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Policy Essays

A cautionary tale in front-end planning and governance: The UK High Speed 2 project

Morten Welde [a,*], Vedran Zerjav [b]

[a] NTNU – Norwegian University of Science and Technology, Department of Civil and Environmental Engineering, Trondheim, Norway
[b] NTNU – Norwegian University of Science and Technology, Department of Industrial Economics and Technology Management, Trondheim, Norway

A B S T R A C T

This essay offers lessons for governments and institutions on strengthening front-end governance in major projects. It uses the UK High Speed 2 (HS2) programme as a cautionary case to highlight systemic weaknesses in front-end governance of major public investments. HS2 demonstrates how optimism bias, political momentum, and fragmented accountability can override structured decision-making, leading to cost escalation and delivery failure. Drawing on lessons from Norway's State Project Model – widely regarded as best practice – we show how mandatory stage gates and independent assurance can prevent premature commitments and improve project outcomes. The analysis underscores the need for governments to institutionalise rigorous front-end governance, enforce independent challenge, and build capability commensurate with risk. We conclude with actionable recommendations for policymakers to strengthen governance frameworks and avoid repeating costly mistakes in future infrastructure planning.

1. Introduction: why front-end governance matters

Front-end governance is widely recognised as the most decisive phase in the lifecycle of a major infrastructure project. Decisions taken before execution lock in a significant share of costs, risks, and benefits. Once a project moves into delivery, options narrow, and the ability to correct course diminishes. Research consistently shows that poor decisions at this stage may lead to cost overruns, delays, and underperformance. Effective governance ensures that projects are strategically justified, alternatives are properly evaluated, and readiness is achieved before committing to irreversible investments. As the old saying amongst project practitioners goes, 'projects don't go wrong, they start wrong'.

International experience reinforces this point. In this essay, the Norwegian State Project Model with its Quality Assurance 1 (QA1) and Quality Assurance 2 (QA2) stage gates (Ministry of Finance, 2025) is used as an analytical lens to structure our assessment of HS2's front-end decision-making. We do not present it as a model to be translated into the UK context, which has its own established stage-gate and business-case arrangements. However, the Norwegian model, introduced in 2000 and refined over two decades, is widely regarded as an example of international best practice for managing large public investments. It incorporates two mandatory stage gates that must be passed before parliamentary approval and budget authorisation. The first quality assurance gate (QA1) ensures that the right project concept is selected through a comprehensive assessment of needs and alternatives. The second gate (QA2) verifies that the proposed scope, budget, and schedule are realistic and that governance structures are in place before funds are allocated. These two gates strengthen accountability and counter optimism bias by requiring independent review before political momentum locks in scope and cost.

The UK has a similar framework through its Stage Gate Model (HM Treasury, 2024). It sets out three critical phases for determining the strategic case for the project: the Strategic Outline Case (SOC), which establishes the strategic need and explores options; the Outline Business Case (OBC), which develops the preferred option and assesses affordability and risk; and the Full Business Case (FBC), which confirms readiness for delivery. These gates are designed as safeguards against political pressure and unrealistic assumptions. When applied rigorously, they help ensure that projects deliver value for money and align with national priorities.

We present HS2 as a textbook example of a governance failure on both concept and planning checkpoints. The project was launched with a politically charged ambition – to build the world's best and fastest high-speed railway – rather than a clear problem definition (Cooke, 2024). Alternatives, such as incremental upgrades to existing lines, were not seriously considered. In the Norwegian project governance model, this situation would correspond to a failure at the concept stage: the strategic case was weak, and the solution was predetermined. At the planning stage, HS2 advanced to contract with limited maturity and thousands of

* Corresponding author.
E-mail address: morten.welde@ntnu.no (M. Welde).

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unresolved planning consents (Stewart, 2025). Cost estimates were unreliable, and risk management was inadequate. This mirrors a failure at QA2: the project was not ready for execution, yet political momentum drove premature commitments.

For policy-makers, the lesson is that thorough governance must start as early as possible in a project. HS2 illustrates what happens when early-stage scrutiny is sidelined. As the UK and other countries prepare for future infrastructure investments, strengthening front-end governance – through rigorous stage gates, independent challenge, and accountability – is essential to avoid repeating costly mistakes. The purpose here is not to promote one country's model over another, but to highlight cross-cutting principles – clarity of need, disciplined assessment of options, and maturity before commitment – that apply regardless of institutional setting.

2. Concept stage failure

Front-end governance determines whether a project succeeds or fails. The Norwegian State Project Model enforces this principle through Quality Assurance 1 (QA1), which occurs before concept approval. QA1 asks: *Is the project necessary? What problem are we solving? Have all viable alternatives been considered?* It requires an independent review of the strategic case, problem definition, and options appraisal to select the most cost-effective solution. This checkpoint prevents political enthusiasm from locking in a solution before the problem is understood.

HS2 was framed as a visionary project rather than a response to a clearly defined need (Stewart, 2025). The ambition to build "the best and fastest high-speed railway in the world" overshadowed evidence-based analysis. This framing was not incidental – it was central to the project's political appeal. High-speed rail offered a tangible symbol of modernity and national ambition, a flagship infrastructure project that could be marketed as transformative. Yet this vision was not anchored in a rigorous strategic case. The Eddington Transport Study (Eddington, 2006), commissioned by the UK Treasury, had explicitly warned against "all-or-nothing" megaprojects with uncertain benefits and long delivery times. These strategic choices were made against a shifting policy backdrop, from late-2000s expansionism to the austerity-driven constraints that followed the 2010 Spending Review. It recommended focusing on incremental upgrades to existing networks, arguing that such investments typically offer higher returns and lower risk. HS2 ignored this advice, opting instead for a grand gesture based on uncertain and speculative impacts decades into the future (Cooke, 2024)

As with any megaproject, HS2 was supported by a strong political narrative. The Labour government (until 2010) emphasised capacity expansion, housing and economic growth. The Coalition (2010–2015) argued that HS2 was essential for boosting economic growth in the North of England by improving connectivity and supporting agglomeration economies. After 2019, Conservative governments – under Boris Johnson, then later under Rishi Sunak, rebranded HS2 as a key instrument for the "levelling up" agenda and boosting productivity outside London, especially in the Midlands and the North, and thus addressing long-standing regional economic imbalances (Durrant, 2025). This instability weakened the problem definition and locked the project into an evolving set of political narratives rather than a coherent transport objective.

These shifting narratives suggest HS2 was a solution looking for a problem, rather than the other way around. This diluted the strategic clarity required at the concept stage. Successive governments layered new justifications onto an already fragile case. Alternatives – such as upgrading existing lines, investing in regional connectivity, or improving digital signalling – were not seriously considered (Cooke, 2024). The creation of HS2 Ltd. in 2009 reinforced this bias: its sole mission was to deliver a high-speed rail line, not to evaluate competing options. This institutional design locked in a solution before the problem was fully understood. From a conceptual perspective, this illustrates premature solution lock-in before adequate problem exploration.

Economic justification was weak. Evidence from HS1 and international studies shows that high-speed rail rarely delivers transformative economic benefits. The economic case for HS2 relied heavily on projected time savings and speculative wider economic impacts. Yet ex-post evaluations of similar projects cast doubt on these assumptions. The Standing Advisory Committee on Trunk Road Assessment (SACTRA, 1999) cautioned against over-reliance on agglomeration effects, noting that such benefits are difficult to quantify and often fail to materialise. Instead, the SACTRA report stated that transport schemes could reduce employment in targeted regeneration areas by exposing them to competition from outside, which they cannot withstand. Vickerman (2015, 2017), too, found that high-speed rail tends to reinforce existing economic patterns rather than redistribute growth. HS1's evaluation concluded that monetised costs outweighed benefits – even after including agglomeration effects (Steer, 2023). HS2's promise of "levelling up" lacked empirical support. Improved connectivity does not automatically translate into regional prosperity, especially when local accessibility remains poor. As Rodrigues and Breach (2021) argued, the benefits of high-speed rail accrue disproportionately to affluent users and well-connected urban centres, leaving peripheral regions behind.

Climate arguments were equally flawed. HS2's construction involves massive emissions from concrete and steel, both of which materials with high embodied carbon. HS2 Ltd. itself has admitted that the project will never be carbon-neutral over its 120-year lifespan (Barkham, 2020). This admission undermines the claim that HS2 contributes to net-zero goals (Cooke, 2024). Modal shift from cars and planes is negligible – only 1% of passengers would have flown, and 4% would have driven, according to Department for Transport estimates. In fact, HS2 may increase rather than decrease aviation emissions. Birmingham Airport has signalled and begun expansion directly linked to HS2 (Airports UK, 2025). Meanwhile, road transport is decarbonising rapidly, driven by the uptake of electric vehicles and improvements in fuel efficiency. The International Energy Agency expects electricity to account for three-quarters of road transport's energy consumption by 2050 (IEA, 2023). In this context, HS2 risks becoming a stranded asset – an infrastructure investment misaligned with future mobility patterns and climate policy. The analogy with canals after the advent of rail is apt: once a transformative mode of transport, canals became obsolete as technology and demand shifted.

HS2 is also responsible for habitat destruction on a scale not seen in the UK for decades. It will inflict massive damage and disruption on wildlife sites and ancient woodlands. Early route assessments suggested negative effects on over 100 ancient woodlands and on hundreds of nature reserves and local wildlife sites along the corridor. Moreover, construction compounds, access roads, car parks, and ancillary works will significantly expand the ecological footprint beyond the rail track itself. In the long run, the development corridor along the line can lead to further habitat fragmentation and green-belt conversion (Brock, 2024). This has never been and will never be a green project.

The strategic case for HS2 lacked coherence. It was never clearly articulated whether the project was primarily about capacity, connectivity, or economic transformation. This ambiguity made it difficult to assess whether the chosen solution was appropriate. The absence of a structured options appraisal meant that alternative approaches – such as targeted upgrades to existing lines or investment in regional transport – were not properly considered. The creation of a delivery-focused organisation before the problem was fully understood further entrenched a single-solution mindset.

In short, HS2 lacked a clear problem definition, ignored alternatives, and relied on speculative benefits. The strategic case was muddled, the economic rationale was weak, and the environmental and distributional arguments were unconvincing. Had HS2 been subjected to a broad conceptual appraisal and subjected to external quality assurance, it would not have met the criteria for proceeding. Its early framing as a visionary project foreclosed critical scrutiny and reinforced a narrow solution bias. The result was a project that advanced without a solid

foundation, setting the stage for the planning and delivery failures that followed.

3. Planning and readiness failure

Quality Assurance 2 (QA2) in the Norwegian State Project Model occurs before parliamentary funding and focuses on readiness for implementation. It asks: *Is the chosen concept mature and ready for execution? Are cost estimates, schedules, and risk management plans robust? Does the client have the capability to deliver?* This checkpoint prevents premature commitments and ensures projects enter delivery with a stable scope and realistic budgets. Had HS2 been subjected to similar scrutiny, it would not have met the criteria required to proceed.

3.1. Planning consents

Even after the Hybrid Bill passed, HS2 faced over 8000 separate consents, creating friction and delay. The Stewart Review highlighted this as a systemic issue. Moreover, it highlighted the planning consent burden as a major contributor to delay and cost escalation (Stewart, 2025). These negotiations inflated costs as HS2 agreed to concessions to keep the project moving. This shows how unresolved regulatory and environmental issues can become bottlenecks, especially if they are not addressed systematically in the early stages.

3.2. Design maturity and market readiness

HS2 advanced to contract award with only 13% design maturity, and the Hybrid Bill relied on a business case based on just 4% maturity – far below the level needed for credible cost estimation or sound risk allocation in major civil works (Stewart, 2025). This immaturity meant early estimates were largely speculative, and commitments under the Main Works Civils Contracts (MWCCs) – procured through a two-stage tendering model – were made without the technical basis required to set realistic budgets. Proceeding at this point locked HS2 into a scope and timeline not grounded in engineering reality, driving cost escalation, scope changes, and schedule pressure.

The contracting strategy further amplified these risks. The two-stage tendering approach, adopted before adequate ground-condition data or design details were available, encouraged joint ventures to produce risk-averse, inconsistent solutions. Contracts were awarded prematurely, under commercial terms that transferred little risk to suppliers, undermining value for money and inviting disputes as requirements evolved. Limited competitive tension and a heavy reliance on bespoke arrangements weakened procurement discipline, forcing suppliers to work from unstable, incomplete designs.

Both the Stewart Review and Winch (2025) highlight that these failures stemmed from insufficient commercial capability within HS2 Ltd. and an approach that prioritised momentum over readiness. Under Norway's QA2 criteria, HS2 would not have passed a market-readiness assessment: design maturity, cost and risk estimates, and contracting strategy all fell short of the standards required for a credible transition into delivery.

3.3. Cost estimates and risk management

HS2's cost estimates were consistently optimistic. Political pressure to maintain momentum led to premature contracting under cost-plus arrangements, shifting risk back to the client. Stewart (2025) observed: “Schedule has been prioritised over cost throughout the Programme.” This culture of “just keep going” ignored mounting evidence that budgets and timelines were unrealistic. The failure to develop robust cost estimates and risk management plans before committing to delivery is a textbook failure. Had QA2 been applied, HS2 would not have met the threshold for credible estimates and mitigation strategies. The absence of independent challenge and the lack of contingency planning further exacerbated the financial exposure. HS2's cost overruns are not simply the result of unforeseen events; they are the product of underestimation and a lack of rigorous scrutiny, highlighting the lack of effective forecasting and assurance mechanisms (Winch, 2025).

3.4. Capability gaps

HS2 Ltd. operated under a lean client model that was misaligned with the level of risk retained by the organisation. This mismatch, combined with persistent capability gaps within both HS2 Ltd. and the Department for Transport's sponsor team, undermined governance and decision-making. Rather than adapting when problems emerged, the organisation continued to build capability while simultaneously delivering the programme, leaving critical functions underdeveloped. These capability weaknesses were not abstract: the Stewart Review documents that HS2 Ltd. lacked key senior leadership positions at critical points. The Review also highlights high turnover and reliance on interim appointments, which eroded institutional memory and continuity. Winch (2025) further shows that these gaps left HS2 Ltd. without a coherent ‘guiding mind’ for design integration, leading to fragmented engineering decisions across joint ventures and missed opportunities for standardisation.

The absence of institutional learning and adaptive capacity meant that early mistakes were repeated instead of corrected. Reliance on external consultants to fill capability gaps further fragmented responsibilities and diluted accountability, making it difficult to maintain strategic coherence. At key points, HS2 Ltd. lacked essential leadership roles, including the absence of a Project Director or Chief Operating Officer in 2019.

3.5. Political interference

Governance roles were unclear between HS2 Ltd., the Department for Transport, and HM Treasury. Independent challenge was weak or absent. Political pressure distorted priorities, leading to premature contracting and scope creep (Stewart, 2025). The Transport Committee summed it up: “We know what the best way is to manage and develop large projects, but unfortunately, we do not always do it.” The lack of institutional independence and the dominance of political imperatives over technical readiness created a governance environment where short-term political gains were prioritised over long-term project viability. HS2's experience illustrates the dangers of politicised infrastructure delivery, where accountability is blurred, and decisions are driven by optics rather than evidence. The Stewart Review (2025) recommended restoring ministerial oversight and re-establishing a dedicated HS2 taskforce. Under QA2, such governance ambiguity would have triggered a halt.

3.6. Scope instability and delivery risks

HS2's scope evolved continuously, with changes to station locations, service patterns, and integration with other networks. This instability created cascading risks across design, procurement, and delivery. The decision to proceed with an immature scope and unclear interfaces violated the requirement for a stable scope and defined boundaries. HS2's experience shows the cost of ignoring this principle. The lack of a stable baseline made it impossible to manage change effectively, leading to contractual disputes and delivery delays. Moreover, the absence of a coherent integration strategy with existing transport infrastructure created further uncertainty and undermined the project's ability to deliver its intended benefits. Scope changes were often made without a full understanding of their impact on cost and schedule. QA2 would have required scope stability before proceeding. This requirement for scope stability is a general project-governance principle, not unique to the Norwegian model; the UK's own guidance likewise assumes a controlled, defined scope before committing to delivery.

3.7. Misalignment discussion

HS2 did not fail because the UK lacked a governance framework, but because the existing framework was advisory, weakly enforced, and overwhelmed by political and organisational fragmentation. The UK's Stage Gate Model is designed to ensure that major projects are strategically justified, economically viable, and deliverable before public funds are committed. It provides structured oversight at key decision points: the Strategic Outline Case, Outline Business Case, and Full Business Case. However, HS2 did not adhere to this model in practice, revealing a significant breakdown in front-end governance.

At the Strategic Outline Case (SOC) stage, HS2 embedded a vision before defining the problem. The strategic case was framed around national ambition and symbolic infrastructure rather than a clear articulation of need. The capacity challenge on the West Coast Main Line was real, but it was never rigorously analysed in terms of alternative solutions. The SOC should have required a robust problem definition and a comparative appraisal of options, including upgrades to existing lines, regional investment, and digital signalling. Instead, the creation of HS2 Ltd. as a delivery body pre-empted this process, locking in a single solution before alternatives were explored.

The Outline Business Case (OBC) stage was similarly compromised. The OBC is meant to test the economic rationale, delivery strategy, and commercial arrangements. It should have been the point at which HS2's cost estimates, risk profile, and delivery capability were thoroughly scrutinised. However, HS2 advanced with immature design, optimistic cost forecasts, and a contracting strategy that transferred little risk to suppliers. The assurance reviews flagged concerns, but these were not acted upon. Political momentum overrode technical caution, and the project moved forward without resolving fundamental uncertainties.

The Full Business Case (FBC) stage, which precedes major contracting decisions, was effectively bypassed. HS2 signed contracts and committed public funds before demonstrating readiness. The UK's model requires that projects reach a defined level of maturity before entering delivery, including a stable scope, credible cost estimates, and aligned capability. HS2 met none of these conditions.

While the UK's Stage Gate Model is sound in principle, its advisory nature meant HS2 advanced despite repeated warnings, with no mechanism equivalent to Norway's to halt an unready project. The assurance reports were advisory, and there was no institutional authority to enforce compliance. This undermines the model's credibility and exposes public investment to avoidable risk.

Another issue was the fragmentation of governance. HS2 Ltd. operated as an arm's-length body, while the Department for Transport retained sponsorship responsibility. HM Treasury controlled funding, and the Infrastructure and Projects Authority provided assurance. This multi-layered structure diluted accountability and created gaps in oversight. The Senior Responsible Owner (SRO) sat within DfT but had limited influence over HS2 Ltd.'s board. The reliance on external consultants for assurance further weakened institutional memory and continuity. The UK Stage Gate model assumes coherent governance, but HS2's structure was anything but.

Megaprojects require robust owner capability, integrated systems, and adaptive governance. HS2 lacked all three. The gate reviews were not designed to assess systemic risk across multiple interfaces and delivery partners. The model is better suited to conventional projects with clear boundaries and manageable complexity. HS2's scale overwhelmed the assurance process, and the absence of a strong central authority meant issues were neither escalated nor resolved.

The advisory nature of reviews meant that critical issues flagged at each stage were not acted upon. At the Strategic Outline Case stage, the lack of a clear problem definition and premature commitment to a single solution undermined strategic clarity. At the Outline Business Case, the economic rationale was built on speculative benefits, and delivery plans lacked realism. At the Full Business Case stage, the absence of design maturity and credible cost estimates should have triggered a pause. Instead, the project advanced, locking in risks that would later prove catastrophic.

Table 1
Front-end governance failure in reference to the UK and Norwegian governance models.

Model	Key Requirements	HS2 Performance
Norwegian QA1	Validate need, assess alternatives, define problem	Failed: Predetermined solution, weak case
Norwegian QA2	Confirm readiness: design maturity, cost, risk, capability	Failed: Immature design, unresolved consents, capability gaps
UK Strategic Outline Case	Establish strategic need, explore options	Failed: Vision over need, limited options
UK Outline Business Case	Develop preferred option, assess affordability and risk	Failed: Advanced with immature design, weak cost estimates
UK Full Business Case	Confirm readiness for delivery	Failed: Premature execution under political pressure

A brief overview of HS2's failure in front-end project governance is shown in the Table 1.

While the UK system differs from the Norwegian model, the underlying governance challenges identified here – weak problem definition, insufficient design maturity, and advisory rer than enforceable gates – reflect general front-end governance failures rather than country-specific shortcomings.

4. Discussion and recommendations for governments: HS2 as a case study in front-end governance failure

HS2's failure to comply with the principles of both the Norwegian and UK project models illustrates a systemic weakness in front-end governance. At every critical checkpoint – QA1, QA2, strategic outline case (SOC), outline business case (OBC), and full business case (FBC) – the project failed to meet fundamental requirements. Instead of validating need and exploring alternatives, HS2 locked in a predetermined solution early, driven by political ambition rather than evidence-based analysis. This created a path dependency that proved impossible to reverse.

The absence of design maturity and readiness checks at key checkpoints compounded the risks. Governance fragmentation diluted accountability, while the advisory nature of gate reviews led to warnings being ignored. These failures were not isolated technical oversights – they reflect a deeper cultural issue: the prioritisation of symbolic infrastructure over the optimisation of existing assets. The obsession with new megaprojects has often overshadowed investment in local transport, maintenance, and electrification – areas that could deliver greater public value.

From a project management perspective, HS2 exemplifies the consequences of poor quality at entry. International research consistently shows that most project failures originate in the early stages (Samset and Volden, 2016; Williams et al., 2019). Stage-gate models exist to prevent such outcomes by enforcing structured decision-making, independent challenge, and accountability. Yet, in HS2's case, political momentum and optimism bias overwhelmed these safeguards. In fact, the project appears to have sidestepped established governance models precisely because of its political importance. This is particularly concerning, as large and risky projects should be subject to **more scrutiny**, not less. The lesson here – for the UK and for governments worldwide – is to resist hubristic attitudes of exceptionalism and grandiosity when planning and implementing megaprojects (Cooke, 2024).

5. Recommendations for governments

In this essay, we have illustrated the failures of HS2 – a world-famous megaproject. Its delays, cost overruns, and resource misalignment have come at considerable financial and political cost. This should not have

been allowed to happen, but more importantly, it should never be repeated.

Building on international best practice and lessons from HS2, we offer the following practical recommendations for policymakers seeking to improve the governance of major public investments:

- Governments must institutionalise robust front-end governance models by adopting stage-gate or quality-at-entry frameworks that enforce structured decision-making before approval and funding. Models must be followed systematically, with minimal scope for political bypass or "uniqueness bias." A central authority should manage the model, grant exemptions only in exceptional cases, and monitor compliance.
- Require independent quality assurance at key decision gates. Independent review of strategic cases, cost estimates, and delivery plans reduces optimism bias and prevents scope from being locked in prematurely.
- Strengthen early strategic appraisal, including problem definition and options analysis. Decisions must begin with identifying the problem – not championing a preferred solution. Broad options appraisal and cost-benefit analysis should be conducted before institutional momentum builds.
- Ensure realistic, evidence-based estimates using robust analytical methods. Stochastic cost estimation, reference class forecasting, and empirical data from comparable projects should underpin early estimates. Cost and schedule assumptions must reflect uncertainty.
- Require project maturity before approval for implementation. Projects must reach defined levels of readiness, have a stable scope, sufficient design maturity, resolved planning consents, and capable delivery organisations before contracting or budgeting.
- Build and maintain strong owner capability. Public clients must have adequate strategic, commercial, and technical competence. External consultants can support, but not replace, essential internal capabilities.
- Support systematic learning through ex-post evaluation. Few large projects undergo rigorous post-completion evaluation. Without closing this loop, governments lose critical learning opportunities. Embedding evaluation requirements strengthens long-term governance and reduces the risk of repeating mistakes.

Finally, transparent governance is essential for avoiding the kinds of failures that came to define HS2. When strategic cases, option assessments, and cost estimates are openly available, they invite external scrutiny, help counter optimism bias and politicised narratives. Transparency does not guarantee consensus, but it ensures that decisions are contestable and increases democratic legitimacy. In the HS2 case, a more transparent process would have made such concerns harder to ignore and created stronger incentives to address weaknesses early.

6. A note on perspective

The findings and recommendations presented here are grounded in extensive research on project governance, particularly in the front-end phase of major public investments. They are substantively informed by the Concept Research Programme at the Norwegian University of Science and Technology (NTNU). Over more than two decades, this programme has studied the governance of large-scale public projects, with a particular focus on early-phase decision-making, quality assurance, and the institutional mechanisms that support value creation and risk mitigation. This body of evidence provides a robust analytical foundation for comparing alternative governance frameworks and assessing how their institutional arrangements shape the quality of front-end planning, the discipline of decision-making, and overall project performance.

In the paper, we have argued that HS2, like many megaprojects, never rested on a stable or coherent political narrative. Shifting narratives meant that HS2 functioned more as a political symbol than a solution to a clearly defined transport problem. When economic conditions changed, costs escalated, and political priorities shifted, the project lost its political protection. This reinforces a core message of the paper: without a clear strategic problem definition and robust front-end governance, megaprojects become vulnerable to changing political winds. HS2 was not only a governance failure; it was a product of unstable political framing that left the project exposed when its symbolic value faded.

Although this paper draws on Norwegian experience to illustrate the value of rigorous front-end governance, it is important to acknowledge that governance models cannot simply be copied from one country to another. The UK and Norway differ markedly in political culture, administrative traditions, institutional stability, and levels of centralisation. Norway's governance framework evolved within a consensus-oriented political system with strong ministerial accountability and a long tradition of independent oversight. The UK system, by contrast, is characterised by higher political turnover, stronger ministerial discretion, and a more centralised but less standardised project governance environment. However, these differences provide a valuable lens to analyse HS2 as a case of front-end governance failure. It provides a comparative angle that helps illuminate systemic weaknesses and potential reforms applicable to governments globally.

CRediT authorship contribution statement

Morten Welde: Conceptualization, Project administration, Writing – original draft, Writing – review & editing. **Vedran Zerjav:** Conceptualization, Writing – original draft, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

Data availability

No data was used for the research described in the article.

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Morten Welde works as a senior researcher at the Concept Research Programme, which develops ways of improving the use of resources and enhancing the effects of major public investments. His research interests cover impact assessment and benefit-cost analyses, ex-post evaluations, governance frameworks for public investments, and cost overruns and cost estimation methodologies. He holds an MSc in Transport Economics from the University of Leeds, UK, and a PhD from the Norwegian University of Science and Technology.

Vedran Zerjav is a Professor of Project Management at the Department of Industrial Economics and Technology Management at The Norwegian University of Science and Technology in Trondheim. His areas of teaching and research expertise include strategic, operational and value considerations in project-based organising, with the empirical focus on urban infrastructure and innovation settings. He is primarily a qualitative researcher with a keen interest in hybrid and novel methodologies for project studies. Originally, he is a civil engineer and with a PhD on interdisciplinary design in the context of infrastructure project management, Professor Zerjav's academic and advisory work has straddled domains of engineering and management