



DEVELOPMENTS

IN THE INDUSTRY

Networking | Education | Opportunities



In last 10 years,

platforms such as Expo and various other initiatives brought a step change in the profession. UK Government, taking on its increased awareness, initiated the efforts to put strong controls on complex infrastructure and major projects which lead to the birth of the **IPA (Infrastructure and Projects Authority)** which sits at the heart of government, reporting to the Cabinet Office and HM Treasury.

The Institution of Civil Engineers formed the dedicated group “**The Infrastructure Client Group (ICG)**” that brings together the UK’s most progressive economic infrastructure clients in partnership with government and industry. ICG’s key purpose is to lead the acceleration of the improvement and alignment in the delivery and development of UK infrastructure for **the benefit of the economy, society and the environment. Major projects Association** took wide range of initiatives to improve the initiation, delivery and outcomes of major projects.

Various initiatives such as **Project 13** and **Construction Playbook** were drafted by the community with the support from UK Govt.





National Audit Office

UK National Audit Office (NAO)

UK National Audit Office (NAO) joined by creating wide range of **frameworks** for **providing capabilities** that underpins the UK's defence policy and for wide-ranging social and economic projects including Net Zero carbon emissions targets.

With these net zero targets falling in Project Controls KPI's, The International Coalition for Sustainable Infrastructure (ICSI) was founded in 2019 by The Resilience Shift, the American Society of Civil Engineers (ASCE) and its ASCE Foundation, the Institution of Civil Engineers (ICE), the Global Covenant of Mayors for Climate & Energy (GCoM), WSP and LA Metro, among others.

They aim to bring together the entire value chain of infrastructure and unlock the opportunity of using engineers as a driving force for positive impact and climate action.

Refer to the **ICSI roundtable discussion paper** following the COP26 infrastructure roundtable in Glasgow. On academic's front, the Department for Education took note of Project Controls as a profession and initiated the Trailblazer apprenticeship program at **Level 3 – Project Controls Technician** with **Level 6 – Project Controls Professional**.



On the US front, Project Controls has increasingly been promoted by industry organizations as well as state and federal governments as the differentiator for program & project management. As an over 50-year-old industry organization specializing in cost engineering/project controls, **AACE International** has brought industry best practices to both the process and the commercial construction industries, with a complete body of knowledge called the Total Cost Management (TCM) Framework providing “an integrated approach to portfolio, program, and project management”.

The TCM addresses best practices across the full life cycle of programs, projects, facilities, and services. The TCM is the guide to the development of AACE’s over 100 Recommended Practices on topics ranging such as scheduling, cost estimating, earned value management, risk management, and forensic analysis and the basis for respected certifications in project controls disciplines.



The well-known program and construction management industry organization, **Construction Management Association of America (CMAA)**, has written industry Guidelines for the disciplines of PMCM, including Time, Cost, Risk, Claims, Quality Management, and Contract Administration, along with Sustainability and CM standards of practice. CMAA also provides certifications in construction management has a well-established network of chapters supporting construction management and produces surveys of construction manager fee structures.



The American arm of the **Royal Institute of Chartered Surveyors (RICS)** has brought their global standards for chartered surveyors to the US and offer educational and technical sessions to ensure standards are met. **The College of Performance Management** has long shared, promoted, and advanced the use planning, control, and performance management, providing support the EIA-748 global standard of earned value management.



The organization holds conferences and industry sessions to expand understanding of EVM, On the federal government level, departments like the United States Army Corps of Engineers (USACE) have developed detailed specifications for scheduling which provide in-depth requirements and reference AACE recommended practices.

The National Defense Industrial Association (NDIA) published and updates **the Earned Value Management System Guideline Scalability Guide** that helps the industry implement EVM according to EIA-748. GSA, as the largest landlord in the world, has developed their requirements for construction managers to meet best practices of CMAA and AACE across the organization.



NDIA



As the federal agency, responsible for audits for all federal programs, **GAO** has developed Guides which disseminate best practices for managing programs in cost, schedule, alternatives, and technology. These guides have been developed in cooperation with industry experts and are used to plan, manage and assess federal programs.

On the other side of the world, Australia leads a range of initiatives to improve the project delivery by setting up statutory bodies such as **Department of Infrastructure, Transport, Cities and Regional development** which put the spotlight on enhanced governance and delivery arrangements – find out more in a **talk by Ben du Bois**.

Infrastructure Australia and regional states set up bodies such as Infrastructure Victoria and Office of Projects Victoria to support these efforts by drafting 2021 Infrastructure Market Capacity Report



The 2021 Infrastructure Market Capacity Report has been recognised internationally as an industry leading approach towards a common challenge; **Advisory Papers on Infrastructure Resilience ; New Assessment Framework** and Sustainability Principles. **The Grattan Institute drafted range of similar reports such as The Grattan car plan: practical policies for cleaner transport and better cities, Towards net zero: A practical plan for Australia’s governments, How to get better bang for transport bucks** and The rise of megaprojects: counting **the costs** to further bring awareness and contribute towards these initiatives. Additionally, Australia’s professional bodies **ACES** and **RES** too led the efforts on professionalism in Project Controls and initiated range of actions supported by **Engineers Australia** such as considering Chartered status for Project Controls professionals.



The O&G and construction sector including residential and commercial real estate, essential infrastructure (transport, power and water systems) and industrial developments (light and heavy manufacturing) throughout the Middle East and Gulf Region has seen phenomenal growth over the last 40 years and nowhere is it more true than in the United Arab Emirates.

Just for Oil and Gas, there are 598 projects with a value of US\$ 550bn planned to commence operations in the Middle East between 2022 and 2026. About US\$77bn worth of construction and transport projects were reported to be at the tender stage, and an additional US\$352bn worth of contracts were at the design and study stage—mostly in government-backed infrastructure projects linked to the

development of highways, railways, seaports, airports, bridges and water sewage systems. Real estate projects, energy transition, transport (especially railway development), energy sector capacity building (oil, gas and liquefied natural gas production) and industrial developments will feature heavily in the Middle East project pipeline through to 2026.



Various associations such as AACE - UAE Section and PMI UAE Chapter and Arab council of Project Management have actively engaged in promoting the profession. In addition to these, the UAE Contractors Association, is a non-profit organization whose principal objective is to strengthen the UAE construction industry and the construction contracting business so that they can sustain their positive role in the task of national development of the UAE. In pace with the growth of these associations, the government of the UAE have also taken on a leadership role in helping the advancement of project management & controls.

With the above in view, the Project Controls Expo UAE, Middle East will focus on the following:

Construction innovation: The project control expo has placed a great deal of emphasis on innovative construction techniques and processes. The expo has been a great platform to discover the latest advancements in the sector by gathering international industry professionals to showcase new products, materials, and technologies.



Adoption of technology: Technology plays a vital role in improving the quality of projects in the Middle East. The expo has provided the platform to learn more about the technology which is being used to build structures and execute large projects, allowing industry professionals to make better-informed decisions.

Emphasis on local content: The project control expo also aims to increase the use of local content and supplies in construction. This could help promote a stronger and more resilient economy in the region, reducing reliance on foreign suppliers.

Sustainability in Oil & Gas - Oil and gas firms are redefining project delivery with sustainability in mind. They're adopting advanced tech to cut emissions, investing in renewables, and prioritizing eco-friendly practices. By embracing sustainability, they're not just reducing their environmental impact but also boosting efficiency and resilience in the energy sector.



Improved infrastructure: As part of the expo, participants can gain insights into how infrastructure projects are implemented across the region, gaining insights on the advantages of specific materials, best practices for building management and safety, and much more.

Creating business opportunities: The expo is a great platform to explore business opportunities and develop networks. With many foreign and local industry experts in attendance, attendees are able to gain first-hand knowledge about upcoming trends in the region and source potential customers.

With regards to how much % cost of Project Controls/Management on a given project, in reference to **PMI report**, the combined project Controls/Management costs for all phases of a project total somewhere between 7–15 percent of the project's TIC (Total Installed Cost). The sheer scale of investment that runs in trillions would offer the PC/PM cost with easy maths, demonstrating the vital role played by Project Controls in this thriving and huge sector.



Project Control Expo aims to continue offering support to all ongoing initiatives for effective project delivery globally especially when JV's are burgeoning in the construction industry.

With ambitious infrastructure projects across the world, we would like to continue bringing professionals, apprentices and professional organisations together to benefit the industry and to understand the skillsets that are required for future generations to deliver. Technology now plays a large part in everyday working and we have innovative technology providers showcasing new opportunities with machine learning, AI and extensive use of data for predictive analysis. For this, technology is expected to play critical role in future events.