

Green Paper: Transforming public procurement

Consultation response from the Royal Academy of Engineering

10 March 2021

Summary

- Procurement of innovation can deliver a wide range of benefits, from better value and improved public services to acting as an effective stimulus for innovation and business growth with government providing the pull-through of novel concepts with market potential. Procurement is an under-leveraged tool in the UK's innovation ecosystem and has the potential to have a transformational effect on companies' investment in R&D in the UK, stimulate innovation and adoption across supply chains and deliver best value to the public purse while achieving the government's priorities such as the net zero target.
- Significant culture change is needed across government departments so that they are more open to procuring innovation. Successful implementation of the reforms will also require culture change. Priorities for an innovation-friendly procurement culture include:
 - Leadership that prioritises culture change, values innovation and has a clear vision of the purpose of the procurement project.
 - Radical change to risk perception in public procurement to create a culture that takes appropriate risks and focuses on outcomes.
 - Collaborative relationships between buyers to ensure there is good understanding of the buyer's needs and offer opportunities for co-creation of innovative solutions and risk management.
 - Government departments having a joined-up approach to provide the 'golden thread' identified in the Green Paper to deliver the value procurement.
 - Increasing pre-procurement processes, including demonstrators, living-labs and testbeds.
- Outcomes-based procurement processes should be deployed to drive low carbon innovation in public-sector infrastructure and building projects. Procurement is a vitally important lever in delivering the net zero transformation at pace and at scale, especially in the construction sector which represents a significant proportion of the UK economy and where government is a major customer. However, despite reductions in emissions since 1990, the built environment still contributes around 40% of the UK's carbon emissions¹. Whole life analysis is important to take into account the capital and operational carbon, as well as the impacts of demolition or regeneration.

¹ [Climate Change](#), UKGBC. [Accessed on 03/03/2021]

- The Royal Academy of Engineering supports the move to ‘most advantageous tender’. This presents a real opportunity to drive the necessary culture change and deliver longer-term cost-benefit balance to society, the environment and wider policy goals. The key to success will be empowering procurement teams across government to consider wider benefit and desired outcomes, with frameworks that make procuring for ‘most advantageous tender’ and for innovation the easiest path, especially compared to prioritising lowest cost.

Introduction

1. The Royal Academy of Engineering welcomes the opportunity to respond to the UK government’s consultation on the Green Paper: Transforming public procurement. The Academy’s submission has been informed by the expertise of its Fellowship, which represents some of the nation’s best practicing engineers, including leading researchers, industrialists, innovators and entrepreneurs.
2. The Academy’s response focuses on the procurement of innovation. Procuring for innovation can deliver better value products, processes and services that can improve public services. Beyond delivering a better service, a successful procurement strategy can be an effective stimulus and signal for innovation, business and economic growth, leveraging private investment and advancing the pull-through of innovative solutions where additional domestic sales or exports will result. Procuring for innovation can drive the adoption of innovative solutions across supply chains, create new markets or provide that first contract to an innovative business that allows them to grow. Innovation can be incremental or disruptive, carrying increasing levels of risk but also potentially rewards². These reforms provide an opportunity to deliver cost-benefit balance and wider benefit to the public purse.
3. Procurement is an under-leveraged and powerful tool in the UK’s innovation ecosystem. Public procurement has the potential to have a transformative effect on companies’ investment in R&D in the UK, large and SMEs³. It provides a huge opportunity to stimulate innovation. However, engineering companies have found that decisions on public procurement prioritise low cost over best value, and risk aversion hinders the introduction of innovative solutions⁴. If public procurement processes discourage R&D and innovation, it can push businesses to move those activities to other more receptive countries.
4. Extensive recommendations, advice and evidence already exist on how public procurement for innovation could be improved. However little progress on implementation has been observed, and this is most likely in part due to a change in culture needed for successful implementation. Now is the time to take down the barriers preventing their uptake and make innovation a key component of the public procurement process to procure for the most advantageous tender and bring cost-benefit balance to the public purse whilst delivering on the UK government’s ambitions as a science and innovation superpower and the Net Zero target.
5. This response builds on previously published Academy work including [Public projects and procurement in the UK](#)⁵ and the [public procurement](#) explainer⁶ from [Increasing](#)

² [Public projects and procurement in the UK](#), RAEng, 2014.

³ [Public procurement](#), RAEng, 2018.

⁴ [Increasing investment in R&D: business perspectives](#), RAEng, 2018.

⁵ [Public projects and procurement in the UK](#), RAEng, 2014.

⁶ [Public procurement](#), RAEng, 2018.

[investment in R&D: business perspectives](#)⁷, as well as input from Fellows and the Academy's networks.

Q8. Are there areas where our proposed reforms could go further to foster more effective innovation in public procurement?

6. The reforms outlined in the Green Paper offer a real opportunity to leverage public procurement as a tool to drive innovation and deliver the best, and wide, cost-benefit balance to the taxpayer. In particular, the move to 'most advantageous tender' and simplification of procurement processes are important steps in reducing the barriers to procuring for innovation from businesses of all sizes and across the UK. However, while the framework is the responsibility of Cabinet Office, responsibility for effective implementation of the reforms lies with departments across Whitehall, and will depend on enabling the right behaviours and culture change (Paragraphs 7-10). Similarly, the pre-procurement processes, detailed in Paragraphs 18-28, which are crucial for procuring innovation also lie outside of Cabinet Office.

7. The conversation around improving the procuring of innovation is not new and will require significant **culture change** to be more open to innovation. We welcome the Green Paper's intention 'to establish a more innovation friendly culture' although the challenges of implementing culture change should not be underestimated. **Leadership** will be crucial to foster successful culture change and drive innovation in public procurement, including changing **risk perception**, introducing **collaborative ways of working**, including across government, and with a **longer-term outcomes focus** and assessment of value or cost-benefit balance. Innovation needs to be the easiest, or path of least resistance, to incentivise and empower procurement teams and engender change culture.

8. **Leadership and a clear vision of the purpose of the procurement project are critical**⁸. Procurement project leaders have a key role to play, as well as Ministers and Permanent Secretaries across government, to set out a strong and clear vision for public procurement. Consistent leadership will examine the strategic choices made in procurement and measure them against the overall public gain. Conversely, inconsistency in the vision and priorities associated with a project can cause delays and failures. If it is unclear whether budget or deadlines rule in a project, the result can be that neither is met. Once clarity of vision has been achieved and the right processes have been put into place, all parties involved need to buy-in to the project. Process alone is not enough: we need leaders to encourage all players to engage in the right behaviours for procurement, and especially for the procurement of innovation. Leaders in government should champion existing good practices and implement lessons from within government and the private sector, as detailed in Paragraph 10, to best leverage the greater flexibility announced in the Green Paper and support innovation.

9. **Radical change to risk perception in public procurement is needed to realise its potential impact, creating a culture that takes appropriate risks and focuses on outcomes**⁹. There can be a tendency to err towards risk aversion in the public sector when the financial impact, and public reaction to it, of failures in procurement can be highly significant. This is especially true in the procurement of innovation. Innovation always introduces risk, but if the risk of choosing an innovative product or process mitigates a greater risk, then it is a risk worth taking. Government needs to find ways of accepting and managing risk and the potential for failure where there is a desire for innovation or

⁷ [Increasing investment in R&D: business perspectives](#), RAEng, 2018.

⁸ [Public projects and procurement in the UK](#), RAEng, 2014.

⁹ [Public projects and procurement in the UK](#), RAEng, 2014.

an unavoidable degree of risk. It is also important to note that a rate of failure in procurement projects does not necessarily equate to an equivalent wasted cost. By factoring in the risks associated with innovation early in the planning stage, failures can be identified early and a change of direction can be implemented before severe financial ramifications occur. The leadership in public procurement needs to signal acceptance of risk, with a clear framework for risk tolerance and risk sharing with contractors. Opportunities for risk-sharing, for example pre-procurement processes described in Paragraphs 19-28, can encourage industry to propose innovative methods and solutions with the confidence they can still win a tender with innovation and deliver better cost-benefit balance to the taxpayer. New approaches to risk management should include improving public acceptance of occasional failure.

10. **Government should implement good practice and ways of working that support public procurement of innovation**^{10,11}.

10.1 There have been a number of initiatives aiming to improve the effectiveness procurement and its ability to drive innovation both outside and within government that government can learn from, including Project 13¹² and the Value Toolkit¹³, as well as examples of success in public procurement, from the 2012 London Olympics¹⁴ to the procurement of COVID-19 vaccines¹⁵. The wealth of knowledge in the private sector could also be leveraged by bringing in independent advice or seconding industry thought leaders with practical experience in strategic procurement into the public sector.

10.2 **Government departments should take a joined-up approach to provide the ‘golden thread’ identified in the Green Paper to deliver the value procurement**¹⁶. Taking a holistic system view of the project and identifying the interactions and interdependencies of individual elements of the projects, including those that may go across government departments and priorities, can allow the identification of critical interfaces, opportunities for longer term value, objectives or purpose, and contribute to building the overall vision of that project, especially on large projects or projects deploying multiples of the same, for example building multiple schools or vehicle charging stations. Practices currently vary across government departments; being more consistent in approaches to procurement will help industry understand how they should bid for government contracts and how they should deliver contracts to government. Cabinet Office, as the rule setters, and HM Treasury, as the funders, should be closely involved in building a joined-up approach to provide this ‘golden thread’.

10.3 **The move to ‘most advantageous tender’ should be used to drive the culture change needed for innovation and enable a long-term and outcomes focus in public procurement.** Procuring innovation can deliver cost savings to the project, however that is not the only benefit that can be derived. A focus on a wider range of benefits such as economic growth, job creation, demonstrating solutions with potential for export, innovation uptake, productivity, lifecycle maintenance or management, carbon footprint for example, can provide a lens to examine the value procurement can deliver to the UK taxpayer beyond the limited view of project cost.

¹⁰ [Public projects and procurement in the UK](#), RAEng, 2014.

¹¹ [Public procurement](#), RAEng, 2018.

¹² [What is project 13](#), Institution of Civil Engineers. [Accessed 24/02/2021]

¹³ [Value Toolkit](#), Construction Innovation Hub. [Accessed 24/02/2021]

¹⁴ [Public projects and procurement in the UK](#), RAEng, 2014.

¹⁵ [UK Vaccine Taskforce 2020 Achievements and Future Strategy](#), BEIS, December 2020.

¹⁶ [Public projects and procurement in the UK](#), RAEng, 2014.

10.4 Collaborative relationships between buyers and suppliers are vital for successful innovation as they ensure there is good understanding of the buyer's needs and offer opportunities for co-creation of innovative solutions and risk management. More collaborative working and pre-competitive processes can enable better design of projects and contracts with the right flexibility for effective delivery. When procuring for innovation, an open channel of communication between a client and supplier, pre-competition stages to plan for the right specifications or a two-stage bidding process can enable the commissioner to become a reliable and supportive lead client who procures new designs and products from industry, whilst enabling industry to best understand to problem to solve or outcome to deliver and put forward suggestions. Procuring of innovation benefits from project-appropriate metrics, rather than a one-size-fits-all approach. This dialogue can also help the procurer best understand and manage the level of risk. This can encourage investment into smaller companies.

10.5 The tender process should be clear and transparent, including the evaluation criteria to enable companies to best understand what needs to be delivered and put forward the most competitive tenders.

11. Outcomes-based procurement processes should be deployed to drive low carbon innovation in public-sector infrastructure and building projects¹⁷. Procurement is a vitally important lever in delivering the net zero transformation at pace and at scale. 'Most advantageous tender' should be used for procurement to act as a key stimulus for the construction sector to deliver outcome-based whole-life carbon targets and adopt innovation. Government should use outcomes-based procurement processes for all public sector infrastructure and building projects drawing on international best practice in low-carbon procurement. The National Engineering Policy Centre has identified the need for urgent change in procurement practice to reflect broader definitions of whole-life value including whole-life carbon performance and not just short-term cost. Whole life analysis is important to take into account the capital and operational carbon, as well as the impacts of demolition or regeneration. Best engineering practices and engineering innovation should be at the heart of the design and deployment of all new infrastructure ensuring it dramatically reduces global greenhouse gas emissions throughout its lifecycle, including during construction. The balance of risk in outcomes-based contracts should be well thought out and managed, considering the maturity of the contractor and creating a safe space with tolerance on additional cost and agreed risk to mitigate for unintended consequences and ensure successful delivery of desired outcomes.

11.1 The construction industry represents the building blocks of the community and is a crucial component of the UK economy, contributing 6.7% of GDP¹⁸. However, despite reductions in emissions since 1990, the built environment still contributes around 40% of the UK's carbon emissions¹⁹ and the global construction industry is directly responsible for 11% of global carbon emissions²⁰. As a result, urgent transformation of the sector is required over the next five years if low carbon building and infrastructure projects are to contribute to the UK's reduction in greenhouse gas emissions of at least 68% by 2030²¹. Government, as a major client of infrastructure and building projects, must now change its own relationship with the construction sector. The Academy is due to publish a report on decarbonising construction in the spring.

¹⁷ [Beyond COVID-19: laying the foundations for a net zero recovery](#), NEPC, 2020.

¹⁸ [Construction](#), HM Government, 2013.

¹⁹ [Climate Change](#), UKGBC. [Accessed on 03/03/2021]

²⁰ [Global Status Report for Buildings and Construction 2019](#), IEA, 2019.

²¹ [UK sets ambitious new climate target ahead of UN Summit](#), HM Government, 3 December 2020.

12. Defence is a significant proportion of the procurement budget, and has its own specific complexities and opportunities for innovation. However, engineering companies still perceive the Ministry of Defence (MoD) as risk-averse and prioritising low cost at the expense of considering the broader benefits of maintaining UK capability with procurement. The recommendations in the points above around culture change should be considered alongside ongoing initiatives in the MoD, such as the outputs from the Integrated Review, the review into the UK's defence and security industrial strategy and previous reports such as '[Growing the contribution of defence to UK prosperity](#)'²², to ensure that best value and wider benefit can be delivered to the public purse through defence procurement.

Q9. Are there specific issues you have faced when interacting with contracting authorities that have not been raised here and which inhibit the potential for innovative solutions or ideas?

13. The Academy has spoken to chief technology officers, chief engineers, and in some cases chief executives responsible for business decisions about R&D at engineering companies across a range of sectors, sizes and locations, to understand which aspects of the UK environment encourage or discourage further R&D and innovation²³. Some of the specific issues that have not been raised in the Green Paper and inhibit the potential for innovative solutions or ideas are detailed below.

14. **Profit capping can strongly disincentivise R&D investment**²⁴. Profit capping plays an important role in industries such as regulated utilities and defence. However, not only does it decrease funds available for R&D, it also makes it difficult for companies to attract high risk investors that are willing to support innovative work.

15. **Government should take a pragmatic approach to Intellectual Property (IP) handling, where it is crucial to small and innovative businesses but may not benefit the UK taxpayer unless the government intends to exploit IP generated from procurement projects.** Owning intellectual property is key for many companies so that they can maximise returns from R&D investment²⁵. The way IP is handled, both in procurement and in government-funded innovation, must be unambiguous, providing clear incentives for companies to invest in R&D and supply innovative goods and services to the UK government.

16. **Sectoral context should be considered, as the approach and effectiveness of different measures will depend on the industry sectors involved.** For example, in the construction sector, profit margins are small, typically one percent for contractors, and combined with a complex supply chain, hinders innovation. There are examples of success in driving innovation through public procurement, understanding the sector and the supply chains which will need to deliver on contracts is crucial to leverage public procurement as a tool to drive innovation. Health is another example, where life sciences R&D is very successful and there are opportunities for DHSC and the NHS to invest in new technology from SMEs. Lessons from COVID-19 provide an opportunity to think differently on how to procure and deliver services more efficiently.

17. **Procuring services brings additional challenges in incentivising R&D investment**

²² [Growing the contribution of defence to UK prosperity](#), MoD, 2018.

²³ [Increasing investment in R&D: business perspectives](#), RAEng, 2018.

²⁴ [Public procurement](#), RAEng, 2018.

²⁵ [Public procurement](#), RAEng, 2018.

through procurement²⁶. This is because procurement tends to be based on person-hour cost, and it is difficult for companies to demonstrate the benefits generated from R&D investment in building experienced and highly skilled staff.

Q11. What further measures relating to pre-procurement processes should the Government consider to enable public procurement to be used as a tool to drive innovation in the UK?

18. Public procurement should be a powerful component of the UK's innovation ecosystem which can be leveraged to drive, scale and grow innovation in the UK. The ability to drive innovation through public procurement will be dependent on the broader health and fitness of the innovation ecosystem, from public funding mechanisms such as UKRI and Innovate UK to the continued excellence of UK university research, knowledge exchange frameworks between universities and industry, the environment to start and grow innovative businesses and attractiveness and incentives for businesses to conduct R&D activities in the UK. Public procurement is one element that should be considered with a systems perspective to maximise its impact to drive innovation in the UK and deliver the ambitions of the government's R&D roadmap. Targets could be used to incentivise pro-innovation procurement, for example a defined proportion of public procurement spend going to innovative solutions, products or services.
19. Pre-procurement processes ensure innovations are at the right stage when they enter the formal procurement processes or highlight innovation activities where government can help those companies, products, processes and services reach the point to successfully deliver in a procurement contract. These processes are essential to allow collaboration between contractors and innovators for co-creation of solutions as detailed in Paragraph 21-28. This helps manage the risk of procuring innovation, with a good, shared understanding of the needs of the customers, the problems to solve and the solutions innovation to deliver best value outcomes. Pre-procurement processes are a gateway into the public procurement system, which can otherwise be resource-intensive to engage in and a barrier especially to small companies.
20. Pre-procurement processes send an early signal to the market about what procurers want to buy and problems they want to solve and enable procurement teams to learn and develop processes in preparation for upcoming innovation. Signalling the demand for solutions to certain challenges creates a market opportunity for small and large businesses to respond –setting out an innovation friendly tone and opportunities for collaboration to create a safe space to test innovation and give confidence to businesses to invest in the R&D to deliver.
21. There are many examples of pre-procurement processes deployed across the UK for innovation, with multiple owners across government. The lessons, opportunities and challenges should be learned across government and joined up to increase the reach, awareness and deployment of these processes to support building the pipeline of innovation going into procurement tenders (Paragraph 10). Initiatives such as the Transport Research and Innovation Board in the Department for Transport, bringing together the transport community to share knowledge on innovation and procurement, should be deployed more broadly across the public sector to pool learning and build awareness of processes and successes. The following points are a non-exhaustive list of good examples supporting the pipeline of innovation into public procurement tenders.

²⁶ [Public procurement](#), RAEng, 2018.

22. **Small Business Research Initiative (SBRI)**²⁷: SBRI is a means to introduce disruptive innovation into public contracts, and is therefore one part of the solution to procure for innovation. Participants find it valuable, supporting them to create new companies, develop and launch new products and attract equity investment. However, the scheme has been underutilised across government and has had relatively little impact on broader public procurement processes. In addition, the focus on small companies does not address the broader challenges in using public procurement to support R&D and innovation by companies of all sizes. There are a range of issues that may have contributed to SBRI not fulfilling its potential including perceived lack of clarity regarding leadership, ownership, funding and governance²⁸. Visible support from a Ministerial Champion and Departmental Champions tasked with promoting the benefits of SBRI would be helpful. Targets for all government departments to deploy the scheme, accompanied with mitigation measures to manage risk, for example portfolio approaches, alternative plans to manage operational risk or gated phases for progress through the contract delivery.
23. **Highways England Innovation Fund**²⁹: Highways England has ringfenced £150 million between 2016 and 2021 for its innovation fund. The fund supports collaboration with industry to trial new technologies for improving safety, customer experience or environmental impact. While it has had a slow start, companies interviewed are positive about the opportunities that the fund provides for the acceleration of new technologies such as connect and autonomous vehicles, pulling the innovations through into practice in the road network. Highways England is also adjusting its processes to better support innovation through procurement, such as developing a single point of contact for innovators to propose new ideas. Highways England published a second Road Investment Strategy in March 2020, covering the period 2020-2025 and including a designated fund for innovation and modernisation^{30,31,32}.
24. **Building Information Modelling (BIM)**^{33,34}: BIM is a collaborative approach for designing, creating and maintaining infrastructure, underpinned by digital technologies. It increases the efficiency of construction projects and enables collaboration across the whole supply chain. Government procurement processes have stimulated the development and uptake of BIM in the construction sector through clear targets for all central government departments to use BIM Level 2 by 2016, training of government staff to use the system, and close working with industry to support embedding of the technology in industry processes.
25. **Living labs, demonstrators and test beds**, including those supported by Innovate UK and European Union Horizon research and innovation programmes: living labs and test beds enable businesses to test and develop innovative solutions safely in real-world environments. Often this involves collaboration or cooperation with local authorities and public services which can support the public sector to develop and deploy innovative solutions to service provision³⁵. Test beds help de-risk the development process for innovative companies by provide a space to test, identify

²⁷ [Public procurement](#), RAEng, 2018.

²⁸ [Submission to the Review of the Small Business Research Initiative](#), RAEng, 2017.

²⁹ [Public procurement](#), RAEng, 2018.

³⁰ [Road Investment Strategy 2: 2020-2025](#), DfT and Highways England, 2020.

³¹ [Innovation, Technology and Research Strategy: Our approach](#), Highways England, 2016.

³² [Innovation – How it works](#), Highways England. [Accessed 23/02/2021]

³³ [Public procurement](#), RAEng, 2018.

³⁴ [Public projects and procurement in the UK](#), RAEng, 2014.

³⁵ Late-stage R&D, RAEng, soon to be published.

and problem solve safely with real users to reach a commercial stage³⁶. This type of innovation infrastructure can also attract innovation activities to a certain place and leverage private investment in R&D. Contracting authorities, including local councils, should be encouraged and enabled to engage with these innovation infrastructures to build an exchange across with the innovation community and increase adoption of innovation in public services. The Academy is due to publish a report on late-stage R&D in the spring, including case studies illustrating the use living labs and demonstrators for innovation in public services and defence.

26. **Defence and Security Accelerator (DASA):** DASA is a valuable mechanism for businesses to engage in to develop innovative solutions for the MoD. For example, participants benefit from the opportunity to run live experiments with the British Army providing an opportunity for iterative feedback and problem solving to develop the most valuable solution. It also signals the MoD's interest in certain innovations for businesses to work towards. The process is however described as slow which can stall the pace of innovation and time to market³⁷.
27. **Advanced Research and Invention Agency (ARIA):** the government has recently announced the creation of ARIA, modelled on the US Advanced Research Programme. In the US, this model feeds into departmental procurement processes, for example defence or energy³⁸. The scale and nature of the challenges mean that government and public procurement are often the customer, providing a pull as an end-user for the technological solution being developed and a focus to drive development towards application. Establishing ARIA into the pipeline feeding into public procurement is part of the equation to collect the high reward and beneficial outcomes of projects for wider society and consumers³⁹.
28. **Innovation schemes in large procurement projects:** Procurement can be used to drive innovation, and there are examples of innovation schemes in large projects such as the HS2 Innovation Accelerator⁴⁰, however the scale of these schemes currently doesn't match the ambitions of a science and innovation superpower or an endorsement of innovation in public procurement. The pipeline across the innovation ecosystem into public procurement should be strengthened and nurtured to deliver innovative solutions and wider benefits.

Q13. Do you agree that the award of a contract should be based on the 'most advantageous tender' rather than 'most economically advantageous tender'?

29. The Academy welcomes the changes to the Green Book, basing the award of a contract on 'most advantageous tender' rather than 'most economically advantageous tender'. This presents a real opportunity to deliver longer-term cost-benefit balance to society, the environment and wider policy goals such as increasing innovation, net zero and levelling up by looking at the potential impact and opportunities from procurement in the whole and not always limited by cost and short-term consideration. Culture change and effective implementation, from government leadership across to individual procurement teams will be vital in achieving this.

³⁶ [Testing innovation in the real world](#), Nesta, 2019.

³⁷ Late-stage R&D, RAEng, soon to be published.

³⁸ [Radical Innovation](#), RAEng, 2020.

³⁹ [Radical Innovation](#), RAEng, 2020.

⁴⁰ [Innovate at HS2](#), HS2. [Accessed 25/02/2021]

30. The award of contracts should consider value as including the growth of UK businesses and job creation and maintenance of key skills, innovation uptake, productivity improvement, reduced lifetime maintenance costs, carbon emissions reduction, growth of innovative sectors and SMEs, driving diversity and inclusion, and more. For innovation in particular, the risk should be framed against the risk of loss if innovation is not procured and consider potential negative impacts on innovative sectors and companies who may move elsewhere. These priorities and outcomes should be included in the National Procurement Policy Statement and set out clearly to guide contracting authorities in their decision making but also as a strong signal to the market to deliver upon. Public procurement contracts can support innovative businesses to scale their products and provides an endorsement for UK innovation, attracting wider commercial and investment interest. This should be a key consideration in the value tenders can deliver to the UK. It is a crucial part of the pipeline from public funding of research and innovation to thriving innovative businesses in the UK, delivering a return in the taxpayer's investment.
31. Supported with appropriate evaluation frameworks to incentivise the right behaviours, 'most advantageous tender' offers an opportunity to take the longer-term strategic view of the broader value of procurement projects and design contracting processes to best incentivise the overall desired outcomes. Evaluation frameworks should fully capture this change and empower procurement teams to deliver, making culture shift the easiest path. The shift from 'most economically advantageous tender' to 'most advantageous tender' is a crucial step in leading the culture change needed across government procurement to deliver best value for the UK. The key to success will be in leadership and implementation shifting the behaviours and risk perceptions that value most economically advantageous to most advantageous for the UK.
32. With the leadership to drive culture change, 'most advantageous tender' can help promote the narratives highlighting the broader value delivered to the UK and change the perception of risk in procurement. For example, the Channel Tunnel was delivered with a year behind schedule and £2 billion over budget⁴¹. Since its opening the Channel Tunnel has facilitated UK-EU trade, worth £138 billion or 26% of total UK-EU trade in 2016, and of particular importance to the transport of high value and time-sensitive goods and over 20 million passengers going across⁴². The value procurement projects such as the Channel Tunnel deliver is a question that 'most advantageous tender' should aim to answer.

Diversity and Inclusion

33. The Academy champions diversity and inclusion in engineering. As part of that, the Academy has established a Diversity and Inclusion Leadership Action Group in procurement⁴³. This group takes leadership in developing guidelines for situations and methods by which procurement levers can be used to encourage action on diversity and inclusion through the supply chain. While the group is focused on procurement within the private sector, there are lessons that are transferable for public procurement. We welcome the suggestion in the Green Paper that improving supplier diversity may be an outcome included in the National Procurement Policy Statement. Supplier diversity means taking steps to ensure that the suppliers are inclusive and diverse. Businesses that diversify their supply chain can experience unexpected positive add-on benefits, such as new ways of looking at product development and marketing, access to new markets and an enhanced business

⁴¹ [How Eurotunnel went so wrong](#), BBC, 2005.

⁴² [Economic footprint of the Channel Tunnel in the EU](#), EY, 2018.

⁴³ [Diversity and Inclusion Leadership Action Group - Procurement](#), RAEng. [Accessed on 02/03/2021]

image^{44,45}.

⁴⁴ [Supplier diversity](#), RAEng. [Accessed on 02/03/2021]

⁴⁵ [Supplier diversity](#), CIPS. [Accessed on 02/03/2021]