation infrastructure and CNS systems integration (ILS, VOR, radar, communications).
- Passenger boarding bridges (PBB) planning and integration.
- Design of critical airport facilities and operational infrastructure (ATC, technical buildings, control centres).





+120 km

of runways and taxiways designed

+2 million m²

of apron areas designed

+1.7 million m²

of terminal refurbishment designed

+350,000 m²

of new terminal buildings designed



César Manrique Airport – Lanzarote

Terminal Area Expansion & Renovation
Full Design Services (Concept to Detailed Design)

Area of intervention: 95,000 m².

Estimated Investment: 200 million €.





Josep Tarradellas Barcelona – El Prat Airport

Terminal 1 Expansion & Rehabilitation
Full Design Services (Concept to Detailed Design)

Area of intervention: 137,310 m².
Estimated Investment: +€700 million.





Congonhas Airport (Sao Paulo)

Terminal and Airside
Concept Design

Area of intervention: +170,000 m².
Estimated Investment: 400 million €.





Air Traffic Center - Madrid (Spain)

Enaire ACC Building Expansion
Full Design Services (Concepto to Detailed Design)

Total intervention area: 9,100 m².

Investment: 24 million €.





AENA Airports – Spain

Terminal Facilities Upgrades and Refurbishment
Full Design Services (Concept to Detailed Design)

Total intervention area: +250,000 m².

Estimated Investment: +65 million €.

Locations: Menorca Airport (MAH), Ibiza (IBZ), and Palma de Mallorca Airport (PMI).





Josep Tarradellas Barcelona – El Prat Airport

Runway 06R-24L, Taxiways and Apron
Full Design Services (Concept to Detailed Design)

Area to work: 460,000 m².

Investment: +€100 million €.





Adolfo Suarez Madrid – Barajas Airport

Runways 18-36 & TWYs
Full Design Services (Concept to Detailed Design)

Area of intervention: 670,000 m².
Estimated investment: 40 million €.





Congonhas Airport (Sao Paulo)

Terminal and Airside
Concept Design

Area of intervention: +170,000 m².
Estimated investment: 40 million €.





Palma de Mallorca Airport

*Regeneration of North and South Taxiways and
Rapid Exit Taxiways for Both Runways
Full Design Services (Concept to Detailed Design)*

Area of intervention: 460,000 m².

Estimated investment: +38 million €.





10 Airport Runway Projects

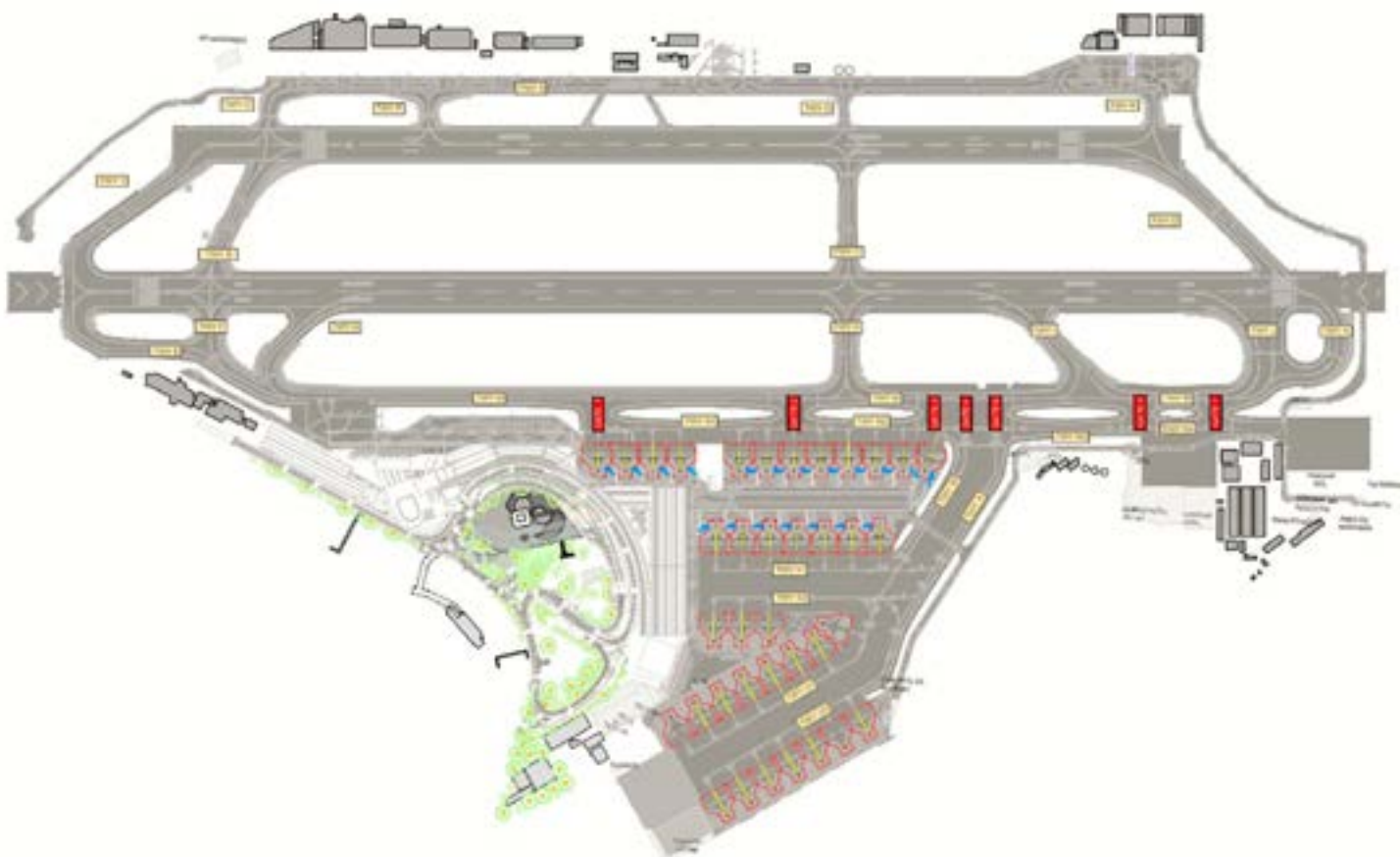
Runway Rehabilitation and Upgrade Works
Full Design Services (Concept to Detailed Design)

Area of intervention: 2,860,000 m² (all intervention area).

Value of construction works: +300 million €.

Airports: (Vigo, Santiago de Compostela, Granada-Jaén, La Gomera, Tenerife Sur, San Sebastián, El Hierro, Zaragoza, Madrid y Barcelona).





11 Airport Apron Projects

Apron Rehabilitation and Upgrade Works
Full Design Services (Concept to Detailed Design)

Area of intervention: 1,890,000 m² (all intervention area).
Value of construction works: +170 million €.
Airports: (Málaga, Menorca, Vitoria, Pamplona, El Hierro, Sevilla, Reus, Melilla, San Sebastián, La Gomera and Ceuta).



Projects & Construction Management



Project & Construction Management



Viarium offers a specialized airport management service, providing comprehensive solutions with high added value. Within Viarium's organizational structure, it is a key pillar of our activity, with Viarium being one of the leading companies in this field. That is why it is organized as a specific area in coordination with the rest. Our technical team, made up of aeronautical engineers and other specialists, is responsible for the planning, design, development and management of airport and air navigation infrastructure. Viarium offers services such as strategic planning, project design, construction management, certification, and airport infrastructure and process management.

Creating the gateways that move the world.





+ 3 bn €

Airport Investment Managed

+ 250 km

RWY and TWY Supervised

+ 3,3 M m²

Apron Areas Managed

+ 45

Airports Managed Investment Programmes



Burgas Airport Fraport – Burgas (Bulgaria)

Runway and Apron Rehabilitation

Project Management | Construction Supervision | Contract Administration

Apron rehabilitation area: 20,000 m².

Total investment: 60 million €.



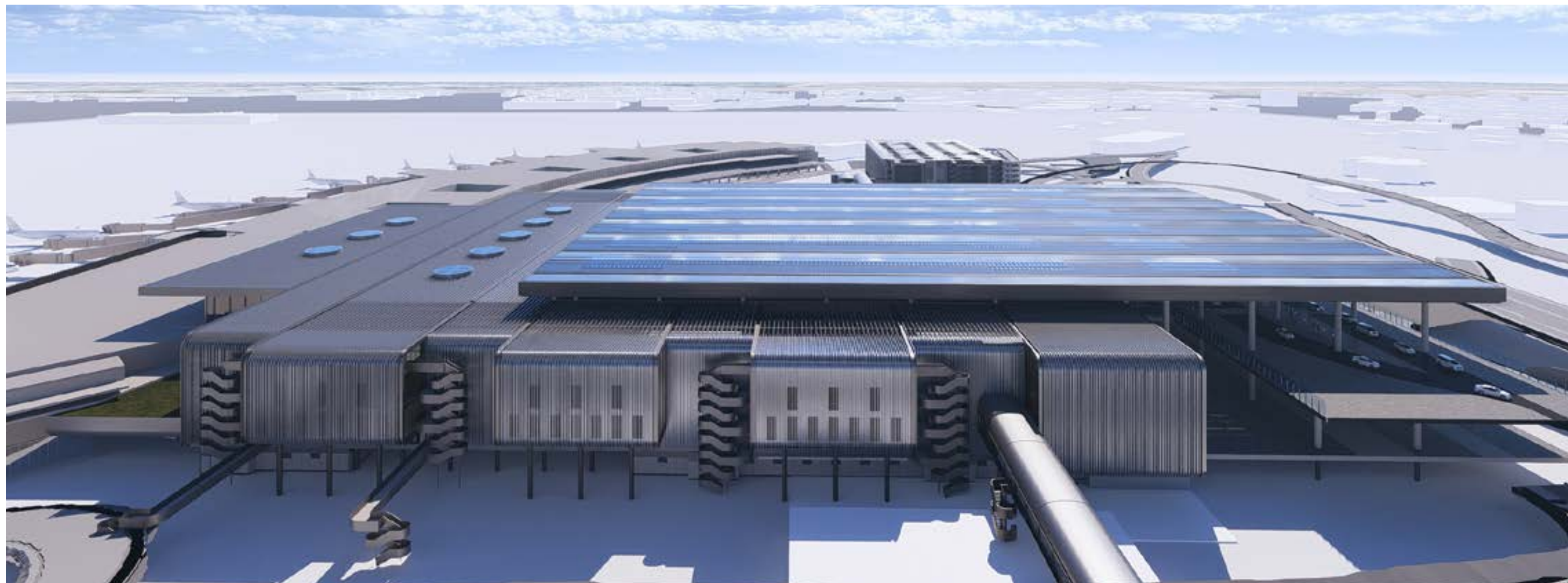


Norman Manley International Airport – Kingston (Jamaica)

*Runway Extension and Marine Reclamation
Project and Construction Supervision*

Runway Supervised: 3,200 m.
Total investment: +50 million €.





Madrid - Barajas Airport

T123 Terminal Expansion
Design Programme Management

Area of intervention: 156,000 m².
Estimated investment: 600 million €.





Tenerife South Airport (Spain)

Terminal Area Expansion

Project Management & Technical Direction
(Design Phase)

Area of intervention: 78,000 m².

Estimated investment: 310 million €.





**Balearic Islands Airports – Mallorca, Menorca & Ibiza
(Spain)**

*Airport Infrastructure and Terminal Improvements
Programme*
Project Management & Construction Supervision

Total investment: 700 million €.
Programme during: 8 years.





AENA Northern Region Airports (Spain)

Airport Infrastructure and Operational Improvement Programme

Project Management and Construction Supervision

Airports covered: 11 airports within Aena's Northern Region.

Total investment: 300 million €.





Aena Canary Islands Region Airports – Spain

Airport Infrastructure and Terminal Improvement Programme
Project Management & Construction Supervision

Total investment: 500 million €.





Aena Airport Network – Spain (47 Airports)

*Air Navigation Systems Upgrade Programme
(CNS/ATM)*

Project Management and Construction Supervision

Airports covered: 47 airports across the Aena network

Total investment: 116 million €.

System involved: ILS, VOR, radar, VHF communications, control towers and remote tower systems.





Aena Airport Network – Spain (47 Airports)

Baggage Handling Systems (BHS) Upgrade Programme

Project Management & Construction Supervision

Airports covered: 47 airports across the Aena network.

Total investment: 108 million €.





Aena Airport Network (Spain)

Electric Vehicle Charging Infrastructure Programme
Project Management & Construction Supervision

Airports covered: 47 airports across the Aena network
Total investment: 60 million €.





Palma de Mallorca Airport (Spain)

Passenger Boarding Bridges and Aircraft Servicing Systems

Project Management & Construction Supervision

Scope: Supply, installation and integration of Passenger Boarding Bridges (PBB) and aircraft ground service equipment.

Programme context: Part of the terminal remodelling and expansion programme.





Adolfo Suárez Madrid–Barajas Airport (Spain)

*Runway 18L–36R Rehabilitation
Work Supervision*

Area of intervention: 670.000 m².
Estimated investment: +76 million €.



Consulting & Airport Management



Consulting & Airport Management



Viarium provides airport consulting and management services aimed at improving the planning, operation and performance of airport infrastructures throughout their entire lifecycle. We support operators, managers and airport authorities in the analysis, design and implementation of solutions that optimize operational processes, enhance asset management and ensure compliance with safety and regulatory standards.

Our approach combines consulting, planning and engineering capabilities with extensive experience in infrastructure management and operational efficiency improvement. This enables us to address the challenges associated with airport operations in a comprehensive manner, from the organization of operations and process optimization to the implementation of management tools and new technologies.

At Viarium, we focus on delivering practical solutions tailored to each infrastructure, with the objective of improving operational efficiency, extending the lifespan of assets and strengthening the strategic value of airport infrastructures.

*Transforming airport operations
into strategic assets.*



Consulting & Airport Management



Integrated airport management solutions



Asset Management & Maintenance

We help airport operators maximise asset performance and lifecycle value through integrated asset management and maintenance, combining technical expertise and data-driven oversight to optimise maintenance and ensure service continuity.



National Asset Strategy – AENA Network (47 Airports) – Spain (2022-2027)

- Client: AENA.
- Amount consultancy Viarium: 2,070 M€.
- CAPEX: 20,000 M€.



Airport Maintenance Assistance – AENA Network (47 Airports) – Spain (2018-2022)

- Client: AENA.
- Amount consultancy Viarium: 1,498 M€.
- CAPEX: 20,000 M€.



Airfield Visual Aids Monitoring – AENA Network (47 Airports) – Spain

- Client: AENA.
- Amount consultancy Viarium: 0,614 M€.
- CAPEX: 1,500 M€.



Asset Management & Maintenance

National Airport Maintenance Programme



La Palma Airport – Maintenance Management (2015–2019) – Spain

- Client: AENA.
- Amount consultancy Viarium: 0,23 M€.
- CAPEX: 450 M€.



Asset Management System Deployment – Castellón Airport – Spain

- Client: AEROCAS.
- Amount consultancy Viarium: 0,23 M€.
- CAPEX: 150 M€.



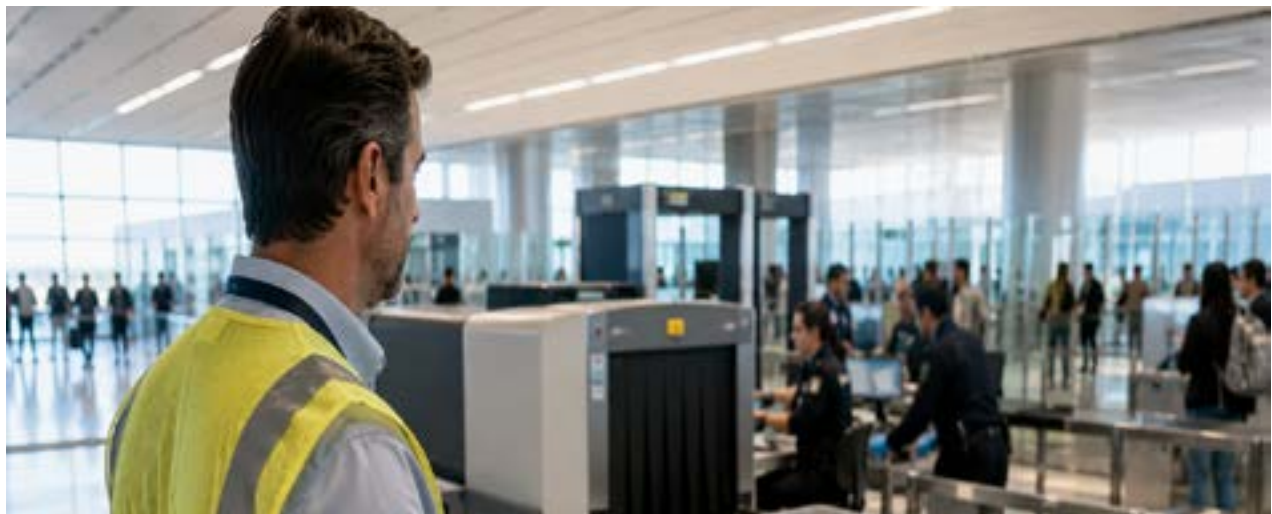
Security Management

We support airport operators in enhancing security performance, compliance, and operational efficiency across complex airport networks. Our services combine strategic advisory, technical expertise, and programme management capabilities, ensuring alignment with evolving regulatory requirements while maintaining the highest standards of safety, quality, and passenger experience.



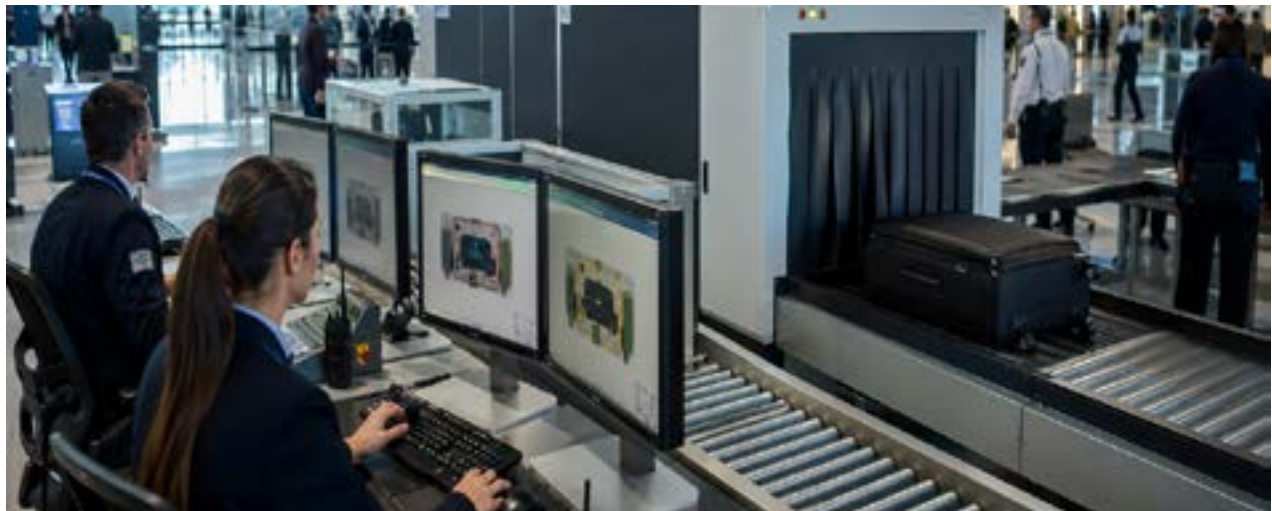
National Private Security Quality Assurance Programme – AENA Network (47 Airports) – Spain
(2020-2029)

- Client: AENA.
- Amount consultancy Viarium: 2,82 M€.
- CAPEX: 2,000 M€.



Independent Airport Security Compliance Audits – AENA Network (47 Airports) – Spain
(2024-2028)

- Client: AENA.
- Amount consultancy Viarium: 1,5 M€.



Explosive Detection System (EDS) Standard 3 Programme Management – AENA Network (47 Airports) – Spain

- Client: AENA.
- Amount consultancy Viarium: 2,615 M€.



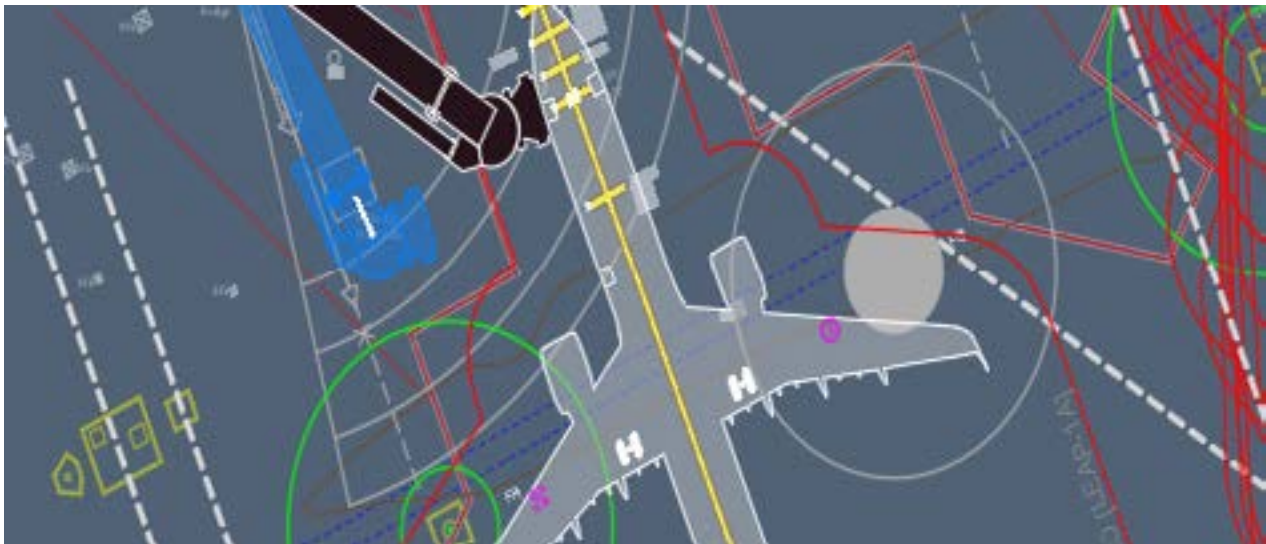
Safety Management

Viarium supports airport operators in managing critical airside and operational safety across complex airport networks, combining technical expertise, regulatory knowledge, and advanced analytical capabilities.



Airside Regulatory Compliance (AESA) – AENA Network (47 Airports) – Spain

- Airside Maintenance.



Airfield Simulation & Risk Analysis – Spain

- Simulation Tools.
- +47 Airports network.



Aircraft Stand Safety Monitoring – Innovación Project (AII SOP) – Spain

- Support by AENA & Spanish Government (CDTI).



Safety Management



Obstacle Limitation & Airside Safety Supervision – AENA Network (47 Airports) – Spain

- Obstacle Limitation Surfaces Assistance OLS/Safety.
- Operational Monitoring & Safety Supervision Airside Operations.



Operational Compatibility Simulation – Sangster Internacional Airport – Jamaica

Simulation Tools Airside.



Due Diligence & Asset Valuation

Viarium provides specialised airport due diligence and asset valuation services, combining technical, operational and financial analysis to assess asset condition, performance and value, supporting informed investment and acquisition decisions.



Pre-Acquisition Technical Due Diligence – Doncaster Sheffield Airport – England, United Kingdom

- Client: Private investment fund.
- CAPEX/OPEX: 120M €.



Airport Technical Due Diligence – Porto Alegre & Fortaleza – Brazil

- Client: Euroconsult/Fraport.
- CAPEX/OPEX: 300M €.



Independent Asset Valuation – Castellón Airport – Spain

- Client: AEROCAS.
- CAPEX/OPEX: 150M €.



Commercial

Viarium provides specialised consultancy for airport retail and commercial fit-out projects, covering planning, technical review, control, and coordination. Our experience across the AENA network, particularly at Madrid-Barajas Airport, ensures technically sound and operationally compatible commercial spaces.



Retail Fit-Out Coordination – AENA Network (47 Airports)– Spain

- Client: AENA.
- Consultancy Amount: 1,4 M€.
- +100 fit out works.



Technical Review of Retail Units Madrid-Barajas Airport – Spain

- Client: AENA
- Consultancy Amount: 1,28 M€
- +50 fit out works.



Retail Fit-Out Coordination– Madrid-Barajas Airport terminals 1-2-3 – Spain

- Client: AENA



Sustainable Infrastructure & Environmental Consultancy

We support airport operators in delivering sustainable, efficient, and future-ready assets. Our approach integrates environmental certification, energy performance optimization, and inclusive design, ensuring compliance with international standards while enhancing operational and user experience outcomes.



BREEAM & WELL Certification – Terminals & Headquarters – Spain

- Barcelona-El Prat Airport – Terminal T1.
- Lanzarote Airport – Terminal Extension.
- Tenerife South Airport – Terminal Extension.
- AENA Headquarters (BREEAM & WELL).



Energy Performance Audits AENA Network (47 Airports) – Spain

- Adolfo Suárez Madrid-Barajas Airport.
- Barcelona-El Prat Airport.
- Client: AENA.



Accessibility & Inclusive Design (PRM) – Spain

Accessibility Design & Constructive Guidelines

- Cliente: Cluster II Airports (Arabia Saudi).

Programme & Project Management for Accessibility Investments

- Cliente: AENA Network (Spain).



Airport Services

Viarium is a leading airport services consultancy for major airports, excelling in operations, passenger services, commercial areas, maintenance, quality, and strategic advice with tailored support.



Passenger Experience

- Passenger Experience Advisory Madrid – Barajas Airport – Spain
 - Passenger Services Quality Advisor Madrid – Barajas Airport – Spain
- Process Optimization.
 - Service Quality.
 - Passenger Experience.



Passenger Wayfinding

- Passenger Wayfinding Monitoring Assessment & Improvement Madrid – Barajas Airport – Spain
- Wayfinding.
 - Passenger Experience.



Airport Operational Services

- ICT Management Support Madrid – Barajas Airport – Spain
 - Ground Handling Monitoring Madrid – Barajas Airport – Spain
- ICT Services.
 - Ground Handling.
 - Operational Support.



Operations/Airports Management

Viarium aids airport operators and authorities in managing daily operations, from documentation and compliance to concession oversight and emergency management, blending expertise with regulatory knowledge for safe, efficient airport functioning.



Aerodrome Manuel Update – Palma de Mallorca Airport – Spain

- Management System.
- +15M passengers.
- Client: AENA.



Airport Concession Supervision – Castellón Airport – Spain

- Operation Management.
- CAPEX/OPEX: 150 M€.
- Client: AEROCAS.



Regional Emergency Heliport Network Infrastructure Management – 12 Heliports – Spain

- Emergency Operation Management.
- 12 Heliports.
- Client: Community of Madrid.

Innovation & Technological Development



Innovation and technological development



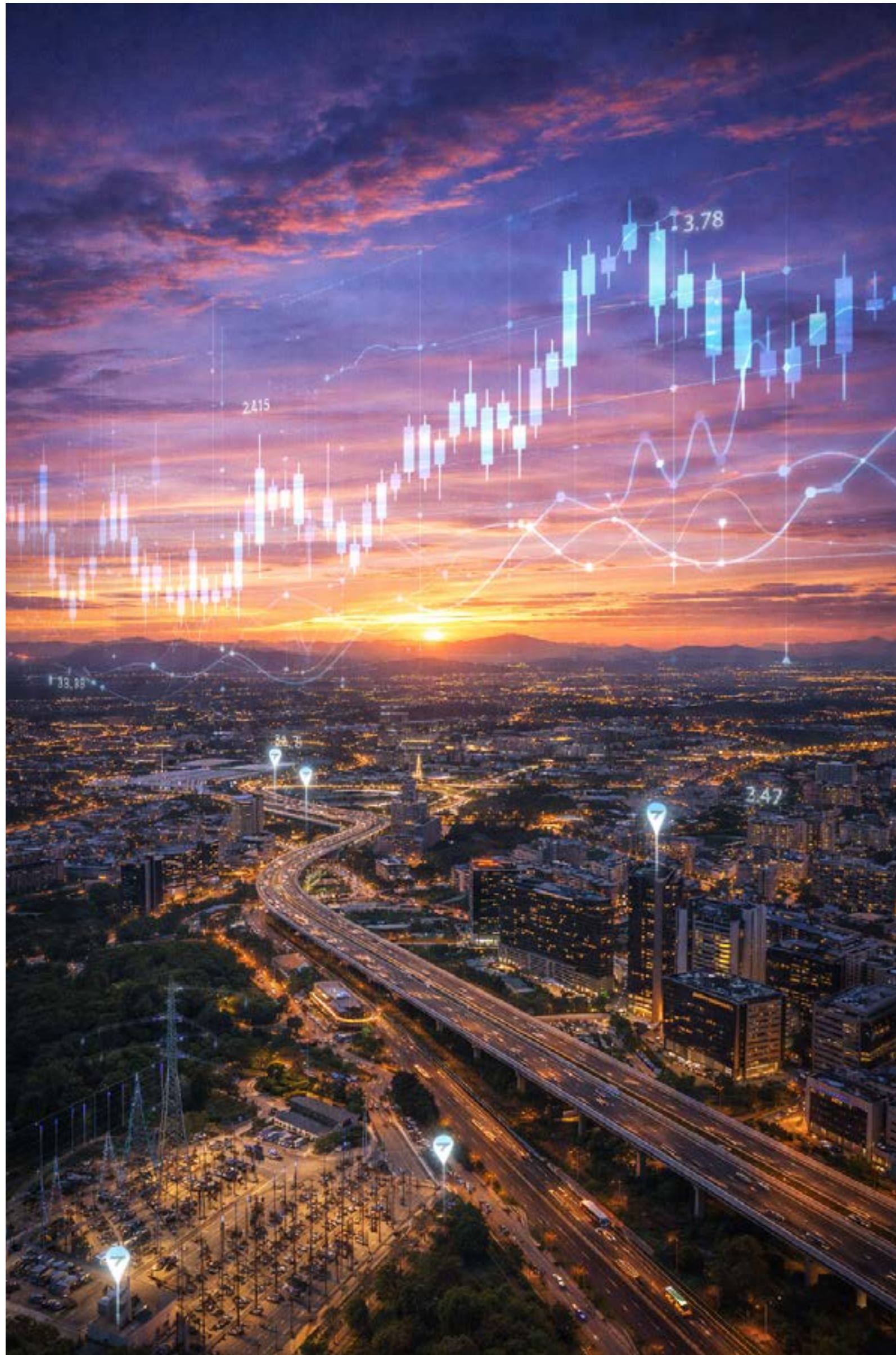
Viarium develops **technological innovation applied to infrastructure**, combining its core **expertise in infrastructure engineering** with strong technological know-how. This integration constitutes **one of the main strengths of the company's business model** and enables the development of **advanced solutions for complex engineering environments**.

Within Viarium's organizational structure, **technological innovation plays a strategic role through a dedicated Technological Development Division**, fully integrated into the company's management and production framework and working in coordination with the rest of the organization.

Our multidisciplinary team of engineers and technology specialists focuses on the development and implementation of **innovative systems and solutions applied to infrastructures, transport, energy and space sectors**, supporting both the execution and the operational management of these assets.

Thanks to Viarium's extensive experience in infrastructure projects, the company is able to provide **integrated and end-to-end technological solutions**, covering **all stages of the project lifecycle**, from analysis and system design to development, implementation, testing, commissioning and maintenance.





Viarium develops **technological innovation applied to infrastructure** by combining its core expertise in infrastructure engineering with advanced technological capabilities. This integration enables the development of innovative solutions for complex engineering environments.

Through its **Technological Development Division**, fully integrated within the company's management and production structure, Viarium designs and implements advanced systems supporting infrastructure, transport, energy and territorial resilience.

Main Technological Lines:

- **Infrastructure Digitalization and Monitoring**
- **Airport Operational Systems**
- **U-Space Systems and Services**
- **Energy Transition and Infrastructure Decarbonization**
- **Territorial Risk Management and Climate Resilience**

+200

Stakeholders in the innovation ecosystem

+15

European countries with technology partners

+150

Agreements with Technology centers

+50

Innovation initiatives Launched

Digitalization and Monitoring



Viarium develops **advanced digital solutions for the monitoring, assessment and predictive maintenance of infrastructure assets**. Through the integration of sensors, digital models and data analytics, the company enables real-time infrastructure management and more efficient asset lifecycle strategies. The objective is to improve safety, optimize maintenance operations and enhance the resilience of critical infrastructures.

Key Technologies:

- Infrastructure Monitoring Systems.
- IoT Sensors.
- Predictive Analytics.
- Digital Twins.





- eSHM extended monitoring system for transport infrastructures.
- EOSIS – predictive diagnostics system for wind turbines.
- AEROPAV – automated airport pavement assessment system.
- MASBIM 4D.
- Digital models – Barcelona and Lanzarote Airports Castellón Airport asset digitalization.



Airport Operational Systems



Viarium develops **advanced technological solutions to support airport operations, operational safety and the management of airside and terminal environments.** Through digitalization, data analytics and intelligent automation, the company enhances operational awareness and supports more efficient airport management.

Objective:

Improve operational efficiency and safety in airport environments through digital technologies and automated operational support systems

Key Technologies:

- Data analytics.
- Computer vision.
- Operational simulation.
- Artificial intelligence.
- Flow analytics.





- AIISOP – Intelligent image analysis for aircraft stand safety monitoring.
- SIMOS-TLA – Monitoring and optimization of airside traffic.
- SIMUTRAC – Automated simulation of aircraft ground trajectories.
- FLOCUS – Intelligent passenger flow management.
- Security Analytics – Data-driven analysis for airport security operations.



U-Space



Aeronautical consultancy and design of ground infrastructure required for the deployment of **Innovative Air Mobility (IAM)** and the provision of **U-space services**.

Objective:

Enable the safe and efficient deployment of IAM operations through U-space services, ensuring compliance with European regulatory frameworks.

Key Technologies:

- UTM / U-space service platforms.
- IoT-based infrastructure monitoring.
- AI-based traffic management and operational optimization.





- Digital marketplace for UAS operations.
- MaaS (Mobility as a Service) platform integration.
- Innovative services for autonomous UAS operators, including infrastructure management and coordination in emergency scenarios.



Energy Transition & Infrastructure Decarbonization



Viarium develops technological solutions to support the **integration of renewable energy sources and new energy vectors into infrastructure systems**. Through advanced modelling and innovative energy technologies, the company contributes to more efficient, sustainable and resilient infrastructure environments.

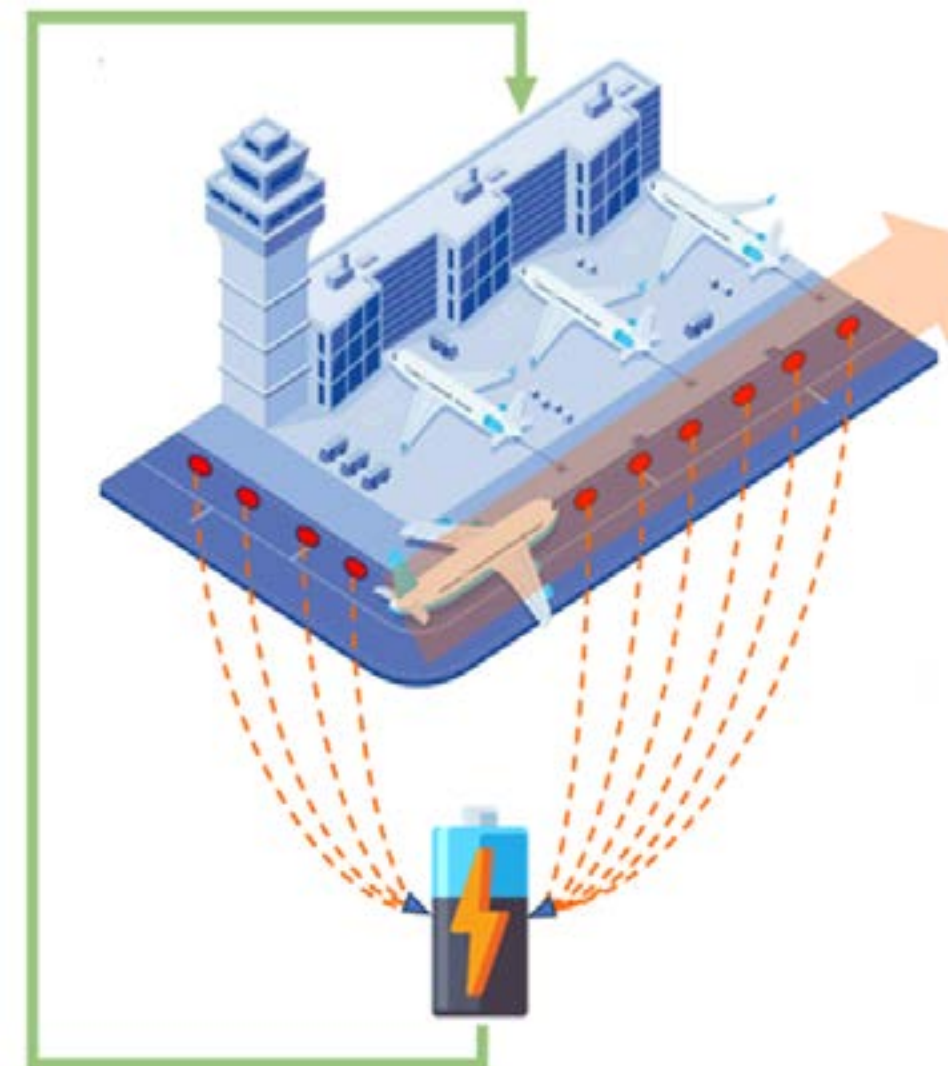
Objective:

Support the energy transition and the decarbonization of transport systems and infrastructure through innovative technological solutions.

Key Technologies:

- Hydrogen integration.
- Energy harvesting.
- Energy modelling.
- Hybrid gas–hydrogen networks.





- **HYTARI:** Hydrogen Integration for Natural Gas Network Resilience.
- **AEROHARVEST:** Airport Energy Recovery Systems.
- **PIPRA:** Electric Vehicle Charging Infrastructure and Electroliner Deployment.



Territorial Risk Management



Viarium develops advanced tools and methodologies to support **climate risk assessment and resilient territorial planning**. By combining modelling, simulation and data analysis, the company enables better anticipation of climate-related impacts on infrastructures and territories.

Objective:

Anticipate climate risks and strengthen the resilience of territories and critical infrastructures.

Key Technologies:

- Mathematical modelling.
- Climate simulation.
- Resilient territorial planning.





- **MATHMOD-ONFIRE:** Mathematical modelling for wildfire risk management.
- **SUREPATH:** Resilient planning of European infrastructure networks.
- **HYDROMIND:** Intelligent water management and flood prevention.





Expertise that drives every project

01. Engineering Design.

02. Architectural Design.

03. Project Management.

04. Infrastructure Management.



Engineering Design

- DESIGN OF CIVIL WORKS PROJECTS AT AENA AIRPORTS. **INVESTMENT: €800 M**
- DESIGN OF AIR NAVIGATION PROJECTS. ENAIRE. **INVESTMENT: €+40 M**
- DESIGN OF AIR NAVIGATION PROJECTS FOR AENA. **INVESTMENT: €82 M**
- DESIGN OF LOCAL INVESTMENT PROJECTS. BALEARIC AIRPORTS (2016–24). **INVESTMENT: €158 M**
- RUNWAY 06R–24L REHABILITATION AND NEW TWY AND APRON BARCELONA AIRPORT. **INVESTMENT: €102 M**
- REHABILITATION OF RUNWAY 18R–36L. MADRID–BARAJAS AIRPORT. **INVESTMENT: €40 M**
- REHABILITATION OF RUNWAY 12R–30L. ZARAGOZA AIRPORT. **INVESTMENT: €34 M**
- TAXIWAY REHABILITATION ALICANTE AIRPORT. **INVESTMENT: €11 M**
- RUNWAY REHABILITATION 07L–25R. BARCELONA AIRPORT. **INVESTMENT: €5 M**
- RENOVATION OF PLATFORMS R1–R5. MALAGA AIRPORT. **INVESTMENT: €26 M**
- RUNWAY REHABILITATION VIGO AIRPORT. **INVESTMENT: €30 M**
- RUNWAY 12–30 RUNWAY REHABILITATION DESIGN. TENERIFE NORTE AIRPORT. **INVESTMENT: €30 M**
- TAXIWAYS AND APRON. VITORIA AIRPORT. **INVESTMENT: €16 M**
- AIRFIELD ADAPTATION. FUERTEVENTURA AIRPORT. **INVESTMENT: €7.2 M**
- RUNWAY REHABILITATION. GRANADA–JAÉN AIRPORT. **INVESTMENT: €21 M**
- EAST APRON REHABILITATION. SAN SEBASTIÁN AIRPORT. **INVESTMENT: €6.8 M**
- APRON CAPACITY IMPROVEMENT. REUS AIRPORT. **INVESTMENT: €7 M**





*Airfield design and remodelling projects,
including runways,
taxiways, aprons and hangars.*



Information:

Specialists in airport facility design;
BHS, Area Navigation, PBB, Inspection Equipment
Systems, Control Systems.



Architectural Design

- NEW PROCESSOR BUILDING AND REMODELING OF T1-T2-T3 . MADRID AIRPORT.DESIGN PM. **INVESTMENT: €600 M**
- TERMINAL 1 EXPANSION AND REHABILITATION. FULL DESIGN. **INVESTMENT: +€700 M**
- TERMINAL EXPANSION AND RENOVATION LANZAROTE AIRPORT. FULL DESIGN. **INVESTMENT: €200 M**
- CONGHONAS TERMINAL EXPANSION AND REHABILITATION. CONCEPT DESIGN. **INVESTMENT: €400 M**
- TERMINAL EXPANSION TENERIFE SUR AIRPORT. DESIGN PM . **INVESTMENT: €310 M. ENGINEERING: €2.4 M**
- REUS AIRPORT TERMINAL BUILDING EXPANSION. DESIGN AND CONSTRUCTION SUPERVISION. **INVESTMENT: €14 M**
- AIR TRAFFIC CONTROL CENTER (ACC) EXPANSION FOR ENAIRE. FULL DESIGN. **INVESTMENT: €24 M**
- REVIEW OF COMMERCIAL PREMISES AT ADOLFO SUÁREZ MADRID-BARAJAS AIRPORT. **ASSETS: +€45 M**
- PASSPORT CONTROL ADAPTATION AT IBIZA AIRPORT. FULL DESIGN. INVESTMENT: **€0.65 M**
- NEW AENA OFFICES IN THE MENORCA AIRPORT TERMINAL. FULL DESIGN. INVESTMENT: **€0.6 M**
- ADAPTATION OF THE AENA III BUILDING AT PALMA DE MALLORCA AIRPORT. FULL DESIGN . **INVESTMENT: +€1 M**
- DESIGN OF A NEW VIP LOUNGE IN THE TERMINAL BUILDING. MENORCA AIRPORT. FULL DESIGN. **INVESTMENT: €0.35 M**
- RENOVATION OF BOARDING AREA TOILETS MENORCA AIRPORT. FULL DESIGN. **INVESTMENT: €0.6 M**
- NEW COMMERCIAL AREA IN THE TERMINAL BUILDING MENORCA AIRPORT. FULL DESIGN. **INVESTMENT: €0.6 M**
- COMMERCIAL AREA REMODELING AND SECURITY CONTROLS AT BILBAO AIRPORT. FULL DESIGN. **INVESTMENT: €0.5 M**





+1.7 million m² of terminal refurbishments and over 350,000 m² of new terminal buildings, delivering modern, efficient and passenger-focused airport infrastructure.



Information:

Architectural design and development of airport terminals and airport buildings, covering all phases from conceptual design to detailed design. The scope includes terminal planning and spatial organization, passenger flow analysis, functional layout development, integration of architectural and engineering disciplines, BIM-based design coordination, preparation of technical documentation, cost estimation and design optimization, as well as the incorporation of safety, security, environmental and building systems requirements to ensure efficient, compliant and sustainable airport facilities.



Project Management

- AIRPORTS IN THE BALEARIC REGION. **INVESTMENT: €800 M**
- AIRPORTS IN THE CANARY ISLANDS REGION. **INVESTMENT: €500 M**
- AIRPORTS IN THE NORTHERN REGION. **INVESTMENT: €300 M**
- NEW PROCESSOR BUILDING AND REMODELING OF T1-T2-T3 . MADRID AIRPORT.DESIGN PM. **INVESTMENT: €600 M**
- TERMINAL EXPANSION TENERIFE SUR AIRPORT. DESIGN PM . **INVESTMENT: €310 M**
- ELECTRIC VEHICLE CHARGING POINTS IN THE AENA AIRPORT NETWORK. **INVESTMENT: €60 M**
- AENA’S AIR NAVIGATION SYSTEMS PROJECTS. INVESTMENT: **€116 M**
- SIEB/SATE SYSTEMS AT AENA AIRPORTS. INVESTMENT: **€108 M**
- BOARDING BRIDGES AND AIRCRAFT SERVICE EQUIPMENT. PALMA DE MALLORCA AIRPORT.
- TECHNICAL MANAGEMENT OF WORKS REQUESTS AT MADRID AIRPORT. INVESTMENT: **+€100 M**
- COORDINATION OF PRIVATE COMMERCIAL WORKS IN T1-T2-T3 – ADOLFO SUÁREZ MADRID-BARAJAS AIRPORT
- RUNWAY AND APRON REHABILITATION BURGAS AIRPORT. PM AND WORKS SUPERVISION. **INVESTMENT: €60 M**
- RUNWAY EXTENSION FOR KINGSTON AIRPORT. PROJECT AND WORKS SUPERVISION. **INVESTMENT: €50 M**
- RUNWAY 18L-36R REHABILITATION. WORK SUPERVISION. MADRID AIRPORT. **INVESTMENT: +€76 M**





+3 billion in investment in more than 45 different airports, in engineering, architecture, installations and airport construction management



Information:

Supervision and management of the design, execution and implementation of airport investments with the support of more than 50 people with extensive experience in the sector. Among the works included in the scope are the following:

Contract management, projects, work plans using BIM methodology, budgets and cost control, technical management – engineering, procurement, production, traffic and transport, safety, security, environment and facilities and sub-testing and commissioning management.



Consulting & Airport Management

- STRATEGIC ADVICE ON IMPROVING QUALITY CONTROL OF THE SECURITY SERVICE AT AENA (AENA NETWORK – SPAIN) (SECURITY MANAGEMENT)
- STRATEGIC ASSET MANAGEMENT AND AIRPORT MAINTENANCE PLAN FOR AENA (AENA AIRPORT NETWORK) (ASSET MANAGEMENT & MAINTENANCE)
- AERODROME MANUAL UPDATE FOR PALMA DE MALLORCA AIRPORT AND GRAPHIC INFORMATION MAINTENANCE FOR THE AENA AIRPORT NETWORK (MANAGEMENT SYSTEMS)
- TECHNICAL ADVISORY FOR THE SUPERVISION OF THE CASTELLÓN AIRPORT CONCESSIONAIRE,(OPERATIONS MANAGEMENT)
- REVIEW OF PRELIMINARY DUE DILIGENCE REPORTS – DONCASTER SHEFFIELD AIRPORT (UK) (DUE DILIGENCE & ASSET VALUATION)
- MANAGEMENT OF AIR INFRASTRUCTURE FOR THE HELIPORTS OF THE DIRECTORATE GENERAL OF EMERGENCIES – COMMUNITY OF MADRID (OPERATIONS MANAGEMENT)
- ADVICE ON AIRPORT MAINTENANCE IN ACCORDANCE WITH AESA REGULATIONS (AENA NETWORK) (SAFETY MANAGEMENT)
- TECHNICAL ASSISTANCE FOR THE CONTINUOUS IMPROVEMENT PLAN OF PASSENGER EXPERIENCE – MADRID-BARAJAS AIRPORT (OPERATIONS MANAGEMENT)
- SUPERVISION OF OPERATIONAL ASPECTS AND OBSTACLE SURVEILLANCE AND CONTROL AT IBIZA AIRPORT (SAFETY MANAGEMENT)
- MAINTENANCE MANAGEMENT AND CONTROL SERVICE AT LA PALMA AIRPORT (ASSET MANAGEMENT & MAINTENANCE)
- GROUND HANDLING PERFORMANCE MONITORING AT MADRID-BARAJAS AIRPORT (OPERATIONS MANAGEMENT)
- ANALYSIS, PLANNING AND IMPLEMENTATION OF WAYFINDING IMPROVEMENTS AT MADRID-BARAJAS AIRPORT (OPERATIONAL PROCESS OPTIMIZATION)





*Infrastructure Management in
+45 Airports.*



Information:

Viarium optimizes airport infrastructure and processes, integrating engineering, consulting, and technology for efficient operations, long-lasting assets, and satisfied passengers.



