



DRIVING
INNOVATION
PRODUCTIVITY AND
EFFICIENCY

RETHINKING PROCUREMENT TO DRIVE INNOVATION



If innovation on a project is to be achieved, procurement should be the starting point. AECOM's **Alex Mathewson** and **John Bradley** explain how even the smallest changes can yield significant rewards.

The imperative to innovate in construction has never been greater. Productivity and sustainability issues, including net zero carbon, need to be addressed and resilience designed into our infrastructure and buildings. However, while innovative digital tools, property technology ('PropTech') and modern methods of construction (MMC) exist to facilitate this change, business-as-usual procurement methods are a frequent barrier to their adoption, particularly for SMEs.

Procurement, especially for complex infrastructure projects, is a highly skilled exercise. Too often it is presumed that if common best practice is followed then the best outcome is achieved. The result is often compliant, inflexible 'tried-and-tested' procurement that leaves no room for innovation. After all, you can't expect innovation post-contract if you've run a compliant, inflexible procurement process as the space to innovate has already been removed from the process.

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Furthermore, it is important to note that innovation in procurement doesn't automatically equal increased risk. Indeed, our experience shows that clients who adopt bold procurement strategies to encourage innovation right from the start are reducing risk while reaping significant rewards.

The UK government's Industrial Strategy states that “we must use strategic government procurement to drive innovation and enable the development of UK supply chains”. At the same time, the call for innovation from the private sector continues to grow louder. ➔

However, Bowley (1960) found that construction is an adopter of innovations from other industries, rather than a source of innovation ¹, and this appears to still very much be the trend today.

There are several reasons for this. Research and development (R&D) is costly and is often the first thing to go as margins continue to be squeezed and cash flow worsens.

The Construction Act ² was introduced to encourage prompt payments to suppliers, however it is often ignored and infrequently enforced. The SME R&D tax credit scheme and Research and Development Expenditure Credit (RDEC) are both designed to promote R&D but don't support all-important upfront costs needed to drive innovation.

Furthermore, fixed price contracts and a lack of market engagement in procurement mean suppliers often have no incentives to go beyond minimum contractual obligations and don't have room to innovate.

So how can we approach procurement differently to boost innovation in design and construction?

SIX WAYS TO RETHINK THE PROCUREMENT PROCESS

These challenges outlined above can be met. Here are six small to significant changes that can be made to nurture innovation and deliver improved outcomes.

1/ FLEXIBLE AND PROPORTIONAL RESPONSES

Requesting inflexible, disproportionate responses is the first thing that limits innovation. The cost of providing both a standard response and an alternative proposal that highlights an innovative response is not possible for most tenderers, especially SMEs. Requirements should be also proportional — for example, requesting £10 million public indemnity insurance for a £40,000 innovative pilot project would be a barrier from the outset. Instead, write a procurement strategy and tender documents that have some flexibility to invite innovation.

2/ REALISTIC TIME-SCALES

Both procurement teams and responders need to be given realistic time-scales to conduct and respond to procurement processes, without exceeding the 12-month limit from ITT to award as proposed in MACE's recent *'Manifesto for Construction'*. Requesting complex tender responses in as little as a week removes the prospect of tailored innovation.

3/ EARLY MARKET ENGAGEMENT

Early consultant engagement allows clients to test alternative procurement approaches to limit risk. Our EMEA Client Listening programme has consistently found that clients who have shared their requirements and contractual mechanisms with the market in advance have found their openness rewarded with greater innovation on projects.

4/ THINK CAREFULLY ABOUT LOTS

Lot strategy should be tailored to what you want to achieve. You may wish to realise efficiencies by packaging lots together over a large-scale programme, in which case inviting turnkey providers who can innovate at scale makes sense (setting aside an 'innovation fund' as part of a multi-million-pound contract is often a prudent investment in this case). Conversely, if you are looking for innovation that disrupts the status quo, then breaking the procurement into many smaller lots invites specialist suppliers who can bring new and fresh ideas to the table.

5/ ASSESS CAPABILITY, NOT EVIDENCE

Procurement teams are often under pressure to complete compliant procurement quickly. However, this can lead to overly bureaucratic procurement processes that favour asking many questions over relevant questions, disadvantaging respondents who cannot commit to such resource-intensive exercises. The adoption of frameworks that can pre-approve suppliers makes procurement far more streamlined, allowing focus to be directed on assessing capability for innovative problem solving. Using the analogy of hiring a new employee, once the basic criteria has been met in terms of education and requisite years of experience, the recruitment process is about assessing the candidate's capability to not only do the job but also bring fresh, innovative thinking to the role.

6/ MOVE TO PROGRAMMES, NOT SINGLE PROJECTS

Game-changing innovation is difficult to achieve when single schemes are procured on an ad hoc basis in the open market; all this achieves is a 'race to the bottom', where squeezed margins limit innovation, and encourages cost cutting to the detriment of the end result. To counter this, we propose the most significant procurement change: a move to programmes, not projects.

Frameworks provide a good starting point for this move, though they largely still look at single projects. AECOM is currently appointed on a number of multi-disciplinary, public sector frameworks — including Scape Group's BECS framework (as part of the Perfect Circle joint venture), CCS, NHS SBS, Homes England and Clear Futures frameworks. These frameworks allow us to form partnerships with SMEs to deliver programmes of work on which we can innovate collaboratively. We adhere to Fair Payment as part of the BECS framework, paying our suppliers within 28 days regardless of whether we have been paid, freeing them to innovate alongside us.

Where a programme approach to procurement is being taken — for example by the UK Government on its Locations programme or Building 2050 project — suppliers have confidence to develop innovative approaches, secure in the knowledge that the pipeline will provide time to finesse these approaches to evidence success and efficiencies, providing a return on the investment required to innovate at the start of the programme. ➡

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THE IMPORTANCE OF CHANGE

Government advocacy for modern methods of construction and digital processes alone isn't enough to drive the innovation we need. Procurement is the link and enabler between advocacy and reality. It has the ability to help draw out innovative solutions and outcomes by allowing suppliers and the market to provide responses based on their knowledge and experience.

In addition to government advocacy and pilot programmes, more openness and collaboration at the start of the process combined with flexibility at the back end of procurement will result in greater innovation in our industry and better outcomes for communities as a result.

4.3B

Intelligent client model for the ambitious £4.3 billion Heathrow Terminal 5

CASE STUDY

HEATHROW TERMINAL 5

Heathrow Airport adopted the intelligent client model for the ambitious £4.3 billion Terminal 5, taking on and managing project risk so that they could pursue a strategy of rewarding innovation-enhanced performance from all participants. An integrated team led by Heathrow was responsible for each of the 147 sub-projects and innovations were actively sought out and developed

from the 15,000 suppliers involved. They included product innovation in the off-site fabrication of the roof structure, technological innovation on the tunnelling process as well as other equipment and process innovations. The result was that, unlike the majority of megaprojects, T5 was delivered on time and on budget.

CASE STUDY

HMRC'S LOCATIONS PROGRAMME

Programmes of work such as HMRC's Locations Programme, on which AECOM used digital libraries to speed up design and reduce cost, has set the blueprint for future procurement: utilising digital innovation has delivered high-quality outcomes in a streamlined and cost-effective way.

CASE STUDY

FOREIGN & COMMONWEALTH OFFICE (FCO)

The FCO's Overseas Principal Support Provider framework is a catalyst for innovation. As part of the FCO framework, we were able to devise a completely new approach to seismic protection in the retrofit of old buildings overseas. The investment of time to design this approach would not have been possible on a single project, but the pipeline provided by the FCO framework created the catalyst for this innovation that has improved safety and resilience outcomes. 