



ICE submission to the Public Accounts Committee on the Governance and Decision-Making on Major -Projects Inquiry

April 2025

About the ICE

The Institution of Civil Engineers (ICE) is a 97,000-strong global membership organisation with over 200 years of history.

It is a centre of engineering excellence, qualifying engineers and helping them maintain lifelong competence, assuring society that the infrastructure they create is safe, dependable and well designed.

Its network of experts offers trusted, impartial advice to politicians and decision makers on how to build and adapt infrastructure to create a more sustainable world.

For more information, please contact **Martina Moroney**, Policy Manager: policy@ice.org.uk.

Submission

The case for improved major project governance and decision making

Trust in governments worldwide is in decline, and the UK is no exception. One of the central ingredients to rebuilding that trust will be the successful delivery of infrastructure projects up and down the country.

But, as in other jurisdictions, the government's ability to deliver major, and mega, projects has failed to meet expectations over many years.

Unless delivery issues are addressed, the public are likely to lose faith that they will get the infrastructure they have been promised. Ongoing delivery challenges would also jeopardise the net zero transition, which needs to progress at pace.

Equally, the opportunity cost of the added cost to each individual project comes at the expense of other infrastructure investments that could deliver substantial benefits and an improved quality of life for the public. Non-delivery and the stop-start nature of project prioritisation also further discourages private investment – or costs the public more as private sector players price additional risk.

As such, the ICE welcomes the Public Accounts Committee’s inquiry on governance and decision making on major projects.

However, this inquiry is far from the first to focus on these issues. There is plenty the PAC can learn from both the failures and successes of domestic and international projects including High Speed 2 which the ICE has produced a review of.

The industry and government’s own recommendations for change have, for many years, been relatively consistent, and are numerous. The questions the inquiry might focus on include how existing and new structures in the government advisory and assurance system (including the National Infrastructure and Service Transformation Authority) might help embed these learnings across major public projects.

The UK is not alone in facing major project delivery challenges

Research by Saïd Business School demonstrates that this is a worldwide issue. Of a sample of 3,022 projects, 27% were on budget or better, 2.8% were on budget and on time, while only 0.2% of projects were on budget, on time, and on benefits¹. Put simply, a typical project anywhere in the world is significantly more costly than expected, delivers significantly less than the benefits promised at inception and at a much later date than scheduled.

Similarly, on the megaproject front, a McKinsey and Co. study reviewed a dataset of more than 500 global projects above US\$1 billion in resource industries and infrastructure and found that only 5 per cent of projects were completed within their original budget and schedule. In the completed projects, the average cost overrun was 37 per cent, and the average schedule overrun was 53 per cent².

¹ Bent Flyvberg (2014) [What you Should Know about Megaprojects and Why: An Overview.](#)

² McKinsey and co (2017) [The art of project leadership: Delivering the world’s largest projects | McKinsey.](#)

This area has been well studied. The following sections lay out a non-exhaustive collection of key learnings the PAC may want to consider.

Closing the gap between forecasts and outturns

In 2019, an ICE report focused on how more collaborative working, better governance, data-led frameworks and sharing of best practice could support improvements in project delivery, and outturn forecasting³.

Notably, it acknowledges that although efficiency in delivery is and should be a key determining factor of project success, a recognition of the broader whole of life and whole of society benefits that infrastructure, delivered properly, can achieve is needed.

The report's recommendations cover the following areas:

Scoping projects

Scope change, scope creep or incomplete designs often occur once work has commenced. Too often designers, risk adjusters and contractors work separately or are not brought together at an early stage.

Going forward, infrastructure owners should complete scope, design and exploration before commencement of work is allowed, taking steps to include contractors early.

Judging success

Government relies too much on cost (and to some extent time) to determine project success and frequently reduces contingency to 'save' money – limiting room for manoeuvre if new information comes to light, or if economic conditions change. Scrutiny of projects often focuses on the process of completion against arbitrary budgets and not the wider benefits infrastructure can deliver in the long-term.

The government and infrastructure owners must move away from capital cost as the most important metric when assessing project benefits, recognising the importance of whole-life economic, social and environmental value.

Estimating and tenders

³ ICE (2019) [ice-report-reducing-the-gap-between-cost-estimates-and-outturns-for-major-infrastructure-projects-and-programmes.pdf](#)

Estimates are often set at a fixed price point, before full project or programme scope and complexity are known. Tenders are approved based on these early estimates and contracts allocated, potentially years before scope and complexity are understood.

Principles set out in the Sourcing Playbook should be mandatory for government infrastructure owners, this includes infrastructure owners undertaking should-cost modelling to help inform their expectations and knowledge of appropriate tender prices during the procurement process. The ICE has since recommended that the Construction Playbook be mandated on a comply only basis.

It should also be mandatory for all public infrastructure owners undertaking procurement to award contracts based on a cost estimate range, using a should-cost estimate as a reference point, with an amount of contingency allocated appropriate to the level of project maturity.

Since the publication of the ICE's paper in 2019, there have been changes in the UK major project delivery environment – including the publication and relevant updates to the Construction Playbook, the release of the IPA's cost estimation guidelines and the Labour Government's mission-led approach, among other changes, that will require a different approach to project governance arrangements.

In acknowledgement of these factors, the ICE is currently working on an update to this paper, which will seek to complement other work underway or recently released by the National Audit Office⁴ and the Office for Value for Money⁵.

There is plenty of policy literature on major project delivery that the Committee would benefit from considering

The Office for Value for Money reflect that the National Audit Office (NAO), National Infrastructure Commission (NIC) and previous PAC inquiries have broadly identified the below issues⁶:

- funding decisions being too short-term and restrictive, leading to a stop-start approach that drives higher whole life costs and undermines delivery planning. The ICE would add that a lack of national level strategic and long term planning has meant that the UK has failed to address time and cost overruns as well as

⁴ National Audit Office (2025) [Governance and decision-making on mega-projects - NAO insight](#)

⁵ Office for Value for Money (2025) [Terms of reference for VfM Study on the governance and budgeting arrangements for mega projects - GOV.UK](#)

⁶ Ibid.

strategic workforce or supply chain planning effectively. The 10-year infrastructure strategy being developed by HM Treasury and NISTA will go some way to addressing this issue, but will require long term support within and across the major parties in the House of Commons, as well as the infrastructure sector to realise its potential.

- insufficient flexibility to reallocate funding within and across departments to expedite the delivery of projects.
- cost and time overruns of mega projects have a knock-on impact on all the other projects a department is running, and the mega project's risks are too large for a department to manage.
- excessive optimism in the initial estimates of the cost and timeline of projects, which means decisions to proceed are not accompanied by sufficiently robust and realistic assessments of affordability.
- projects being initiated before they are ready, locking in costs and timings before the scope and benefits are defined.
- governance and accountability arrangements put in place at the set-up stage of projects not reflecting the scale and nature of the risks involved, and then not evolving as the project develops, particularly where multiple departments are involved.

Similarly, following an analysis of 150 global projects, the National Infrastructure Commission identified four root causes which lead to systemic failures in major project delivery: a lack of clear strategic direction, challenges with project clients and sponsors, inefficient consenting and compliance, and a constrained supply chain⁷.

A recent Boston Consulting Group report lays out how supply chain constraints are likely to worsen in the coming years⁸. Key drivers include international competition for in demand skills, a lack of coordination and joined up planning at the national level and a lack of client-side leadership creating inefficiencies in supply chains, historically high demand for infrastructure investment creating an environment where market players are less likely to accept risk, siloed decision making, and poor scoping.

⁷ National Infrastructure Commission (2024) [Cost drivers of major infrastructure projects in the UK - NIC](#).

⁸ Boston Consulting Group (2025) <https://www.bcg.com/united-kingdom/centre-for-growth/insights/uplift-in-demand-shortfall-in-supply-can-the-uk-deliver-on-its-infrastructure-investment-ambitions/>

Lessons from HS2

The Committee should consider the lessons from individual projects – both good and bad – during the course of its Inquiry.

Last year, the ICE released a paper as part of a policy programme focussed on the lessons that can be learnt from the cancellation of the northern leg of High Speed 2 (HS2)⁹.

The paper explores decision-making in planning, procurement and delivery on HS2 to understand why costs spiralled and support evaporated. Findings are based on insight from key decision-makers involved throughout HS2's lifecycle, infrastructure professionals and other experts.

Key insights centred on the following themes:

Who is in charge of infrastructure projects must be clear.

- Establish processes to protect institutional memory.
- Avoid duplication of roles across project teams.
- Ensure departmental oversight is focused on the right areas. Major public projects need the right level, and the right type, of governmental oversight. Too much leads to micromanagement and inefficiency. Too little and problems are ignored and decisions not scrutinised enough. On HS2, there was a lack of technical design oversight to make sure what was being built was value for money.

Stronger client and departmental capability is needed – particularly on technical assurance and 'owning the project'.

- Use independent, expert 'challenge panels' for design control.
- Project sponsors need to prioritise appropriate recruitment and training. Competing with the private sector for talent is difficult for the civil service. But government sponsors must prioritise recruitment rather than focusing on costs.

⁹ ICE (2024) [Learning Lessons From The Cancellation Of HS2's Northern Leg](#) | Institution of Civil Engineers (ICE)

- Sufficient time is needed to assess alternative options, build in flexibility and challenge designs and specifications.
- Give due consideration to how major projects interact with other infrastructure to maximise benefits and minimise disruption.

The contracting approach should set up the project for best-practice delivery.

- Contracts need to be based on mature designs and extensive risk mitigation.
- Clients need to retain the ability to be a ‘guiding mind’ overseeing technical development.

Major projects and programmes require clarity and consistency on outcomes to achieve political and public buy-in and deliver value for money.

- An overarching transport strategy would clarify the strategic need for major projects.
- Initial planning should be agnostic about transport infrastructure and modes.

The benefits of major projects are often understated and need to be better articulated. All of the senior decision-makers on the project had different ideas of why HS2 was important, with some seeing it as a project focused on either speed, capacity, economic growth or demonstrating Britain’s modernity. These value judgements will have informed the decisions made by senior politicians. Over time, this meant decisions were no longer aligned to any central purpose, and the narrative over the need for HS2 was constantly shifting.

This lack of a well-embedded strategic story for HS2 meant that a significant cohort of the public was indifferent to the project. Therefore, it did not take much for them to become detractors, particularly as planning approval and then construction for Phase 1 started.

In addition to these key takeaways, it was notable that the Prime Minister was in a position to make a decision about the cancellation of the northern leg, without primary legislation. This was despite the Department for Transport and HS2 receiving authorisations to spend and permission to proceed through Hybrid and other bills. Ultimately none of that matters if the UK government decides not to act on Parliament’s instruction on investment.

The paper also notes that, among other political factors, fiscal rules set by the then chancellor Jeremy Hunt in 2022, particularly the requirement for debt to be on course to fall as a share of national income in five years, may have influenced the decision to cancel HS2's northern leg. The rule was meant to be a strong political message and a way to ensure long-term financial sustainability. However, delaying investments expected to deliver economic benefits and introducing more uncertainty about the government's commitment to major infrastructure projects undermined, rather than supported, those objectives.

It has also been suggested that the decision to cancel may have been linked to a wider political need which had little to do with HS2 and spiralling costs, and more to do with the upcoming election and building an image for the Sunak government as being distinct from other political parties, willing to challenge the status quo and committed to investing in other projects.

The impact of shifting political priorities on the delivery of HS2 has negatively impacted the UK's reputation as a major project deliverer.

The ICE also notes that, while a small percentage of projects globally deliver on all three outcomes – on time, to budget and with full benefit delivered, when they do, the infrastructure system as a whole could do a better job at shining a light on what has gone right.

One determinant domestically of this is that government departments do not evaluate nearly enough of their projects. In May 2022, the PAC reported that only 8% of £432 billion spent on major projects had robust impact evaluation plans in place¹⁰. This would imply that magenta book guidance could be better embedded into the system and project sponsors better incentivised to require proper ex-post evaluation.

The role of NISTA

The new National Infrastructure and Service Transformation Agency (NISTA) has a role in ensuring that best practice and guidance like that contained in the Construction Playbook and elsewhere is followed on major public projects.

¹⁰ Public Accounts Committee (2022) [Use of evaluation and modelling in government - Committee of Public Accounts](#).

As it relates to this topic, the ICE has recently made a set of recommendations on the priorities NISTA should take forward¹¹.

- In the context of NISTA being brought in under the wing of HM Treasury, there is a need to ensure that independent oversight is part of the body's governance structure, to proactively challenge the government and that it does not shy away from difficult questions.
- Enable long-term strategic infrastructure planning: Build cross-party and cross-government support to enable long-term strategic infrastructure planning.
- Oversee a credible pipeline: Hold government accountable for developing and committing to a prioritised, stable pipeline of investible projects aligned with society's needs.
- Embed best practice and raise capability across government: Mandate the use of the Construction Playbook and Constructing the Gold Standard by government departments on a 'comply' basis, rather than 'comply or explain'.
- Inform and engage the public: Ensure the public understands the benefits of infrastructure investment and that decision-makers understand the needs of infrastructure users.

Conclusion

This submission represents a non-exhaustive collection of some of the recommendations the ICE considers particularly important for the Inquiry to take on board as it begins its work.

The challenge is how the public sector and their industry partners are able to properly integrate these lessons into major project delivery in the years to come. There is a clear need for a culture of accountability and excellence in delivery to time, cost and benefit expectations, and a role for NISTA in improving assurance and bedding in global best practice – including via the mandated use of existing guidance including the Construction Playbook.

¹¹ ICE (2025) [What should NISTA's priorities be?](#)

As such, this inquiry has an important role to play in focusing discussion on how the UK can move from recommendations on paper to proper implementation, to cut costs, deliver improved benefits, and rebuild public trust.

The ICE thanks the Committee for the opportunity to contribute to this call for evidence and would welcome the opportunity to present this submission to the Committee.