

Improving National Infrastructure Project Delivery

The Association for Project Management (APM) is the Chartered body for the project profession, with over 45,000 individual members and over 470 corporate partners. We aim for a world in which all projects succeed because, when they do, society benefits.

1. What are the major challenges facing major infrastructure project delivery in the UK? How can these barriers be rectified?

Skilled project professionals are essential to project success, but half of businesses reported difficulties recruiting them¹. Project skills were identified in Parliament as a major skills gap by several select committees, including in the Select Committee on Risk Assessment and Risk Planning's report on preparing for extreme risks.

Efforts to rectify skills deficits have limited comprehension of the project profession's multifaceted roles, further contributing to this issue². Additionally, aging workforces and stop-start sectoral investment have led to inconsistent workforce development. Current skills-based approaches typically focus on roles 'on the ground' and neglect project competence, which is critical throughout the life cycle, particularly for large-scale projects which can span decades. Another area largely ignored is the quality and availability of strong project sponsors. This is something the Government needs to build internally, to ensure the right questions are asked, decisions are made quickly, and contractors are kept on task.

Addressing skills shortages requires committing to understanding skills deficits across the project profession: and targeting these shortages through the infrastructure strategy and Skills England; and mandating major projects to be overseen by Chartered project professionals.

Projects are oversimplified: branded as a failure or success, discounting their full benefit to society. The direct benefits of projects tend to be broadcast over their indirect, often significant, benefits (e.g. economic development and societal welfare). Encouraging public support for projects requires conducting evaluations of projects over longer timescales to capture long-term value. The Elizabeth Line, for example, was initially branded a failure, and is now a major success, transporting around 800,000 passengers a day³. Beyond that, we need to see greater focus on stakeholder engagement and regular communication of key project decisions to communities, developing trust and support.

¹ Association for Project Management, 2024. [The Golden Thread: A Study of the Contribution of the Project Profession to the UK's Economy](#).

² Association for Project Management, 2025. [Education Committee: Further Education and Skills Consultation](#).

³ Evening Standard, 2024. Elizabeth line's 'staggering achievement' with 300m journeys made since opening

The Government's Major Project Portfolio (GMPP) has continued to grow, both in size and cost, but despite its success, it was described as "overprogrammed and trying to do too much"⁴, by the former IPA Chief Executive.

The IPA (now NISTA) already supports more projects than it realistically has resources for, and previous solutions to this were to concentrate on projects that most aligned with the Government's priorities⁵. And the Lord Maude review highlighted the civil service's continued focus on policy development, rather than delivery. These issues risk leaving projects behind, or worse risks making them failures before they've even started.

Addressing resources in major projects requires reviewing the GMPP and setting a realistic budget. The Government must also consider interventions to strengthen existing infrastructure to reduce demand, and actions to ease procurement processes.

2. What lessons can the UK learn from international approaches?

The biggest lesson to learn from international approaches is that the UK is not an outlier. The NIC recently investigated this and did not find "a statistically significant difference between average project outturn costs in the UK and international comparators"⁶.

On the approach in other countries, Jimoh Ibrahim et al. looked into megaprojects in Nigeria and found similar issues to the UK⁷. They also compared Nigeria's approach to countries with similar project management maturity levels – India, Thailand and Indonesia – and found that all three countries shared Nigeria's problems around "lack of continuity, slow decision-making and corruption" which caused "delays and budget overruns"⁸.

The International Journal of Project Management is a great source for international comparisons. Giorgio Locatelli et al. looked at the impact of corruption on high-speed rail in Italy⁹ while Mustafa Selçuk Çıdık et al. looked at delays to the Nairobi Expressway in Kenya¹⁰.

⁴ House of Lords Built Environment Committee, 2023. [Letter from Lord Moylan to Baroness Neville-Rolfe](#).

⁵ Institute for Government, 2024. [Whitehall Monitor 2024](#).

⁶ National Infrastructure Commission, 2024. [Cost drivers of major infrastructure projects in the UK](#).

⁷ Ibrahim, J., Loch, C & Sengupta, K., 2022. How Megaprojects are damaging Nigeria and how to fix it.

⁸ Ibid.

⁹ International Journal of Project Management, Locatelli, G. et. al., 2017 Corruption in public projects and megaprojects: There is an elephant in the room!

¹⁰ International Journal of Project Management, Çıdık, S. et. al., 2024. Political ecology perspective for a new way of understanding stakeholders and value in infrastructure projects.

As Bent Flyvbjerg's extensive research on megaprojects around the world shows, these projects are infamous for failing to deliver both what was initially expected of them and for the costs and within the timeframes they set out to deliver by and within¹¹. But that also outlines part of the issue around megaprojects. Cost and time savings come through precedent – have we done something similar before? So many UK megaprojects are unprecedented.

This is important because international precedent is often used to infer that UK projects are failing. Recently, we have seen the Lower Thames Crossing compared to a Laerdal and Eiksund Undersea tunnels in Norway¹² and HS2 compared with the Tours-Bordeaux high-speed line in France¹³. With international comparisons, the key is to compare like with like. Britain is crowded, with specific geological, planning and stakeholder views to consider. It is very difficult to find directly comparable projects internationally.

If anything, the comparisons above show us is that long-term investment is crucial. HS2 appears overly expensive because we're doing it for the first time. We had to build the skills and knowledge base to do this type of projects, whereas the French have been building these sorts of projects for years. The same goes for tunnelling expertise in Norway.

3. What lessons can the UK learn internally, from best practices in individual Government departments and arms-length bodies? What lessons can infrastructure projects learn from project management in other sectors?

There are multiple examples of good project delivery within Government departments and arms-length bodies. For example, winners of APM awards in 2024 include Transport for Wales for its Core Valley Lines Transformation Programme and the Department for Education for its Schools Water Strategy¹⁴. But there are also examples from local Government, with Essex County Council winning an award in 2023¹⁵ and a case study from Portsmouth Council¹⁶.

The National Audit Office plays a key role in regularly examining major projects and drawing lessons learned from each one. In 2020, the NAO collated many takeaways into one report, identifying eight areas where Government projects consistently miss opportunities to deliver better¹⁷.

¹¹ Flyvbjerg, B. & Garner, D., 2023. How big things get done.

¹² Britain Remade, 2024. [Revealed: How the Lower Thames Crossing is breaking records for all the wrong reasons.](#)

¹³ Britain Remade, 2023. [UK's Colossal HS2 project in danger of going off the rails.](#)

¹⁴ Association for Project Management, 2024. [APM Awards Winners 2024.](#)

¹⁵ Association for Project Management, 2023. [APM Awards Winners 2023.](#)

¹⁶ Association for Project Management, 2019. [How Portsmouth council used systems thinking to deliver a better service and reduce costs.](#)

¹⁷ National Audit Office, 2020. [Lessons Learned from Major Projects.](#)

We recommend that the Government investigates why the available lessons and case studies of good practice are not being applied. Lord Maude's Independent Review of Governance and Accountability in the Civil Service attempted to do this and touched on various major problems affect project delivery in Government departments¹⁸.

APM would like to see project specialists involved in developing policy from the start of a project, to ensure they are achievable. Alongside leading academics, we have also suggested a Chief Project Officer accountable for project delivery in each Government department¹⁹. But we can go further still on this, given the obvious blurred lines of accountability between development, delivery, and benefits. There could be chief project officers at every stage of the project, to ensure a focus on accountability – one at the project shaping and proposing stage (i.e. pre sanction); one for project delivery, and one post-delivery to chart the ongoing benefits realisation of the project (which will be realised for years beyond completion).

Finally, the Infrastructure and Projects Authority's (IPA) work, before it merged into NISTA, must be built upon. It is one of the major success stories of previous years. The IPA's significant efforts to uplift project expertise throughout the civil service has led "to a firmly established project profession with career pathways"²⁰, including investment in the Major Project Leadership Academy (which 37% of SROs had completed as of 2023²¹); plans for 2,000 people to gain accreditation through the Government Project Delivery Profession scheme by 2025²²; and a reinforced effort to recruit civil servants with project management expertise. Indeed, Government organisations are aiming to have 10% of their delivery workforce formally accredited and, by extension, Chartered²³.

4. How effective do you feel the Government's current plans are for improving major infrastructure project delivery? Do you have any comments or suggestions for the new National Infrastructure and Service Transformation Authority (NISTA)?

The 10-year infrastructure strategy working paper's focus on cross-government and long-term thinking aligns with a review that evidenced a need for clear systemic prioritisation in the Treasury²⁴. To build on this, the Government must work to encourage joined-up thinking, streamlining processes, projects and plans across

¹⁸ Lord Maude of Horsham, 2023. [Independent Review of Governance and Accountability in the Civil Service](#).

¹⁹ Association for Project Management, 2022. [The Chief Project Officer](#)

²⁰ Association for Project Management, 2024. [The National Infrastructure and Service Transformation Authority How to set NISTA up for success](#).

²¹ Cabinet Office, 2023. [Letter from Baroness Neville-Rolfe to William Wragg MP](#).

²² Infrastructure and Projects Authority, 2023. [Annual Report on Major Projects 2022-23](#).

²³ PA Consulting, 2024. Investigating the Return on Investment to APM Corporate Organisations Study Report.

²⁴ Lord Maude of Horsham, 2023. [Independent Review of Governance and Accountability in the Civil Service](#).

departments and throughout project delivery²⁵. Departments should learn lessons from each other, reducing the number of NAO reports that repeat the same failures. NISTA's processes must be adapted in unison with reforms and policies, creating the right conditions for project success²⁶. Moreover, NISTA must continually consult stakeholders to determine the reforms needed to improve and modernise with the rapidly developing project landscape²⁷²⁸.

Invest 2035 made significant progress in outlining key sectors for investment, however, an enhanced focus on confidence is essential. Whilst it may not be possible to prevent fluctuating supply chains and inflation that disrupt project budgets, timeframes, and outcomes²⁹, the Government should avoid major policy reversals. The infrastructure strategy's intention to design an infrastructure pipeline that grants industry clarity³⁰ is a welcome step to uplift confidence in project delivery and promote transparency.

Increased transparency is evidenced to facilitate decisions, achieve value for money, and maintain confidence or trust³¹. Enhancing accountability and publishing data is essential to promoting the efficient allocation of funds, achieving better value for money in projects³². NISTA must work to develop cross-party collaboration on projects to strengthen trust; select trusted professionals to guide and inform Ministers on the consequences of decisions on long-term major projects; and vet all major project decisions in Parliament.

Whilst the Infrastructure strategy references Skills England, NISTA must take a targeted approach to address skills shortages, particularly within complex projects. It must commit to the career paths, development and competencies set out in IPA's project delivery capability framework³³. It must have the resources to invest in technical expertise, capacity and resources³⁴. Moreover, it must work to address the other areas highlighted in APM's guidance document: overlapping responsibilities in projects; skills shortages; mistrust; and excess bureaucracy³⁵.

²⁵ House of Lords Built Environment Committee, 2023. [Infrastructure Policy Making and Implementation in government](#).

²⁶ Association for Project Management, Eggleton, D. et al., 2021. [Dynamic conditions for project success](#).

²⁷ Association for Project Management, Eggleton, D. et al., 2021. [Dynamic conditions for project success](#).

²⁸ Association for Project Management, 2024. [The National Infrastructure and Service Transformation Authority How to set NISTA up for success](#)

²⁹ Association for Project Management, 2018. [Project Risk Analysis and Management](#) .

³⁰ HM Treasury, 2025. [10-year infrastructure strategy working paper](#).

³¹ Lord Maude of Horsham, 2023. [Independent Review of Governance and Accountability in the Civil Service](#).

³² Institute for Government, 2024. [The benefits of transparency: why being more open is good for government](#).

³³ Infrastructure and Projects Authority, 2021. [Project Delivery Capability Framework](#).

³⁴ Association for Project Management, 2024. [The National Infrastructure and Service Transformation Authority How to set NISTA up for success](#).

³⁵ Association for Project Management, 2024. [The National Infrastructure and Service Transformation Authority How to set NISTA up for success](#).

5. How can the Government work more effectively with the private sector to improve project outcomes?

Public-private partnerships' (PPP) have accelerated infrastructure delivery. Although they are typically costlier than direct government borrowing³⁶, many of the approximately 700 traditional UK Private Finance Initiative (PFI) projects introduced in 1992 achieved effective operational performance with at least acceptable public service levels without significant failures³⁷.

Low levels of trust between the private and public in PFI contracts in the mid-2010s³⁸ highlight the importance of relationship management when working with multiple stakeholders with differing goals. Contracts between the private sector and local governments must focus on flexibility, incorporating mechanisms for change, and move away from rigid contracts, which contributed to many PFI contracts failing³⁹. Moreover, future projects require well-structured risk management and practical decision methods to improve performance⁴⁰.

Public opposition was reported as a key factor behind PPP failure in a 2014 study⁴¹. The success of conventional UK PFI projects is played down by the resultant “fiscal illusion” they produced, which masks the true scale of public debt⁴². Addressing transparency concerns is essential to project success, therefore the Government must account for private sector project costs openly, alongside publishing project decisions, costs, and contract variations. The public need to see clear governance and lifecycle monitoring and be able to observe performance indicators which signify the value for money of projects, such as user satisfaction, measures of availability and asset conditions. APM's research evidenced the private sector wants the Government to take the lead as “the convener for infrastructure delivery”⁴³: for public-private partnerships, the Government could set up a PPP Centre for Excellence, to guide Local Authorities and achieve consistent levels of project delivery.

Private sector project delivery must be underpinned by public sector capability. Local governments have little experience working with PPPs; therefore, knowledge management methods must be used to combat expertise gaps in areas like financial

³⁶ National Audit Office, 2018. [PFI and PF2](#).

³⁷ Association for Project Management, Beardall, W. & Edkins, A., 2025. [Financing Labour's Missions: Considering the role of PFI in Government project](#).

³⁸ Association for Project Management, Beardall, W. & Edkins, A., 2025. [Financing Labour's Missions: Considering the role of PFI in Government project](#).

³⁹ Ibid.

⁴⁰ Yuan, J., Zeng, A.Y., Skibniewski, M.J., Li, Q., 2009. [Selection of performance objectives and key performance indicators in public-private partnership projects to achieve value for money](#). Constr. Manag. Econ. 27 (3), 253–270.

⁴¹ Henjewe, C., Sun, M., Fewings, P., 2014. [Comparative performance of healthcare and transport PFI projects: empirical study on the influence of key factors](#). Int. J. Proj. Manag. 32 (1), 77–87.

⁴² National Audit Office, 2025. [Lessons learned: private finance for infrastructure](#).

⁴³ Association for Project Management, 2024. [The National Infrastructure and Service Transformation Authority How to set NISTA up for success](#)

risk allocation, public participation, consultant management and information disparities⁴⁴. The Centre for Excellence could support local authorities' knowledge management as well as long-term career pathways, adopting similar methods to APM's competence framework to benchmark competence in the required areas.

6. How can the Government work more effectively with the project profession to improve project outcomes? What impact will technological advancements have on infrastructure delivery, and how can the Government better harness innovation?

There are multiple ways that the Government can work with the project profession to improve project outcomes. Often, Government will consult with employer and employee bodies, however professional bodies are not included in conversations. This is a missed opportunity given the wealth of knowledge they will have on their respective professions. We would welcome more Government interaction on missions, the role of NISTA and the delivery of the huge number of projects committed to.

The Government can also commit to treating the project profession as a profession in its own right. It is not uncommon to see civil service jobs with responsibility for multi-billion-pound projects but no requirement for Chartered status, working towards Chartered status, or at the very least membership of the Association for Project Management or other project-related professional body.

This is a missed opportunity, because Chartered provides a professional benchmark that demonstrates attainment of a defined level of technical knowledge, professional practice & ethical behaviour. And membership of APM or equivalent project-related professional bodies includes a commitment, through CPD, to keep professional knowledge up to date and improve capability.

The IPA have been building project capability through training as well, including APM's Project Fundamentals and Project Management Qualifications. We recommend that, as a minimum, anyone managing a Government project over £10m should be given training in project management. And that training should be given to Ministers, to help them better understand how big projects get done.

The role of the professional body is further shown in the field of technological advances. Our research programme has been investigating this consistently. APM funded research asking whether AI can learn to be a project professional which suggested that there will always need to be a human element to project development

⁴⁴ Boyer, E.J., 2016. [Identifying a knowledge management approach for publicprivate partnerships](#). Public Perform. Manag. Rev. 40 (1), 158–180.

and delivery⁴⁵. We also covered the use of AI in project management to enhance project decision-making and support problem-solving functions⁴⁶ and are currently investigating digital transformation⁴⁷.

On the latter, digital change must modernise legacy systems but also include strategic leadership and governance as part of the transformation. And the Government must invest in digital literacy and cross-department inter-operability systems to succeed.

More widely, many projects are developing new technologies to improve their processes, for example the use of hydrogen powered construction machinery in road infrastructure projects⁴⁸. Too often, overly prescriptive tenders force companies to use certain materials and processes as new methods are considered risky. We need Government to be less risk-averse in tendering, allowing companies to use the knowledge they've built up in other projects.

⁴⁵ Association for Project Management, Wang, K. & Stewart, I., 2022. [Can Artificial Intelligence Learn to be a Project Professional?](#)

⁴⁶ Association for Project Management, Dacre, N. & Kockum, F., 2022. [Artificial Intelligence in Project Management](#).

⁴⁷ Association for Project Management research fund, Dacre, N., Baxter, D., Dong, H., & Mhdawi, A., 2025*. Digital Transformation in Public and Private Sector Project Management (*yet to be published).

⁴⁸ Association for Project Management, 2024. Private roundtable on road infrastructure projects, UK Parliament