## DESIGN AND PMCM DERISKING AND VALUE ENHANCING **REAL ESTATE INVESTMENTS**

**AECOM** in Italy







#### AECOM IN ITALY / ABOUT AECOM

# ABOUT AECON







We live where you live and understand the world's challenges. We know the importance of fresh water, clean and reliable energy, efficient transportation systems and industrial facilities, as well as beautiful and well served buildings, communities and cities.

With thousands of experts globally, we are able to serve clients in more than 150 countries across all components of a project's life cycle including design, build, finance and operation.



## AECOM BY THE NUMBERS

- Featured on Fortune's "World's Most
  Admired Companies" five years in a row
- Ranked #1 in Transportation and General Building in Engineering-News Record's 2018 "Top 500 Design Firms"
- Recognized by VIQTORY as a 2019
  Military Friendly® Gold Employer
- Received a perfect score on the Human Rights Campaign Foundation's Corporate Equality Index



Z Continents

## **US\$6B**

Market cap





# AECOM IN ITALY

Our over 80 employees, along with AECOM's solid design and multidisciplinary experience in Italy, have helped shape the world around us, building a strong reputation based on our track record of providing technical excellence to our clients.

With 20 years of experience in Italy, our team is established as a leader in environmental services and as the preferred choice for local and international clients and investors when designing, procuring and delivering corporate space or real estate investments.

AECOM in Italy, as a recognised industry leader, delivers services for a broad range of clients including blue chip corporations, real estate developers, oil & gas, chemical, pharmaceutical, manufacturing and commercial companies.



With a large team of dedicated **multidisciplinary** professionals, we strive to align our work to our clients' strategic goals and business drivers.

Our Milan office is comprised of specialists who, through co-operation with AECOM's **global network** of experts, are able to implement a comprehensive set of solutions that lead to the execution of complex projects.

We are a **global integrated** services provider with the scale and experience required to meet today's most demanding engineering, construction and technical challenges. We combine our strengths in environmental consultancy and engineering design to support **large-scale projects** at every stage of their lifecycle.

AECOM's strength is a unique multidisciplinary approach to projects. We can provide a full range of services throughout the **life cycle** of assets spanning from urban scale to infrastructure, workplaces, commercial, industrial buildings and environment.

AECOM's integrated approach addresses human, technical, environmental and economic scales to deliver **world class solutions** with strong ties with Italian regulations and market conditions.

**AECOM IN ITALY / OUR SERVICES** 

## OURTROOM OF TO SEBRICEES

AECOM partners with clients to take on their most complex challenges and pioneer innovative solutions that make a positive, lasting impact.

As the world's premier infrastructure firm, our clients in the public and private sector count on us to deliver specialized professional services throughout the project lifecycle – from planning, design and engineering to consulting and construction management.





### **Buildings**

Our integrated design, engineering, planning and cost and project management and construction teams come together to help our clients solve some of the most complex problems in the built environment. We have expertise across all sectors and have been key in shaping many of the world's major cities of today.

- Architecture
- Asset advisory
- Building engineering
- Building types
- Construction
- Economics
- Interiors
- Landscape architecture
- Masterplanning
- Program cost & consultancy
- Strategy +

### **Civil infrastructure**

Governments and private organizations around the world are pledging huge sums for investment in infrastructure projects. We are perfectly positioned to take advantage of these opportunities and to maintain our commitment to delivering a better world.

Along with AECOM's strong integrated design, build, finance and operations offering, our innovative thinking and creativity provide efficient and economical solutions for clients.

- Transportation
- Water





### **Government services**

For over 100 years, we have been helping governments make the world safer, serve their citizens, and meet the challenges of tomorrow — addressing security issues, managing and reducing socioeconomic threats, and protecting against societal vulnerabilities.

We support programs of critical national importance in defense, infrastructure, intelligence, domestic security, energy, environmental clean-up, international development and life support services.

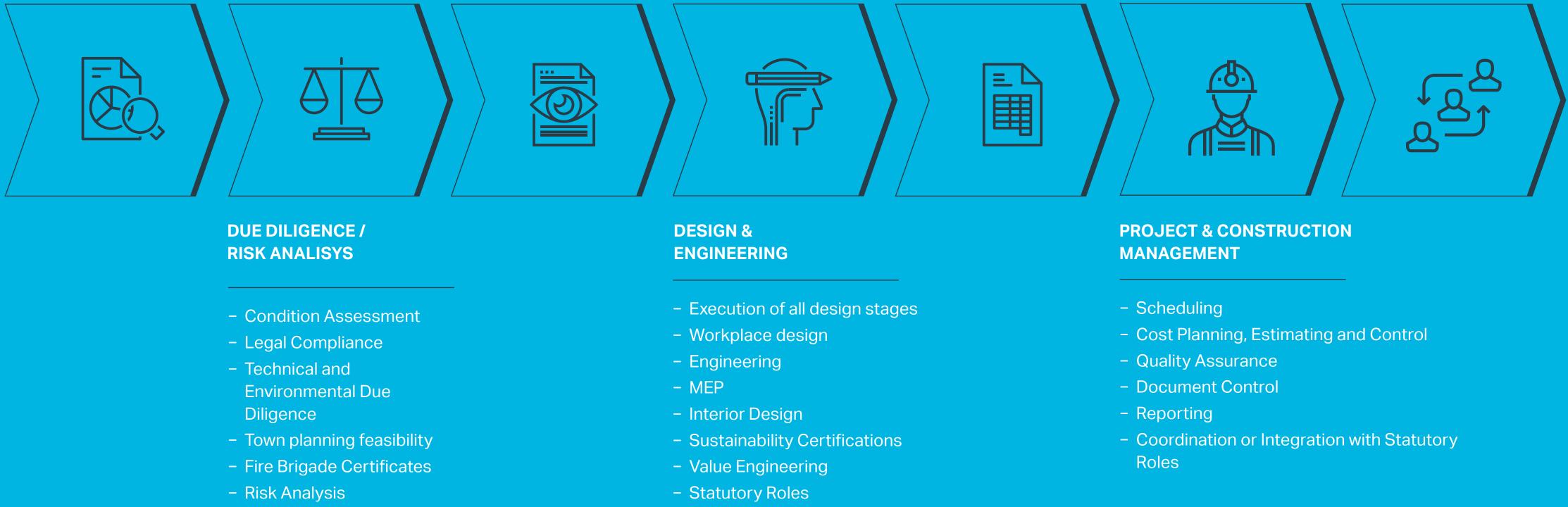
- Energy & Environment
- Government infrastructure
- Knowledge-based services
- Operations, maintenance
- Security & stability

#### SITE / ASSET APPRAISAL / **FEASIBILITY**

- Market Search
- Technical Comparison
- Legal Compliance
- Alternatives selection
- Red Flags
- Capex Appraisal
- Certifications and Authorisations
- Feasibility Study

#### **TEST FITS, CAPEX & ECONOMICS**

- Corporate Design Standards
- International Benchmarks
- Landlord vs Tenant works
- Layout Optioneering
- Future Proofing
- Capex Estimation



#### PROCUREMENT

- Supply chain analysis
- Package Strategy
- Contract Strategy
- Contract Review
- Pre-qualification
- Tender Execution
- Tender analysis
- Assistance to negotiations
- Comparison, Recommendation and Award

#### **STATUTORY ROLES**

- Direzione Lavori
- Safety Coordination at Design Phase
- Safety Coordination at **Execution Phase**
- Responsabile dei Lavori

#### AECOM IN ITALY / CASE STUDIES

## SITE / ASSET APPRAISAL / FEASIBILITY

When the need for a new facility or renovation of an existing asset arises, AECOM can assist corporations and investors in assessing the risks associated with any type of project: commercial, Industrial, warehouse or other uses.

In collaboration with realty advisors, landlords, clients and institutions AECOM can carry out early surveys, documental analysis and environmental investigations to ascertain the benefits and risks associated with the assets and/or alternative options. The selection of a preferred solution relies on a thorough, although quick, review of the permitting and authorizations status. AECOM has a strong reputation of competence and problem solving when liaising with authorities both at local and government level. With a network of qualified professionals distributed throughout the territory AECOM has all geographies covered.

**Client/project name: CITI Bank** 

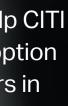
**City/region, country** Milan, Italy

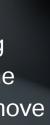
#### Description

AECOM was appointed to help CITI Bank find the most suitable option for its corporate headquarters in Milan's city center.

#### **Services**

Asset appraisal, optioneering and risk analysis related to the successful completion and move to the new location.





## DUE DILIGENCE

With over 20 years of experience in the release of highly qualified technical, legal and environmental due diligence, AECOM delivers opinions and reliable reports that reduce the risks of mistakes, omissions, and protect the client's liabilities.

A team of 15 staff dedicated and highly trained in the preparation of technical reports, ensures a rigorous process of preparation and senior review. Once the key risks associated with the transaction (whether purchase, Capex investment, greenfield development, refurbishment) are identified, AECOM prepares professional reports and presentations necessary to create confidence of investment committees, legal reviews and corporate boards. AECOM adopts world standard anti- bribery codes, guaranteeing total transparency.

#### Client/project name: Amazon

City/region, country Various, Italy

#### Description

Amazon relies on AECOM geographical coverage in Italy to assess the suitability of locations for new greenfield and refurbishment investments.

#### Services

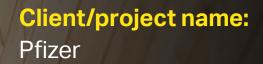
Due diligence for the site selection of various sites in Northern Italy



## **TEST FITS, CAPEX & ECONOMICS**

AECOM has the experience to run early checks over the capacity of the project to accommodate headcounts, commercial activities, hospitality experience, industrial production or other business processes.

AECOM understands the logic and processes of CAPEX reporting underpinning the investment decision making. We have an extensive database of costs to quickly generate alternatives against different risk profiles enabling us to guide the Client to choose the best way forward. Flexibility and scalability criteria are adopted so that future uncertainty of the business is accounted for. Our staff stands strong alongside the client's PM to support decision making.



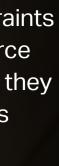
**City/region, country** Rome, Italy

#### **Description**

When Pfizer faced the constraints related to a changing workforce and underperforming facility, they requested AECOM's services to review their current office occupancy, carry out an efficiency analysis and propose a revised office layout.

#### **Services**

Business headcount and space needs, test fits, workplace analysis, design and cost estimation.





## **DESIGN** & ENGINEERING

AECOM is among the largest integrated design firms in the world. We provide, where requested, a full package of services, from conceptual design to tender documents. Alternatively, we can manage - or complement - the work of existing architects and engineers.

The use of advanced BIM or digital modeling allows AECOM to deliver integrated professional outcomes with a constant eye on budget and constructability requirements. We are trained to do design-right-first rather than engaging in costly iterations and value engineering review. AECOM applies international design standards and codes that reduce significantly the risks of mispricing and disputes with contractors.

#### **Client/project name:** Olbia Costa Smeralda Airport

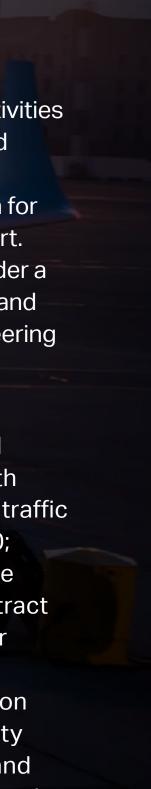
#### **City/region, country** Sardinia, Italy

#### Description

Design and management activities related to the "Expansion and **Regeneration of Olbia Costa** Smeralda Airport" in Sardinia for Geasar, operator of the airport. The project is carried out under a JV between AECOM's Milan and Madrid Offices, SPEA Engineering and other local consultants.

#### **Services**

General project of technical and economic feasibility with reference to the passenger traffic foreseen for 2030 and 2040; Final design prepared for the subsequent integrated contract with reference to passenger traffic envisaged for 2030 with a maximum construction value of € 24,950,000; Safety coordination in the design and construction phase; Construction supervision; Measurement and accounting of the works.



## PROCUREMENT

Each project requires ad-hoc procurement strategies. AECOM supports clients selecting the appropriate level of risk allocated to contractors vs the client. Our strong knowledge of the local market and supply chain allows us to balance the risk to enhance price certainty and budget control.

Each procurement model meets a specific and unique client's risk attitude. AECOM has the knowledge and experience to design tailored procurement strategies, accommodating budget limitations, design quality, innovation, client team presence, local market characteristics and programmed targets. AECOM can generate designs according to the selected strategy, investigate the local market and lead the client through a solid and transparent selection and award process. The procurement process undeniably protects clients from the risks of future disputes during execution.

#### Client/project name: New Stadium for AS Roma

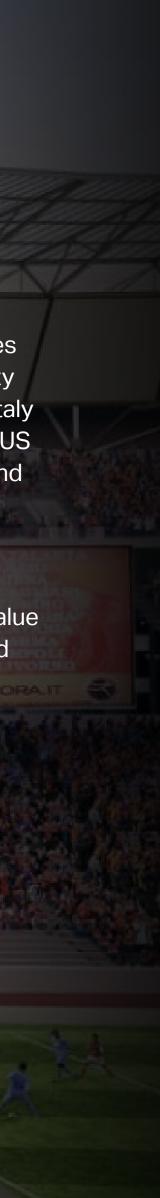
City/region, country Rome, Italy

#### Description

AECOM was the appointed Guaranteed Maximum Price contractor for the early stages of the new 55,000-seat facility in Rome. AECOM's office in Italy partnered with AECOM Hunt US to deliver price simulations and supply chain engagement to develop a GMP

#### Services

Packaging, market checks, value engineering, supply chain and subcontractor pricing



## PROJECT & CONSTRUCTION MANAGEMENT

Procurement strategies establish AECOM's role and the nature of our engagement. AECOM can assist clients with any contract model in local and international markets: high surveillance, project monitoring, project management or construction management options.

At AECOM we have extensive knowledge of the scope of work and contract obligations associated with each solution. We adopt world class standards in project management and cutting-edge software platforms and reporting tools. AECOM couples international project management with statutory roles. We have experience integrating these standards efficiently avoiding overlaps and extra costs.

#### Client/project name: Cassa Depositi e Prestiti

#### City/region, country Various, Italy

#### Description

AECOM is appointed to assist the real estate investment branch of the Ministry of Finance to provide statutory roles and project management for the delivery of three projects in the tourist sector.

#### **Services**

Project Management, Quality Control, Cost Monitoring, Statutory Roles



## **STATUTORY ROLES**

Italian applicable regulations require private clients to appoint professional roles with liabilities and functions disciplined by law. Their scope of work and authority overlays with the services provided by project managers in international practice.

AECOM provides a full package of statutory roles such as Director of Works (Direttore Lavori), Safety Coordinators in Design & Execution Phases (Coordinatori della Sicurezza nelle fasi di progettazione e esecuzione), Responsible of Works (Responsabile dei Lavori) using in house high caliber professionals or externally sourced staff. When coupling project management with statutory roles we achieve the highest level of fee efficiency and authority ensuring the best service to safeguard our client's integrity and project delivery results. Our world standards in Health, Safety and Environmental guarantee safe projects and sites.

#### **Client/project name:** Generali Real Estate

#### **City/region, country**

Various, Europe

#### **Description**

Generali Real Estate appointed AECOM's office in Italy to deliver a unified procedure for the efficient implementation of HSE control over their projects in Continental Europe.

#### **Services**

Legal base review, gap analysis, procedure implementation and training to staff across Europe

## DIGITAL DELIVERY AND INNOVATION

It's no secret that infrastructure and our built environment are changing. The impact of recent technological advancements has been nothing short of transformative.

With a widening infrastructure funding gap and construction productivity at a low, digital tools and processes are being hailed as the key to unlocking the power of integrated delivery required to close the gap and accelerate the progress of critical infrastructure.



Technological advancements are bringing about new ways to optimize project delivery, increase productivity and create efficiencies throughout the design and construction process.

By rethinking technology's role in how we design, build and operate built environment assets, we are able to unlock the best outcomes for our clients — better quality, greater reliability, faster delivery and the highest safety standards.

We are pushing the industry forward through the creative application of existing tools and by inventing new ones. We're recruiting the brightest talent and helping them develop the right mix of traditional and digital skills to create the built environment of the future. Through our global digital solution networks and industry partnerships we're connecting our global digital expertise to share best practices and create world-class solutions that will transform the industry.

Read on to find out how we're accelerating the industry's digital transformation to solve our clients' most complex challenges around the world: from the digital engineering solutions that are transforming design, to the ways we're harnessing the power of data and from the new construction techniques that are changing how we build, to the way we're visualizing our work like never before.

Digital engineering

#### How does **AECOM** use digital delivery and innovation?

Data capture and analysis

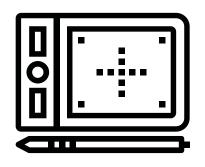
Delivering projects faster, smarter and better

Using technology to unlock the power of integrated delivery

Modern construction techniques

Immersive technologies





#### **DIGITAL ENGINEERING**

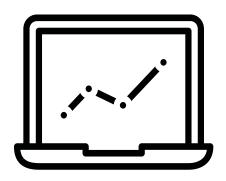
Technology has the power to transform how we design. We are embracing digital engineering to provide smarter, faster, better and safer solutions to our clients' biggest challenges.

- Design Anomaly Detector
- Construction Optimization
- Digital Workflow
- Digitally Transforming
- MEP Engineering





#### AECOM IN ITALY / DIGITAL DELIVERY AND INNOVATION



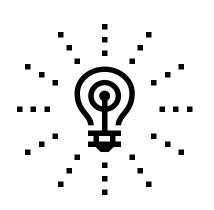
#### DATA CAPTURE AND ANALYSIS

Increasingly reliant on smart technologies in our lives and work, we create 2.5 quintillion bytes of data every day. That's 90 percent of the world's data produced in the past two years alone. From finance and feasibility to design, construction, operations and maintenance, we're harnessing the data explosion, using cutting-edge techniques to collect, process and analyze project information to improve accuracy, safety and efficiency.

- Design Anomaly Detector
- Construction Optimization
- Digital Workflow
- Digitally Transforming



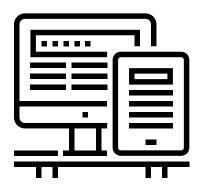
#### AECOM IN ITALY / DIGITAL DELIVERY AND INNOVATION



#### DELIVERING PROJECTS FASTER, SMARTER AND BETTER

While the industry has wrestled with its productivity gap for many years, the time has come to embrace innovation and take a big leap forward. We now have the keys to unlock the future — and they lie in the combination of new delivery models and the smart use of technology.





#### USING TECHNOLOGY TO UNLOCK THE POWER OF INTEGRATED DELIVERY

Digital tools can bring efficiencies in each individual service line, but they also maximize the efficiency of an asset over the entire project lifecycle, resulting in lower total cost of ownership and enabling the full power of an integrated offer.



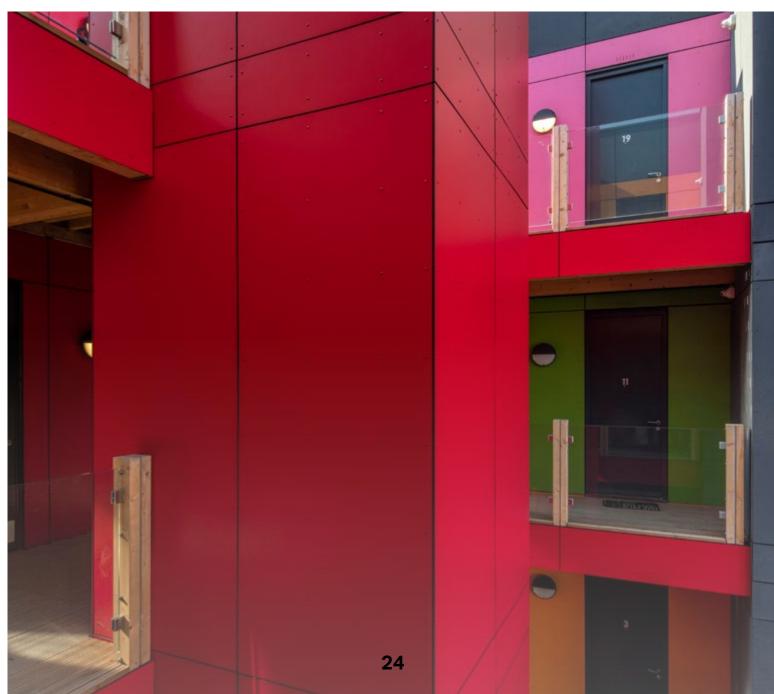


#### MODERN CONSTRUCTION TECHNIQUES

Technologies and processes such as manufacturing, offsite construction, 3D printing and robotics have the potential to fundamentally change the way we build.

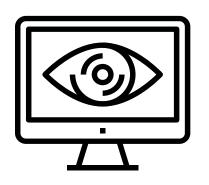
- 3D Printing
- Modular in Construction
- Site Intelligence











#### **IMMERSIVE TECHNOLOGIES**

Blurring the lines between physical and digital worlds, virtual reality (VR) and augmented reality (AR) are helping us visualize projects like never before.

Whether supporting public consultation or engaging stakeholders in the design process, immersive technology is helping our clients make better-informed decisions, with confidence.





#### About AECOM

AECOM (NYSE:ACM) 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 2018. See how we deliver what others can only imagine at aecom.com and @AECOM.

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