LEADING HECOM in Spain



Leading the Change











ABOUT AECOM

AECOM is a global network of design, engineering, construction and management professionals partnering with clients to imagine and deliver a better world. As a premier, fully integrated infrastructure firm, we unlock opportunities, protect our environment and improve people's lives.

For the last four years, we have been named one of Fortune's World's Most Admired Companies. Additionally, we have ranked as Engineering News-Record's #1 design firm by revenue for eight consecutive years and recognized as Construction Dive's Company of the Year for the second year in a row.



OUR GLOBAL AREAS OF EXPERTISE:

DESIGN AND CONSULTING SERVICES

We provide world-class design, architecture, engineering and consulting services as a market leader in transportation, water, environmental, energy, buildings and public spaces.

CONSTRUCTION SERVICES

As the builder of some of the world's most iconic and challenging structures ever conceived, we partner with owners, developers and infrastructure providers in the building construction, civil, oil & gas and power sectors.

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30 YEARS IN CONTINENTAL EUROPE

Europe is a cradle of architecture; from the Pantheon to St. Basil's Cathedral, the continent is home to some of the most impressive structures in the world. For almost half a century, AECOM has been building on this heritage by delivering innovative and diverse projects across Continental Europe.

With our blend of professional and technical services that take a project through its lifecycle, we are able to design, build, finance and operate Europe's modern infrastructure. The proof is in the projects from innovative skyscrapers such as Lakhta

Centre in Russia to technical infrastructure such as the roads and bridges comprising the future Stockholm Bypass, AECOM takes on challenging, complex projects and delivers them on time and to budget.

Our attention to detail and to our clients has established AECOM as a leading design and construction services provider across a diverse collection of markets from transportation, environment and management services. AECOM is proud to lead Europe's tradition of awe-inspiring architecture into a future of innovation and sustainability.









ECOM SPAIN

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AECOM IN SPAIN

Our over 500 employees, including architects, engineers, designers, planners and scientists, have helped shape the world around us, building a strong reputation based on our track record of providing technical excellence to our clients. We embrace our commonalities and leverage our differences to build a world-class organisation and community.

Our Spanish head office in Madrid provides multidisciplinary services from project conception to completion, enabling our public and private sector clients to maintain their competitiveness in global markets and reach their goals. Our holistic approach to clients is based on constant innovation. We are uniquely equipped with cutting-edge technology that allow us to guarantee the quality of the projects we deliver.



REPRESENTATIVE SERVICES





INFRASTRUCTURE



CIVIL INFRASTRUCTURE

Creating today's framework for tomorrow's growth, we are working to move people faster, safer and more sustainably.

With decades of experience delivering innovative civil infrastructure projects that span countries and continents, we are driving the new wave of safe and efficient high-speed rail (HSR), developing rail networks that promote liveable communities by reducing highway and aviation congestion, encouraging energy independence and efficiency, and addressing global climate change. We connect communities through our work on emerging regional and express HSR projects.

As well as being an HSR leader, we provide project management, hydrology, hydraulics and drainage, tunnelling, ground engineering, rail systems, bridges and structures, mechanical, electrical and plumbing engineering (MEP) and transport architecture expertise.



MOVING PEOPLE FASTER, SAFER AND **MORE SUSTAINABLY**







Leading the Change

Rail and mass transit projects



Of tunnels designed

+3,500km

Of highway and road engineering





SELECTED AREAS

- Highways and roads ----
- Railways ----
- Water infrastructure -----
- Mass transit —
- Aviation —
- Systems ----
- Structures and bridges —

SELECTED SERVICES

- Works control and supervision -----
- Technical assistance —
- Design (preliminary design, detailed design)
- Feasibility studies ----
- Tunnelling and ground engineering ----
- Development planning/engineering ----





NORTH TARRANT EXPRESS SEGMENT 3A

Texas, USA

Martin Martin Party

The Texas Department of Transport (TxDOT) is carrying out improvement works to its existing highway network to improve local and regional mobility, promote the area's economic activity and reduce present environmental pollution levels. The North Tarrant Express Segment 3A reconstruction project is an integral part of TxDOT's plans.

AECOM staff from across both our Dallas and Madrid offices are providing detailed design, project management and construction services on the project.





















Leading the Change



DIGITAL BIM IMPLEMENTATION CONSULTANCY FOR ADIF RAIL

Spain

Consulting services for BIM implementation, technical support and training for the Spanish state-owned railway Infrastructure Manager. This system will enable more collaboration and integration of the assets lifecycle, as well as leading the digital transformation that will apply the most advanced digitalization processes to the development, maintenance and operation of infrastructures.

AECOM will offer Adif the possibility to define the strategy, processes and procedures related to BIM technology, having a collaborative workflow for project and asset management processes by developing a digital decision-making framework.











Spain

This project involves a complex transformation of significant areas surrounding the new highspeed rail connecting Spain and France. Our team has been appointed to adapt and design the railway's infrastructure to develop a modern and interconnected urban environment.

Several neighbourhoods previously divided by the railway will be integrated - Sagrera, Sant Marti and Sant Andreu – to foster social cohesion and bring economic opportunities. The plan involves the development of extensive residential, commercial and leisure spaces around the realigned overground and underground transportation network, including: high-speed railway, metro, intercity railway and bus stops. The size and technical complexity of the plan will see the project become one of Spain's urban landmarks: a strategic alliance between France and Spain's state-owned railway companies.









BULDINGS + PLACES



BUILDINGS + PLACES

Whether helping deliver commercial buildings across a multi-acre site or a five-star holiday resort, our architects, engineers and designers consider each site and client's specific needs alongside technical and budget requirements, financial mechanisms, project implementation, maintenance and management and long-term impacts of the project on the community.

Our goal is to bring each client's vision to life, enhance their brand and make a positive contribution to communities. AECOM's interdisciplinary approach brings together the best creative and strategic thinkers to create a working environment where we actively collaborate with our clients, balancing good design with operational requirements.



SHAPING THEWORLD AROUND US







ECOM



Design professionals



Active **BIM** experts



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SELECTED AREAS

- Transport architecture (aviation, rail) —
- Commercial —
- Leisure and hospitality ----
- Logistics and industrial —
- Residential ----
- Urban planning and landscape design —
- Workplace consultancy —
- Interior design ----
- Project management and cost management
- Sustainable design ----
- MEP —

SELECTED SERVICES

- Design (concept, preliminary, detailed design)
- Design management and multidisciplinary coordination
- Works control and site supervision ----
- Feasibility studies —
- Technical assistance _
- Consultancy analysis and reports —
- Sustainability certification —
- BIM management —



AECOM





Leading the Change



SANTANDER BANK Mönchengladbach, Germany

Santander Bank's new building complex in Mönchengladbach has enough space for 1,800 employees, housing five of Santander's back office business units. Adopting an 'inside out' approach, we conducted interviews at all levels to see how best to integrate user needs. AECOM designed the workspace accordingly, focusing on an open and flexible environment that can be

adapted to precisely defined work styles. More efficient use of the space and building systems should mean greater productivity and lower energy consumption. AECOM worked closely with Santander, making sure that the consulting, architecture and general planning services provided complied exactly with their requirements. Through regular meetings and workshops we facilitated fast project decision-making.









KUWAIT TERMINAL AIRPORT, TERMINAL 4 Kuwait, Kuwait

This Support Passenger Terminal Building aims to provide an additional handling capacity of 4.5 million passengers per year, supporting the current Terminal Building T1. Terminal 4 systems are fully integrated with the rest of the Kuwait International Airport facilities.

The scope of works of this project includes all the design stages of a Terminal Building (55.000 sqm), a new passenger Car Park (650 slots), a Connection Pedestrian Bridge (2,400 sqm), a satellite building (1,400 sqm), as well as all associated access roads, landscape, utilities and ancillary buildings. Apart from the design stages submissions, detailed information was produced for site works, stakeholder necessities and tender processes.

AECOM was able to carry out the difficult role of coordination between all parties, including the contractor, the final client, the sub-consultants, the local partner and the permitting relevant Authorities in a challenging time: 21 months from Concept Design to operation.





AECOM developed an ad-hoc BIM strategy to enhance the communication and coordination between all design sub-contractors working from multiple locations and companies.

Using BIM, architecture, MEP, structural and Civil experts were able to share information and work in continuous interactivity, resulting in a federated 3D model that stored and coordinated all necessary project information, an efficient time saving technique.

For Terminal 2 AECOM created the project's BIM standards and ongoing strategy, as well as developing specific quality assurance and quality control BIM tools under Dynamo, Python and Revit API. The team dealt with 3D coordination, 4D sequencing, 5D quantification and 6D management, also using immersive technology to create a virtual reality experience of the model.













Leading the Change



ENVRONMENT AND SUSTAINABILITY



ENVIRONMENT AND SUSTAINABILITY

Our environmental services help private and public sector clients around the world balance growth with resiliency — achieving compliance and reducing, or eliminating, risks while protecting our natural environment.

We work closely with clients and communities to solve the most complex environmental challenges throughout the business lifecycle from asset development and operations optimisation to integrated product delivery.



ENHANCING QUALITY OF LIFE



Environmental experts

.500

Audits and health and safety yearly reports



Ground recovered



ENVIRONMENT AND SUSTAINABILITY

SELECTED AREAS

- Soil and groundwater —
- Impact assessments
- Water ecology —
- Due diligence and EHS audit
- Decommissioning and demolition
- Acoustics _
- Air quality —
- Marine —
- Green building ----
- Geospatial and geographic information systems (GIS)

SELECTED SERVICES

- Environmental site investigation, support and works supervision
- Ground engineering —
- Quantitative risk assessments
- Assessment and permitting —
- Baseline and desktop studies
- Soils and water sampling and analysis
- Inland waters bathymetry ---and sediment mapping
- Legacy site management —
- Environmental site assessments (ASTM), environment, health and safety audits and due diligence
- Hazardous materials survey and assessment
- Odour studies —
- Leak detection and repair — (LDAR)
- IFC/ Equator/Green Bond principles
- BREEAM, LEED, VERDE, ----GSAS, EDGE









AECOM



PROTECTING WATER RESOURCES IN POWER PLANTS Spain

Since 1978 AECOM has been working closely with the electric power industry in Spain to balance the relationship between water resources and power plant operation. Our group of scientists (limnologists) study the properties of water bodies by analysing hydrological data, physicochemical compound characteristics and living things, which each play a vital role in protecting freshwater resources. We also have an in-house physicochemical and biological laboratory located in Barcelona.











ADOLFO SUÁREZ-MADRID BARAJAS AIRPORT

Madrid, Spain

To ensure Adolfo Suárez-Madrid Barajas Airport operates according to environmental protection requirements, AECOM is working with the airport to implement an environmental management system.

As part of this, we are providing fully integrated environmental services, including Environmental Management System supervision and maintenance according to ISO 14001; ACA certification (Level 2 Reduction) compliance support; Service for the Environmental Monitoring of Companies (SERCOMM) support and full environmental documentary control.



AECOM





BAILÍN LINDANE LANDFILL Bailín, Spain

Between 1984 and 1992 a manufacturing company dumped lindane — a type of insecticide — and other persistent organic pollutants (POPs) from its lindane production process on to its legacy lindane manufacturing facility and unlined landfill sites in Bailín Creek. The insecticide threatens to contaminate the Gallego River, which is located downstream, and widely used for irrigation and drinking water.

Since 2008 AECOM has been providing subsoil characterisation and remediation services across the sites to reduce the risk of contaminating the vital water resource. Faced with the challenge of cleaning up what is a multi-component mixture of contaminants across a complex geological setting, our multidisciplinary team is using innovative methodologies such as numerical modelling and advanced remediation tests. The project is co-funded by the EU and LIFE+ DISCOVERED.









A CULTURE OF CARING

Deeply rooted in our Safety, Health & Environment (SH&E) management system, AECOM's "culture of caring" sets an expectation for each employee, contractor and business partner to take personal responsibility for keeping our colleagues, and others associated with our work, safe.

Whether located on a project site, in the office or at home, we embrace safety as a lifestyle choice by maintaining essential safety procedures and behaviours everywhere we go.



COMMITMENT **EFFECTIVE PARTNERSHIPS** Managers will lead on safety, We work closely with all of our partners to create a safe working environment. continuously demonstrating commitment to the highest standards. PARTICIPATION All employees are encouraged to engage in helping to control the risks we face. **BUDGETING + STAFFING FOR SAFETY** The costs of managing SH&E are budgeted into every project. Our safety staff are fully trained to provide expert guidance. **PRE-PLANNING**

We assess risks and produce detailed plans to control them during design, planning and execution of work.

Safety is fundamental to AECOM's purpose — to positively impact lives, transform communities and make the world a better place.

FIT FOR DUTY

All staff come to work each day fit and well, so they do not pose a hazard to themselves or others.

INCIDENT INVESTIGATION

We investigate incidents and nearmisses to understand root causes and take action to prevent recurrence.

ORIENTATION AND TRAINING

Employees are given the latest safety training to identify and mitigate hazards to prevent work-related incidents.

REWARDING BEST PRACTICE

We assess risks and produce detailed plans to control them during design, planning and execution of work.



WE CARE FOR **OUR COMMUNITIES**

Community engagement is at the core of AECOM's Corporate Social Responsibility (CSR) program.

Our company and our employees have a long history of contributing to society and the environment by supporting pro bono, philanthropic and charitable activities in the places where we work and live — as well as in under-served communities.

We have participated in thousands of CSR projects across the globe. In our understanding, social responsibility is a fundamental element of our commitment to work towards continuous improvement and responsible management of the economic, environmental and social impacts of our activities.



BLOOD DRIVES

AECOM employees are active blood donors. Our offices in Europe continuously organise blood drives with the hope that our involvement will save lives.



COMMUNITIES

Christmas gifts, language lessons for children, work in shelters, charity running events, or cooking fairs — these are just a few examples of how we support those in need. By getting actively involved we open our minds to the challenges the world is facing.



ENVIRONMENT

As the leading environmental consultant in the world, we also care for our surroundings. To reduce the use of water and electricity we run many educational campaigns to raise environmental awareness of our employees.



AECOM



LA CAÑADA REAL Madrid, Spain

A CSR project in Madrid in collaboration with El Fanal, an association that helps families in need. A wide range of activities have been carried out in this area in order to improve their school installations to offer kids the best for their future.

Since 2018, AECOM together with a group of volunteers and teachers has led the architecture, interior design and construction project for this community in the outskirts of the city.



ABOUT AECOM

AECOM is the world's premier infrastructure firm, delivering professional services across the project lifecycle – from planning, design and engineering to consulting and construction management. We partner with our clients in the public and private sectors to solve their most complex challenges and build legacies for generations to come. On projects spanning transportation, buildings, water, governments, energy and the environment, our teams are driven by a common purpose to deliver a better world. AECOM is a Fortune 500 firm with revenue of approximately \$20.2 billion during fiscal year 2019. See how we deliver what others can only imagine at aecom.com and @AECOM.