REFORM

MISSION CONTROL

A how-to guide to delivering mission-led government

Patrick King

Sean Eke

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After a decade of disruption, the country faces a moment of national reflection. For too long, Britain has been papering over the cracks in an outdated social and economic model, but while this may bring temporary respite, it doesn't fix the foundations. In 1942 Beveridge stated: "a revolutionary moment in the world's history is a time for revolutions, not for patching." 80 years on, and in the wake of a devastating national crisis, that statement once again rings true. Now is the time to fix Britain's foundations.

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Reimagining Whitehall is one of the major work streams within this programme.

ABOUT REIMAGINING WHITEHALL

This paper is part of the *Reimagining Whitehall* work stream. To effectively reimagine the State, major change must occur in the behaviours, processes, and structures of central government. This paper set outs a blueprint for pursuing a genuinely 'mission-led' approach to government, that an incoming administration could implement on day one of a new Parliament, in order to achieve a small number of unusually ambitious, cross-cutting social and economic priorities.

Reimagining Whitehall Steering group

Reform is grateful to the expert members of the *Reimagining Whitehall Steering Group* who provide invaluable insight and advise on the programme. Their involvement does not equal endorsement of every argument or recommendation put forward.

Pamela Dow, Chief Operating Officer, Civic Future; former Executive Director of the Government Curriculum and Skills Unit

Dr Henry Kippin, Chief Executive, North of Tyne Combined Authority

Sir Geoff Mulgan CBE, Former Head of Policy, Prime Minister's Office; former Director of the No.10 Strategy Unit

Professor Jonathan Slater, Former Permanent Secretary, Department for Education

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The arguments and any errors that remain are the author's and the author's alone.

Interviewees

We would like to thank all 38 interviewees for giving their time and candid insights to support this research paper.

The list of interviewees is as follows:

- Robert Arnott, Director, Department for Levelling Up, Housing and Communities
- James Baggaley, Head of Communications and Engagement, UCL Policy Lab
- Sir Michael Barber, Founder and former Head of the Prime Minister's Delivery Unit
- Marin Beims, Strategy Officer, Health Holland
- Irene Bonvissuto, Director-General, Climate Action, and Mission Lead for Adaptation to Climate Change, EU Commission
- Rt Hon Greg Clark, Chair of the Science and Technology Select Committee, former Cabinet Minister, and author of the 2017 Industrial Strategy
- Dr Michelle Clement, Researcher-in-residence, No.10
- Dan Corry, Chief Executive, New Philanthropy Capital and former Head of the No.10 Policy Unit
- Professor Jon Davis, Director of the Strand Group, King's College London
- Scott Dickson, Devolution Strategy Principal, Greater Manchester Combined Authority
- Pamela Dow, Chief Operating Officer, Civic Future
- Sarah Doyle, Head of Policy, UCL Institute for Innovation and Public Purpose (IIPP)
- William Eggers, Executive Director, Deloitte Centre for Government Insights
- Professor Piers Forster, Interim Chair, Climate Change Committee
- Ravi Gurumurthy, Chief Executive Officer, Nesta
- David Halpern, President and Founding Director of the Behavioural Insights Team
- Claudia Harris, Chief Executive Officer, Makers and former official in the Prime Minister's Delivery Unit
- Dr Dan Honig, Associate Professor of Public Policy, UCL
- Darja Isaksson, Director-General, Vinnova
- Alisha Iyer, Policy and Projects Manager, UCL Policy Lab
- Dr Tom Kelsey, Policy Fellow and Researcher, Blavatnik School of Government

- Joel Kenrick, Deputy Director, Policy & Strategy, UK Infrastructure Bank
- Dominic Lague, Head of the Government Strategic Management Office, Cabinet Office
- Cat Little, Head of the Government Finance Function and Second Permanent Secretary, HM Treasury
- Professor Nico Van Meeteren, Executive Director, Health Holland
- Lord O'Neill of Gatley, former Commercial Secretary to the Treasury
- James Phillips, Senior Policy Adviser, Tony Blair Institute and former Special Adviser for Science and Technology to the Prime Minister
- Jonathan Slater, former Permanent Secretary of the Department of Education
- Conrad Smewing, Director-General of Public Spending, HM Treasury
- Marc Stears, Director of the UCL Policy Lab
- Daniel Wainwright, Research Fellow, UCL Institute for Innovation and Public Purpose (IIPP)
- Rt Hon Lord Willetts, former Minister of State for Universities and Science
- Abigail Watson, Research Fellow, Global Public Policy Institute (GPPi)

and one interviewee who wished to remain anonymous.

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Principles and Recommendations

Principle 1: Missions should be regarded as unique endeavours, separate from the business-as-usual activity of government. They should also be:

- Specific: a clear, time-bound goal, that enables direct accountability
- Credible: government should have the authority and ability to affect change
- Focused: there should be no more than three to five missions at any one time

Principle 2: Missions should be separated into a small number of contributing outcomes, governed according to whether they are primarily focused on:

- Technological innovation: supporting a scientific or technological breakthrough
- Performance innovation: achieving an unusually ambitious or unprecedented socio-economic outcome.

Recommendation 1: The Prime Minister and Secretary of State leading a technological innovation mission should begin by appointing an Expert Council from across business, academia and the public sector, to serve for its duration. Their first task should be to determine whether there is a portfolio of potential solutions to that mission.

Recommendation 2: A subset of the Expert Council for each technological innovation mission should lead the process for appointing a CEO to lead the mission. The Council should also provide ongoing support and constructive challenge to the CEO.

The Mission CEO should directly report to the Prime Minister and have the authority to directly appoint their own team. They should be responsible for advancing the portfolio of potential solutions identified in order to achieve the mission by a set date.

Recommendation 3: Technological innovation missions should have a single business case for their entire spending programme, based on the model employed by ARIA. This should be approved at the first possible spending review. There should be a presumption towards the greatest possible Delegated Authority Limit for this budget, which should be directed by the Mission CEO.

Recommendation 4: The Secretary of State for Science, Innovation and Technology should instruct the UKRI to orientate the activity of its research councils towards missions. There should additionally be a minimum envelope made available by the UKRI for each technological innovation mission, agreed by the Prime Minister and Mission CEOs, in conjunction with the Treasury.

Recommendation 5: Mission CEOs should report directly to the Prime Minister and be required to write a short public, quarterly update on the progress of their mission.

Recommendation 6: An ambitious plan for performance innovation missions should be set by the departments relevant to achieving them, recognising the power of ‘insane targets’. These plans should include the anticipated trajectory needed to complete each mission on time, enabling policymakers to straightforwardly determine whether a mission is ‘on track’.

Recommendation 7: The plan to deliver performance innovation missions should be stress-tested by an independent Taskforce, which is chosen for its cognitive diversity and breadth of experience. The Taskforce should help government set out how success will be measured, and input on the level of ambition of the trajectory used for each mission.

Recommendation 8: A Missions Unit should be set up in the Treasury, with personal sponsorship from the Prime Minster. It should employ a small, diverse and highly capable team of staff, including specialists in policy, management and delivery, and data analysis.

Recommendation 9: The Missions Unit should have a full-time Chief Executive, personally appointed by the Prime Minister to serve at permanent secretary level, as the official point of contact for all performance innovation missions across government. They should be offered generous financial incentives for the completion of milestones towards delivering missions, and be expected to stay in post long enough to oversee the first set of missions.

Recommendation 10: The Chief Executive of the Missions Unit should appoint a 'Mission SRO', at second permanent secretary-level, to oversee each performance innovation mission, from inside or outside the civil service, depending on who is most suitable for the role. If necessary to attract the right candidate, Mission SROs would be appointed above the usual pay band maximum for their grade. They would also have significant financial incentives for completion of mission-critical milestones.

Mission SROs would then appoint their own teams, comprised of senior civil servants from the departments relevant to delivering a mission, and seconded to the Missions Unit for the length of the mission. The SROs' home departments would make temporary appointments to cover their previous roles.

Recommendation 11: A small, Cabinet-level Mission Board should meet monthly to coordinate cross-government action on performance innovation missions, attended by the Secretaries of State responsible for delivering those missions and the Cabinet Secretary. These meetings should be chaired by the Prime Minister.

The Cabinet Secretary should communicate any relevant action points to senior officials, working to address potential blockers. This Board should also monitor whether the measures chosen for performance innovation missions are appropriate, and refine them over time with the Missions Unit, so that they accurately reflect the long-term outcome government is trying to achieve.

Recommendation 12: The Chief Executive of the Missions Unit, together with the Cabinet Secretary and Mission SROs, should publish a concise, publicly available update, outlining progress towards performance innovation missions. This update should contain the measures used for these missions and whether they indicate that the trajectory initially set is likely to be met, as well as an overall RAG rating.

The Secretaries of State responsible for delivering these missions should be required to sign the public update. The independent Taskforce described in Recommendation 7 should also be required to issue a comment, attached to this update, if they determine that the RAG rating, or the way it has been justified, inaccurately reflects progress.

1. Introduction

One thing that unites the world's most successful organisations is a clear purpose or mission statement which underpins everything they do, provides their staff with a mandate to deliver against and can be used to galvanise action across teams and departments. Government is no different.

The times when the State has delivered or helped deliver something extraordinary – landing a man on the moon less than a decade after committing to do so or developing and rolling out a highly effective vaccine to combat a global pandemic only a year on from its outbreak – have been characterised by government having a clear, unifying *mission* to act on. One that other actors in local government, and the private and third sectors are proactively made aware of, brought into and can rally behind.

Crucially, a mission, unlike a target or benchmark, is in part defined by this level of ambition. It is the ambition to achieve something out of the ordinary, in a particularly challenging timeframe, that helps communicate a sense of urgency to the system and incentivises people to innovate and work at their best. Mission-setting, in short, should be bold and imaginative, and the processes that underpin it should facilitate genuine problem-solving and delivery at pace.

Missions now feature prominently in the minds of policymakers, and many governments and public sector bodies globally describe themselves as being 'mission-oriented'.[1] Yet, despite this, insufficient attention has been paid to how this approach is best implemented – including how specialists are recruited, the scope of missions agreed, and progress reported.

This makes the delivery of missions incredibly difficult, as crisis management and day-to-day activity consumes government's energies – compounded by the short-termism, organisational siloes, status quo bias, and tight fiscal constraints that mitigate against achieving transformative, long-term objectives.

Mission control offers a blueprint for how the UK can adopt a genuinely mission-driven approach to government, in which high-performance and innovation are the default, in order to implement highly ambitious, cross-cutting goals.

[1] UCL Institute for Innovation and Public Purpose, 'Mission-Oriented Innovation Network (MOIN)', Webpage, 2024.

2. What is a mission?

Missions are first and foremost defined by their level of ambition. Rather than trying to enhance the 'business-as-usual' activity of government, missions are a time-bound commitment to achieve an outcome that is unusually difficult and in some cases unprecedented. This could include ending rough sleeping in two years, eradicating child poverty in a single parliament, or supporting a moonshot scientific or technological breakthrough, such as carbon neutral air travel by 2030, that has the potential to transform people's lives.[2]

In turn, a mission-led government is one that puts in place the necessary structures and processes to give these ambitions the best possible chance of success. Crucially, because of the unusual scope of missions, and the fact they are premised on disruptive innovation, it would not be possible or even desirable for the whole of the civil service to be oriented around the delivery of these goals. Missions are unique endeavours that require certain parts of the government machine to work in a fundamentally different and more agile way.

A break from business-as-usual

Interviewees argued that mission-like goals are much less likely to succeed when they are pursued within ordinary Whitehall structures but not properly insulated from their more bureaucratic tendencies – including towards top-down management over autonomous, team-based working, a focus on inputs and processes rather than outcomes, and an obsession with avoiding failure at the expense of execution.[3]

For example, projects delivered through the Major Projects Portfolio – some of which would be analogous to missions – are often criticised for prioritising procedure while losing sight of their intended outcome.[4] Remarkably, in nearly half (46 per cent) of the projects recently assessed by the National Audit Office, a failure to track outcomes meant that it was "not possible to say whether the project had achieved [its] stated aims".[5]

Notably, interviewees suggested that even when government is trying to manage something particularly unusual or unprecedented, Whitehall has a tendency to apply its usual procedures and layers of sign-off and to be sceptical of doing things differently, however inappropriate to the situation this may be. It is notable, for instance, that during the pandemic Kate Bingham, in her role as head of the Vaccine Taskforce, was still required to submit multiple business cases to the Treasury on the strategic rationale for purchasing vaccines.[6]

Conversely, successful examples of state-led innovation described as 'missions' have typically been managed outside the ordinary boundaries of government. For example, George Mueller, who was decisive in the success of the 1969 Moon landing, was once asked how he would organise a similar programme today; he responded that, to succeed, it would now need to be

[2] See, for example, Department for Levelling Up, Housing & Communities, *Ending Rough Sleeping For Good*, 2022; Tony Blair, 'We Need a National Plan to Eradicate Child Poverty', Webpage, Children's Commissioner, 2021.
[3] University of Oxford, '"Another War Is Coming", Kate Bingham DBE, Delivers Romanes Lecture', Webpage, 24 November 2021.
[4] Public Administration and Constitutional Affairs Committee, *Delivering the Government's Infrastructure Commitments through Major Projects*, HC 125 (London: The Stationery Office, 2020).
[5] Ibid.
[6] University of Oxford, '"Another War Is Coming", Kate Bingham DBE, Delivers Romanes Lecture'.

designated a “classified black project”, to avoid the constraints imposed by modern-day procurement processes.[7]

Interviewees for this paper also noted that parts of Whitehall involved in the most innovative policy development, like the now-disbanded Strategy Unit or the Social Exclusion Unit have existed “on the edge of the bureaucracy” – often in a physically separate building, with a small and diverse team – enabling a more independent, entrepreneurial culture to emerge.[8] And of course, the successful Vaccine Taskforce was deliberately set up outside of the usual Whitehall bureaucracy.

Specific and credible

As well as being unusually ambitious – and therefore requiring a break from business-as-usual government – missions should be specific and credible. This means it should be clear how the success of a mission will be assessed. As one interviewee put it, “you didn’t need to ask whether a man had landed on the moon, you could look up and see”.

To establish credibility, government should ‘sense-check’ that a mission, while genuinely stretching, can actually be achieved. Historically, some missions have fallen short at this hurdle by adopting an unrealistic view of what is possible. For example, following the historic success of the Apollo mission and the wave of optimism this brought with it, President Nixon announced in his 1971 State of the Union address that the United States would wage a “war on cancer”, to “bring the same concentrated effort that took man to the moon toward conquering this dread disease”.[9]

Although the mission had Presidential sponsorship, was accompanied by the introduction of new legislation (the National Cancer Act), and had significant financial backing (worth more than $11 billion in today’s money), its objective was not defined by an understanding of what was then possible. One leading scientist, Professor Sol Spiegelman (then Director of the Cancer Institute at Columbia University), argued the mission “would be like trying to land a man on the moon without knowing Newton’s laws of gravity”.[10] The mission did not meet this basic test of credibility.[11]

Focused

The resource-intensity and unusually ambitious scope of missions means that government should be sparing in how many it chooses to pursue at any one time. Interviewees agreed that no more than “three to five” missions should be pursued simultaneously, since their power derives, to a large extent, from the intense focus they can create in government.

Other countries that have adopted a mission-led approach to government have sometimes found themselves susceptible to mission creep, with vested interests petitioning for the adoption of more missions over time, or government applying a mission lens to unhelpfully broad areas of policymaking.

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[7] Dominic Cummings, *The Unrecognised Simplicities of Effective Action #2: ‘Systems Engineering’ and ‘Systems Management’*, 2017.
[8] House of Commons Public Administration Select Committee, ‘Governing the Future. Second Report of Session 2006–07. Volume I.’ (House of Commons, 6 March).
[9] Young-Joon Surh, ‘The 50-Year War on Cancer Revisited: Should We Continue to Fight the Enemy Within?’, *Journal of Cancer Prevention* 26, no. 4 (December 2021).
[10] Ibid.
[11] John Kay, ‘Mission Economy by Mariana Mazzucato - Could Moonshot Thinking Help Fix the Planet?’, *Financial Times*, 13 January 2021.

For example, Australia's innovation agency, CSIRO, now has nine core missions, in addition to four "developing missions" and two "enabling missions" – an increase from the six "challenges" it first identified.[12] Meanwhile, the Netherland's mission driven approach to its "top sectors" spans industries from logistics to the creative industries, as well as agri-food, chemicals, water, energy, the life sciences, health, tech, and horticulture – weakening its strategic focus.[13] Interviewees argued this number is "far too many" and that for missions to be successful, government must "focus on a small number of things it wants to do really well". Several also cautioned against the way in which missions and other types of ambitious priority can proliferate over time, and stressed that "if everything is a focus, nothing is".

2.1 A mission typology

One of the biggest risks to achieving missions is to apply the same approach to objectives that are fundamentally different in nature.

Some missions, such as eliminating homelessness, require a high degree of coordination between sectors, changes to the way frontline services are delivered and will have a number of already-known solutions. Other missions, such as achieving carbon neutral air travel, rely on a portfolio of potential solutions, greater R&D capacity in specific areas, and for things to happen much faster than they would ordinarily – calling for a clear, centrally-led strategy.

Finally, some missions – including the mission to reach Net Zero by 2050 – combine the need for innovations in performance and public service delivery with technological innovation. In these cases, the separation of a mission into contributing outcomes can help clarify the governance infrastructure needed to deliver it, and to what extent it should draw on different, performance and technologically oriented delivery approaches.

Determining how a mission should be governed therefore means asking questions like:

- Is the mission primarily concerned with performance (improving how things are done), discovery (doing things that are currently unknown) or both?
- Does the mission rely on the discovery of new technologies and science?
- Is the mission speculative or is there a well-understood 'delivery chain' that could be strengthened to achieve it?

In turn, this would allow a mission like reaching Net Zero by 2050 to be organised according to outcomes related to the discovery of new, green technologies (i.e. 'technological innovation'), and outcomes related to the carbon footprint of individuals and businesses, and activity in the public sector (i.e. 'performance innovation').

[12] CSIRO, 'Partner with Us to Tackle Australia's Greatest Challenges', Webpage, 2024; University College London, 'CSIRO Australia: A National Science Agency's Approach To Missions', Webpage, 2024.
[13] Government of the Netherlands, 'Encouraging Innovation', Webpage, 2024.

Figure 1: Mission typology

2.1.1 Technology innovation

For a technology innovation mission, such as achieving carbon neutral air travel, careful consideration is needed when deciding on specific targets. Firstly, a poorly designed target can mean inadvertently prescribing a solution or approach that 'closes off doors' to innovation. As one interviewee put it, the innovation needed to achieve most missions means "by definition, you can't know exactly what the answer is when you set out".

Despite this, they argued that Whitehall's current approach to these goals is to announce "the five things it is going to do on day one" – which they said amounts to "setting off on a voyage trying to discover America". For example, setting an outcome based on the number of commercial flights powered by hydrogen or some other jet fuel substitute would be entirely inappropriate if the best means of achieving carbon neutral air travel in fact had nothing to do with currently available fuel sources or vehicles.

Secondly, as tech innovation missions involve coordination with other sectors, particularly the private sector and universities, an approach which is too top-down makes it harder to achieve consensus and promote alignment amongst the groups who will be pivotal to the success of the mission.

The key question, therefore, in the context of technological innovation missions, is how government can create a genuine sense of urgency and will to succeed in areas where a high degree of specificity around targets would be counterproductive. And simultaneously, as one interviewee put it, "pour oil on the areas it is certain about; on things that have worked before".

Designing high-level outcomes that "genuinely empower people to take different approaches", but contain a clear goal which is properly incentivised and rewarded, should be the lodestar for these kinds of missions.

2.1.2 Performance innovation

Although performance innovation missions – such as eliminating homelessness – will also require experimentation and new ways of working, their design can and should be informed by a theory, and the available evidence, of what is likely to achieve the greatest change in the shortest possible space of time. For example, we know that programmes supporting people leaving hospital and prison; safe and stable housing provision; and targeted health

interventions (for example, to support people with alcohol dependency or a history of mental illness) can all make an important contribution to reducing rough sleeping.[14]

Unlike a technological innovation mission, this allows government to sketch out the 'delivery chain' involved in a mission and analyse what actions are needed, centrally and locally, to strengthen it. In other words: what are the links that connect decision-makers in government to service providers, and the realisation of outcomes on the ground, and what levers would need to be pulled to affect these outcomes?[15] And how can relevant areas of unwarranted variation – such as, in the example of homelessness, the accessibility and quality of drug and alcohol treatment services – be overcome to achieve a particular mission?

Crucially, this effort relies on a strong foundation of data at every level of a delivery chain to provide government with a predictable, close-to-real-time view of system performance. This could mean collecting qualitative data by making field visits to hospitals or schools, or auditing a commissioning body further up the chain, such as an Integrated Care Board. It also requires an empowered, problem-solving function at the centre of government to understand and help remove practical barriers to delivering missions as they arise (the focus of Section 4.2).

Without an understanding of the 'delivery chain' between decision-makers and outcomes, and how it can be strengthened, even those at the top of government can find they do not have the levers necessary to drive change (as previous *Reform* research has shown[16]).

Principle 1: Missions should be regarded as unique endeavours, separate from the business-as-usual activity of government. They should also be:

- Specific: a clear, time-bound goal, that enables direct accountability
- Credible: government should have the authority and ability to affect change
- Focused: there should be no more than three to five missions at any one time

Principle 2: Missions should be separated into a small number of contributing outcomes, governed according to whether they are primarily focused on:

- Technological innovation: supporting a scientific or technological breakthrough
- Performance innovation: achieving an unusually ambitious or unprecedented socio-economic outcome.

[14] Centre for Homelessness Impact, 'What We Know about What Works', Webpage, 2024.
[15] Michael Barber, *How to Run a Government: So That Citizens Benefit and Taxpayers Don't Go Crazy* (London: Penguin Random House, 2016).
[16] Charlotte Pickles and James Sweetland, *Breaking down the Barriers: why Whitehall is so hard to reform* (Reform, 2023).

3. Technological innovation missions

Once a technological innovation mission has been designed (with a very specific, high-level outcome) there are steps government can take to identify a portfolio of credible solutions, drawing on external expertise to do this (Section 3.1). The mission should then be led by an empowered 'Mission CEO' in Whitehall (Section 3.2), with public R&D funding mobilised in support of the mission (Section 3.3). Finally, progress on the mission should be reported to the Prime Minister on a quarterly basis, to ensure accountability and sustain momentum (Section 3.4).

3.1 Testing phase

Government should begin with a 'testing phase', to search for a portfolio of potential solutions that could help achieve a technological innovation mission. Interviewees were clear that this is preferable to government specifying the "one solution" that it thinks is best for this kind of mission. Because innovation is inherently uncertain, any attempt to over-specify – such as directing R&D towards a specific type of flight technology to achieve carbon neutral air travel – could lead to higher costs and close off promising avenues for success.

Notable examples from major project delivery epitomise the cost overruns and delays that can occur when trying to pre-empt solutions in innovation-intensive areas. The "overspecification" of the railway design for HS2 is a significant reason for inflated costs, and has been cited in recent inquiries held by the Transport Committee and Public Accounts Committee.[17] Similarly, the Public Accounts Committee's inquiry into Ajax – a high-tech armoured vehicle developed for the British Army – concluded that the programme was "flawed from the outset" as a result of being "over-specified" and the Department not understanding "the scale of the technical challenge".[18]

At the same time, interviewees argued that to develop a portfolio of promising solutions, an organisation must have a strong grounding in "innovation analytics" – i.e. the ability to think long-term, prioritise scarce R&D resources and be open to disruptive shocks – a skillset which can sometimes be lacking in the Civil Service.[19] Consequently, bringing in a group of external experts and industry leaders can be a key way of developing and managing this portfolio, ensuring it strikes the right balance of risk between more conventional technologies and lesser-known, more speculative 'moonshots' (see Figure 2).[20]

The decision taken during the pandemic to establish the Vaccine Taskforce – a group of experts from across industry, healthcare, science and government, to build a portfolio of promising vaccine candidates – offers a compelling example of this approach. One which has

[17] See Trevor Parkin, *Oral Evidence: HS2 Progress Update*, HC 85 (Transport Committee, 2023);
[18] Public Accounts Committee, *Armoured Vehicles: The Ajax Programme* (London: The Stationery Office, 2022).
[19] Stian Westlake, 'If Not a DARPA, Then What? The Advanced Systems Agency', Blog, Nesta, 7 April 2016.
[20] Katie Prescott, 'Computer Power behind AI Creates a World of Haves and Have-Nots', *The Times*, 20 March 2024.

been described in a joint report by the Health and Social Care and Science and Technology Committees as a “masterstroke”.[21]

The portfolio approach to procurement enabled the Taskforce to successfully hedge its bets between “world-leading biopharma companies” and “rising stars”, as well as vaccines based on different technology platforms – including the widely-used mRNA vaccines developed by Pfizer and Moderna, and the vector vaccine produced by AstraZeneca.[22] In fact, it was only by adopting this approach, at a time of huge uncertainty, that the Taskforce was able to act quickly and frontload most of the risk, before it knew which vaccines, “if any”, might work.[23]

Interviewees for this paper also reflected that seeking a diversity of expert opinion “from day zero not day one” can act as a vital counterweight to the tendency to pursue technology missions according to what is politically expedient or will reassure particular veto players and producer interests, rather than what is necessary for success.

Since missions are synonymous with government’s most ambitious goals, and can involve risky, high-visibility investments, using expert input early on – especially those with real operational or delivery experience – to identify potential solutions is just not a ‘nice to have’ but an essential first stage in delivering technological innovation missions.

Recommendation 1: The Prime Minister and Secretary of State leading a technological innovation mission should begin by appointing an Expert Council from across business, academia and the public sector, to serve for its duration. Their first task should be to determine whether there is a portfolio of potential solutions to that mission.

3.2 Exceptional leadership

Empowered

An essential principle when delivering missions is to ensure responsibility and authority go hand-in-hand.[24] Leaders of technological innovation missions should be empowered with the resources and authorisation they need to act quickly and decisively and unblock key barriers to progress without needing to constantly defer to other decision-makers in Whitehall. They should be considered the “CEOs” of their respective missions.

Interviewees reflected that important, mission-like priorities in Whitehall are too often assigned to Directors-General, who “spend most of their time managing upwards” and seeking permission from Permanent Secretaries who have a “different, more operationally-focused set of incentives”. In turn, direct accountability for how missions are led is undermined and the Director-General’s role becomes geared towards “chairing meetings” and “briefing junior ministers”, rather than delivering the intended outcome of the mission.

[21] Health and Social Care Committee and Science and Technology Committee, *Coronavirus: Lessons Learned to Date*, HC 92 (London: The Stationery Office, 2021).
[22] PA Consulting, ‘UK Vaccine Taskforce: Steering a World-Leading Programme to Secure COVID-19 Vaccines in Record Time’, Webpage, 2024.
[23] University of Oxford, ‘“Another War Is Coming”, Kate Bingham DBE, Delivers Romanes Lecture’.
[24] Dominic Cummings, ‘Regime Change #3: Amazon’s Lessons on High Performance Management for the next PM’, Blog, 22 February 2022.

Countering this requires precision about what a 'Mission CEO' will be tasked with doing and, crucially, the remit they will have to act, agreed with the Prime Minister before the mission begins. Interviewees argued that prospective Mission CEOs should have some influence over this process, setting out the "two or three things" they think will be needed to achieve a mission, since talented leaders are "unlikely to tie themselves to a table without knowing the means of escape". This could take the form of a public mandate letter, signed by the mission lead and personally by the Prime Minister (a mechanism currently used in Canada, for example, to commit ministers to delivering cross-government priorities).[25]

The more agile approach to decision-making and strategy required by technological innovation missions means those leading them should, wherever possible, be able to act unilaterally. Currently, interviewees argued, there are "far too many routes through the Whitehall system" – taking the form of secretariats, taskforces, units and other governance structures – which introduce unnecessary friction into decision-making and widespread deniability when things go wrong. In many cases, this is exacerbated by the hierarchical nature of the civil service, creating excessive layers of management and sign-off.[26]

The decision rights of a mission lead should extend to the ability to appoint their own team. Several interviewees were emphatic on this point, arguing that the energy and calibre of a "founding team", and the level of trust within it, are essential to organisations delivering ambitious goals. The importance of assembling the best possible team is recognised across some of the world's most innovative, mission-driven enterprises.

Sam Altman, CEO of OpenAI, for example, describes hiring as "probably the most important thing a founder does".[27] Steve Jobs famously said that the "secret of [his] success" is going to "exceptional lengths to hire the best people in the world";[28] while Colonel Boyd, the celebrated military strategist, would often repeat "People, ideas, machines – in that order".[29] Yet, while control over personnel selection is essential to building high-performing teams, and particularly innovative teams, few projects in Whitehall have this luxury.[30] Mission CEOs should be allocated an appropriate budget, and granted the necessary autonomy, to attract top talent.

Inspiring

The reasons for some technological breakthroughs, whether in the public or private sector, appear almost inseparable from the leadership of the individuals associated with them. It is difficult to determine, for example, whether the Apollo missions would have proven successful without the leadership of George Mueller; the Manhattan Project without General Groves; or the development of the smart phone without Steve Jobs (see Figure 2). Despite, or perhaps given, this, interviewees pointed to some general characteristics that government should seek when appointing a Mission CEO.

First, those leading technological innovation missions must be unusually driven, or as one interviewee put it "absolutely fanatical about what they are working on", with a relentless

[25] Government of Canada, 'Mandate Letter Tracker: Delivering Results for Canadians', Webpage, 20 June 2019.
[26] Amy Gandon, *Civil Unrest - A Portrait of the Civil Service through Brexit, the Pandemic, and Political Turbulence* (Reform, 2023).
[27] Sam Altman, 'How to Hire', Blog, 2024.
[28] Gary Garfield, 'What Happened to the "Best and Most Serious People"?', *The Hill*, 5 April 2018.
[29] Dominic Cummings, '"People, Ideas, Machines" I: Notes on "Winning the Next War"', Blog, 10 March 2022.
[30] Dominic Cummings, 'Unrecognised Simplicities of Effective Action #1: Expertise and a Quadrillion Dollar Business', Blog, 13 January 2017.

approach to delivery. They told the story of one leader choosing to "walk over glass" in front of a packed audience, to demonstrate they would do "whatever it takes" to deliver. Others suggested that a Mission CEO needs the kind of drive to "pull everyone towards the mission", and inspire exceptional loyalty from their team.

Second, Mission CEOs must have a clear vision of why a mission is important and constantly communicate this to their team. As one interviewee put it, only when people are "sick to the back teeth" of hearing why a mission matters does it have any chance of traction and surviving the "political turbulence" of government. Previous *Reform* research has found that ambitious objectives – such as reaching Net Zero by 2050 – are most likely to succeed when they are driven by leaders who can articulate a clear vision for the future, which others can align themselves around.[31]

Finally, Mission CEOs should be self-assured and credible enough to inspire personal support from the Prime Minister. While it is important that a Mission CEO is empowered in their own right, interviewees argued that Prime Ministerial sponsorship is indispensable in whether something is prioritised over time, since Whitehall is "quick to work out what the PM wants" and "if they are interested in what you are doing, the corridors of Whitehall become much smoother". For this reason, the Mission CEO should be someone who is well-placed to advocate for the mission and sustain support for it in central government.

Figure 2: Inspiring leadership

When Steve Jobs was designing the iPhone, he made the decision that it should be built with resilient, scratchproof glass, rather than plastic. He met with the CEO of a company known as Corning, that had developed a chemical process to create a product known as "Gorilla Glass" which matched these specifications. Jobs explained to the CEO, Wendell Weeks, that he needed a major shipment of the glass in just six months: a trajectory that would require Corning to scale its glass production at an unprecedented rate.

Weeks explained that a false sense of confidence would not help overcome engineering challenges and that the timeline was not feasible. Jobs disagreed, saying that a six-month trajectory was possible: "Get your mind around it. You can do it".

Soon after, Corning's factories switched from producing LCD to the Gorilla Glass full-time and was able to fulfil the order to schedule, in less than six months – putting their "best scientists and engineers" on the project and "making it work". Jobs' inspiring and uncompromising leadership had laid the groundwork for a previously unthinkable level of performance.

Source: Harvard Business Review, 'The Real Leadership Lessons of Steve Jobs', 2012.

Capable

Mission CEOs should have exceptional capabilities relevant to the technological innovation mission they are tasked with delivering. As one interviewee noted, referencing government's New Hospital Programme, "if the ambition is to build 40 hospitals, you should appoint someone

[31] Gandon, *Civil Unrest - A Portrait of the Civil Service through Brexit, the Pandemic, and Political Turbulence*.

to lead that mission who has overseen the construction of lots of hospitals". Instead, they explained, the tendency in Whitehall is usually to appoint a "nondescript Director General" in the relevant department as the "Senior Responsible Officer" (SRO), with "little-to-no previous experience coordinating major construction projects".

The Public Accounts Committee has similarly identified that government does not have "the right level of skills and experience to deliver some of its most difficult and complex projects".[32] And, moreover, these skills shortages are especially stark in sectors such as "science, commercial and digital", which are most relevant to achieving technological innovation missions.[33]

As a result, in its approach to achieving a technological mission government should look to appoint a Mission CEO from outside the civil service, with specific professional experiences related to the relevant technologies or a similar discipline. To ensure this process is fair and appoints the most capable Mission CEO – rather than the person who is most credentialed or has the strongest existing networks in Whitehall – recruitment should be led by a cognitively diverse Expert Council, who would input on the Mission CEO's terms of appointment. Otherwise, interviewees reflect, Whitehall will generally "choose people from a small, inside group who have honours and the right credentials", rather than the person who is best placed to deliver a mission.

In the private sector, boards have become increasingly influential in talent management, and can help "override some of the personal ties" that bias decisions regarding important appointments.[34] In the public sector, Departmental Boards can make an important contribution to governance, but, as the 2023 Maude Review found, their role has tended to be an informal one, utilised well by some departments but quite poorly by others.[35]

There are also notable examples of advisory groups and councils being successfully used in government to inject diverse, outside opinion on specific, specialist matters, and which carry transferable implications for what the membership of these boards should look like. For example, the Industrial Strategy Council – established to provide "impartial and expert advice" on the UK's 2017 Industrial Strategy – was commended for the wide-ranging experience and perspective of its membership, which afforded it the "credibility to provide a transparent and comprehensive assessment of industrial policy".[36]

Along these lines, each technological innovation mission should be supported by a diverse Expert Council, made up of relevant business, academic and civil society leaders, and brought together by the department responsible for that mission. To begin with, as soon as possible after a mission has been announced, a subset of the Council should be tasked with leading an appointment process, alongside the Prime Minister, to appoint a 'Mission CEO' to lead that mission.

Afterwards, the Council should be available to the CEO throughout the life cycle of a mission to provide specialist advice and counsel which is unavailable within government; help solve specific delivery challenges; and where necessary, offer the CEO constructive challenge.

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[32] Public Accounts Committee, *Lessons from Major Projects and Programmes: Thirty-Ninth Report of Session 2019-21*, HC 694 (London: The Stationery Office, 2021).
[33] Public Accounts Committee, *Specialist Skills in the Civil Service* (London: The Stationery Office, 2020).
[34] McKinsey & Company, 'The CEO Guide to Boards', Webpage, 9 September 2016.
[35] Francis Maude, *Independent Review of Governance and Accountability in the Civil Service*, 2023.
[36] Business, Energy and Industrial Strategy Committee, *Post-Pandemic Economic Growth: Industrial Policy in the UK*, HC 385 (London: The Stationery Office, 2021).

Since technological innovation missions rely on the Mission CEO being aware of developments that occur outside government, the Council should have a strong industry network, which it regularly uses to ensure the Mission CEO is connected to innovative people and ideas: both specific to that mission but also from other fields that could nevertheless be applied to it. In this way, the Expert Council would act as a source of "recombinant thinking" for the CEO – helping them connect innovations taking place in disparate fields – to advance the mission.[37]

Recommendation 2: A subset of the Expert Council for each technological innovation mission should lead the process for appointing a CEO to lead the mission. The Council should also provide ongoing support and constructive challenge to the CEO.

The Mission CEO should directly report to the Prime Minister and have the authority to directly appoint their own team. They should be responsible for advancing the portfolio of potential solutions identified in order to achieve the mission by a set date.

3.3 Fuel on the fire

For technological innovation missions, success hinges not on the activity and funding of departments, but on maximising the likelihood of breakthroughs occurring across society. To this end, interviewees argued there are notable weaknesses in how the UK currently funds public sector R&D that a mission-oriented government would need to address.

While the UK is spending record amounts on R&D – and now exceeds the OECD and EU averages for R&D spending as a percentage of GDP – interviewees argued there are several low-hanging fruit that could be seized on, to give the UK a more agile and mission-oriented approach to supporting scientific and technological innovation.[38] These relate to the speed at which public sector R&D funding can be allocated and to the absence of clear strategy, in several key areas, for what it should seek to prioritise.

Speed of allocation

Missions based around emerging science and technology – which can quickly shift over time and often deliver the greatest benefits to first and early movers – rely on a government which is capable of acting at pace. As Sarah Munby, Permanent Secretary of the new Department for Science, Innovation and Technology (DSIT) has said, "we must aspire to be faster and more agile" to "respond to rapidly accelerating technology development" across the board.[39]

Common processes that work relatively well in one part of government may be completely inappropriate for supporting the innovation required by missions. For example, Lord Willetts, in a review of business cases in DSIT, highlights that the business case process, designed to ensure feasibility and good value for money in conventional areas of spending – like buying services and building new infrastructure – is "ill-suited for the deliberate risk-taking necessarily involved in spending money on R&D".[40]

[37] Matthew Syed, *Rebel Ideas: The Power of Diverse Thinking* (London: John Murrray Publishers, 2020).
[38] House of Commons Library, *Research & Development Spending*, 2023.
[39] David Willetts, *Independent Review of the DSIT Business Case and Approvals Process*, 2024.
[40] Ibid.

Lord Willetts describes submissions that "averaged 249 pages", with ideas taking over "two and half years" to move from the Research Council stage to execution and requiring "13 specific approvals" – all despite widespread agreement that "the process should be shorter".[41]

Worse still, many officials are unclear on how to draft these business cases – leading to the use of external consultants simply to help partner bodies get them through Whitehall's own processes.[42] Ironically, attempts to create alternative, expedited routes for approval are said to have added further "complexity and uncertainty" for officials trying to navigate the system.[43] Meanwhile, in the UK Space Agency, one of DSIT's smaller arm's length bodies, over 50 such business cases have been written in this spending review period alone.[44]

Such lengthy and cumbersome processes, as well as risking technologies becoming out of date by the time approvals are obtained, make it much harder for missions to attract the private and international capital needed to catalyse innovation.

Interviewees argued that for innovation-heavy missions to succeed, a more streamlined and agile approach to business cases is needed. Several pointed to the benefits of adopting the model used for ARIA (the Advanced Research Funding Agency) – which has a single business case for its entire spending programme. This would increase the flexibility of mission SROs to identify and pursue innovations that are crucial to missions succeeding once a spending review has been conducted. It would also better recognise the inherent uncertainty involved in pursuing things that are unusually ambitious in government.

Along similar lines, Lord Willetts makes the case for increasing the Delegated Authority Limit for DSIT investment decisions – outside of which the Treasury exercises additional scrutiny and approval. This would decrease the average decision-making time for DSIT investments.[45]

At the same time, spending considered "novel, contentious or repercussive" (NCR) requires additional Treasury approval within the delegated authority limit. Lord Willetts argues these should be identified by DSIT but "included within overall programme Business Cases", since all R&D spending is "in some way 'novel'", and so risks an overly extensive interpretation of NCR.[46]

These arguments are equally applicable in the case of innovation-heavy missions, and so the Delegated Authority Limit applied to mission budgets should be as expansive as necessary to promote innovation in uncertain and novel areas (with Treasury scrutiny frontloaded in agreeing the mission in the first place, and continued accountability provided by regular scrutiny sessions with the PM).

Recommendation 3: Technological innovation missions should have a single business case for their entire spending programme, based on the model employed by ARIA. This should be approved at the first possible spending review. There should be a presumption towards the greatest possible Delegated Authority Limit for this budget, which should be directed by the Mission CEO.

[41] Willetts, *Independent Review of the DSIT Business Case and Approvals Process*.
[42] Ibid.
[43] Ibid.
[44] Ibid.
[45] Ibid.
[46] Ibid.

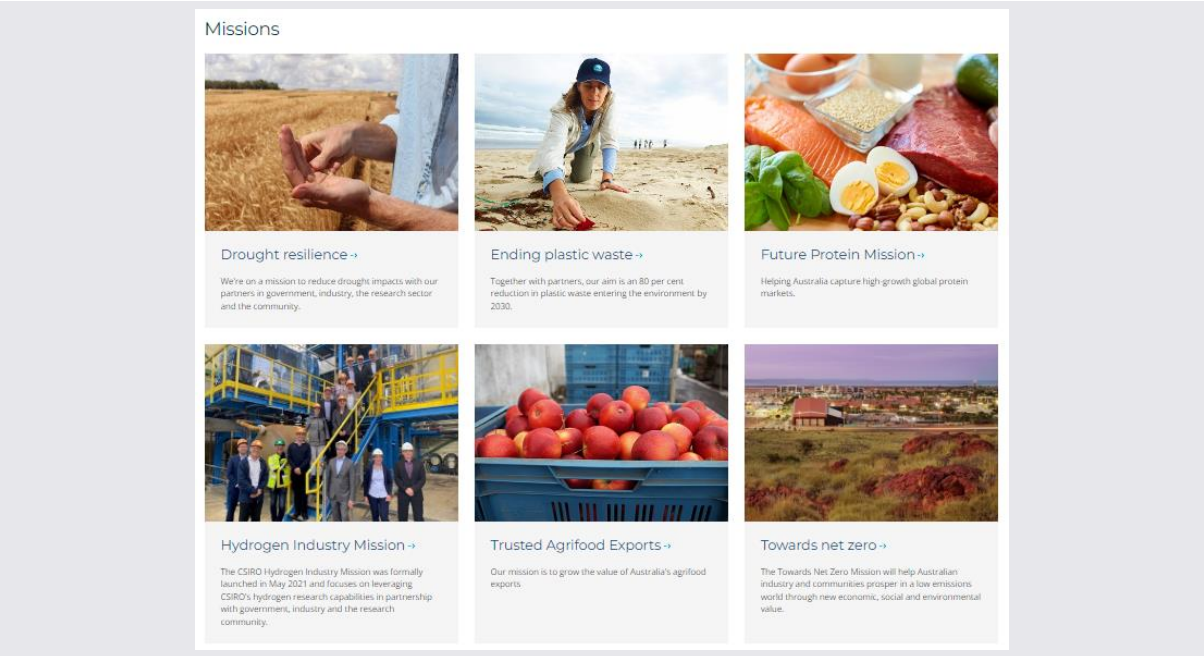
A clear strategy

Since missions are multi-sectoral ambitions, promoting innovation in other sectors often relies on government communicating a sustained, credible message about its commitment to particular goals. Interviewees pointed to the development of the UK's artificial intelligence sector – a consistent theme of recent budgets and spending reviews – as an example of an area where innovation and private sector involvement had been catalysed by the presence of a clear strategy. By contrast, they argued biological engineering, an area in which the UK has a similar, comparative advantage internationally, has been hampered by "the absence of a similar, top-down direction of travel".

This signalling effect can help stimulate inter-sectoral competition and build confidence in other sectors that there will be benefits to aligning their activity with the mission. As a 2017 report by the National Audit Office puts it, "strong leadership [is] required in emerging areas of science to maximise the value of government investment".[47]

For this reason, comparable countries to the UK now direct the activity of science funding bodies and innovation agencies around clear 'missions' or 'challenges' that other sectors can pull in behind and help government achieve. For example, in Australia, CSIRO (the Commonwealth Scientific and Industrial Strategy Organisation) has eight 'missions' aimed at solving "Australia's greatest challenges", which are key to its long-term strategy (see Figure 3).[48] In Sweden, Vinnova (its national innovation agency) takes a "mission-oriented approach" to innovation to establish "commitment from actors at all levels".[49]

Figure 3: CSIRO's 'mission-led' approach to R&D



Source: CSIRO, 'Missions', 2024.

[47] National Audit Office, *Cross-Government Funding of Research and Development*, 2017.
[48] CSIRO, 'Partner with Us to Tackle Australia's Greatest Challenges'.
[49] Vinnova, 'Mission-Oriented Innovation - a New Way of Meeting Societal Challenges', Webpage, 2024.

Interviewees described the public R&D funding landscape in the UK as being "much more bottom-up" and "academic" than our comparators – with relevant Secretaries of State having "far fewer powers" to direct investment towards specific innovations which could help solve societal challenges. For example, the UKRI, the UK's largest public funder of R&D – which is responsible for more R&D spending than the Ministry of Defence, NHS and the Department for Business and Trade combined – currently has eight distinct research councils, each with their own strategies and priorities for investment.

A more overtly 'mission' or 'challenge' oriented approach to public sector R&D funding – based around national priorities – could both accelerate progress towards accomplishing missions and also provide the strategic direction needed to crowd in additional private sector R&D in key areas. This does not require public sector R&D bodies to take a role in the end-to-end management of these missions, but it would allow them to be a more strategic and productive collaborator to science- and innovation-focused organisations in other sectors.

Recommendation 4: The Secretary of State for Science, Innovation and Technology should instruct the UKRI to orientate the activity of its research councils towards missions. There should additionally be a minimum envelope made available by the UKRI for each technological innovation mission, agreed by the Prime Minister and Mission CEOs, in conjunction with the Treasury.

3.4 Quarterly reporting

The scope of technological innovation missions, and the public R&D funding they will command, means it is essential there is a robust line of public accountability for each Mission CEO. Since progress on technological innovation missions is about transformational change, rather than incremental improvements that can be continuously monitored, this accountability should be exercised through a short, publicly available update, written each quarter by the Mission CEO and used to inform stocktake meetings led personally by the Prime Minister.

The update letter should not be a bureaucratic exercise; it should use succinct, everyday language to summarise a mission's 'state of play'. Similar to 'CEO updates' used in the private sector, this could be less than 2,000 words and cover thematic areas, events and trends relevant to delivery (see, for example, the footnoted letters by Larry Fink, CEO of Blackrock or Mark Zuckerberg, CEO of Meta).[50] Basic criteria, to ensure the update letter is as simple and unbureaucratic as possible, should be explicitly set out by government.

There is precedent for the use of this kind of personal reporting in the context of large tech and innovation projects and landmark government reviews. For example, Kate Bingham, as head of the Vaccine Taskforce, personally reported to the Prime Minister.[51] Louise Casey, as government's chief adviser on homelessness, also reported directly to the Prime Minister;[52]

[50] Mark Zuckerberg, 'Update on Meta's Year of Efficiency', Webpage, Meta, 14 March 2023; Larry Fink, 'A Fundamental Reshaping of Finance', Webpage, BlackRock, 2020.
[51] University of Oxford, 'Former Vaccine Taskforce Chair Calls for Fundamental Reset in Government Systems and Approach If the UK Is to Be Prepared for the next Pandemic', Press release, 23 November 2021.
[52] Jim Dunton, 'Louise Casey Quits Government Rough Sleeping Review Role', *Civil Service World*, 21 August 2020.

and Stuart Burgess, former rural affairs Tsar, describes reporting to the Prime Minister in both a "formal and informal" capacity, as well as writing and presenting them an annual report.[53]

Early on in technological innovation missions – when the eventual solution is still unknown – it will be difficult to produce measures that accurately reflect the performance of the Mission CEO and what they have accomplished. Nevertheless, there will likely be leading indicators or qualitative signs of whether a mission is likely to succeed, that occur in advance of completion. For example, in the case of the Apollo missions, these indicators may have included successful test launches, the recruitment of a capable cohort of pilots, or the construction of a command module that can withstand re-entry to Earth's atmosphere.

Government can then plan for contingencies or changes in approach, minimising the sunk cost of waiting for a suboptimal strategy to pay off.[54] Otherwise, interviewees explained, government risks "jumping the gun" and producing indicators and modes of accountability that "aren't aligned with the opportunities that exist".

A direct line of reporting for Mission CEOs therefore serves a dual purpose: enabling clear accountability to the Prime Minister and the public, and reaffirming that they have an authority to act which supersedes conventional Whitehall hierarchies.[55]

Recommendation 5: Mission CEOs should report directly to the Prime Minister and be required to write a short public, quarterly update on the progress of their mission.

[53] Public Administration Committee, *Goats and Tsars: Ministerial and Other Appointments from Outside Parliament*, HC 330 (London: The Stationery Office, 2010).
[54] Barber, *How to Run a Government: So That Citizens Benefit and Taxpayers Don't Go Crazy*. Barber.
[55] Ibid.

4. Performance innovation missions

Once the delivery chain for a performance innovation mission, like eliminating homelessness, has been mapped out, including the contributing programmes that sit beneath it – i.e. it has been properly designed – government must set out an ambitious but credible plan to deliver it. This should be 'red teamed' by an independent group (Section 4.1). A Missions Unit, situated in the Treasury, should oversee progress in departments and align activity across performance innovation missions. The Missions Unit should be led by a Permanent Secretary-level official, with a Senior Responsible Owner (SRO) for each mission (Section 4.2).

Finally, performance innovation missions should be governed through a Cabinet-level board, comprising Secretaries of State from the departments most relevant to delivery and chaired by the Prime Minister – with the Cabinet Secretary in attendance to drive action across officials (Section 4.3).

4.1 An ambitious but credible plan

The ability of a performance innovation mission to motivate and gain support across Whitehall, from the frontline and other key stakeholders, is closely associated with its credibility. Without a credible strategy to deliver this kind of mission – including a theory of how change might occur and an understanding of the interventions the mission is likely to involve – they risk being unattainable or being crowded out by government's other priorities.

One way to promote the credibility of a performance innovation mission is to draw on outside input to 'red team' government's plans to deliver, and set out the trajectory it would need to follow in order for the mission to be successful.

Red teaming

The process of 'red teaming' involves drawing on outside expertise to present contrary views, straw man assumptions made, ensure and legitimise different perspectives, and "counteract the ever-present risks of groupthink or denial".[56]

This approach is laid out in the Chilcot Checklist (based on the findings of the Chilcot Inquiry) as a way to "relentlessly challenge the evidence" and as best practice for developing strategy in areas where there is a high level of complexity.[57]

In this way, an independent group can act as a 'critical friend', offering constructive challenge to government but also helping it understand whether certain strategies, policies and actions would place it on the right trajectory to fulfil this kind of mission.[58] This should not, in any way, infringe on the autonomy of those leading performance innovation missions, but is an important step in ensuring their initial design is sufficiently ambitious and robust, and that ongoing support and challenge is available.

Equally, to realise the benefits of this input, government must be receptive to direct feedback, as well as substantial, sometimes disruptive changes in approach. Whitehall, however, has tended to be characterised by its insularity: taking a stage-managed approach to engagement

[56] Michael Barber, *Accomplishment: How to Achieve Ambitious and Challenging Things* (London: Penguin Random House, 2023). Barber.
[57] Ministry of Defence, *The Good Operation: A Handbook for Those Involved in Operational Policy and Its Implementation*, 2018. Ministry of Defence.
[58] Cabinet Office, *Functional Review of Bodies Providing Expert Advice to Government*, 2017.

and a culture of groupthink, which limits outsider perspectives and opportunities for genuine challenge.[59]

The composition of the group used for red teaming is critical. It should be informed enough to assess the substance of government's proposals, but also diverse enough in experience and background to offer genuine, critical appraisal and challenge on government's approach. For red teaming to be successful, it must be able to offer the kind of original insight that can only originate from combining those with truly diverse experiences and accomplishments.[60]

This is because performance innovation missions are not about determining how to replicate past success, but instead how to achieve transformative change and radical improvements in performance. Which, in turn, relies on this red-teaming process generating novel ideas by combining insights from across sectors and industries (see Figure 4).

Figure 3: The composition of a red team

After the England team lost the 2016 European Championship in men's football, suffering a humiliating defeat to the much lower-ranked Iceland, the Football Association assembled a "Technical Advisory Board" to determine the cause of decades of underperformance in major competitions, and what could be done to turn this around.

Rather than appointing members to this Board based on their credentials and expertise in football or even team sports, the group was chosen for its cognitive diversity, with members having achievements in a wide range of disciplines, and each bringing very different frames of reference.

The group included Manoj Badale, a British Asian founder of a high-tech start-up, Sir Michael Barber, former head of the Prime Minister's Delivery Unit, Lucy Giles, the first female commander at Sandhurst and Sir Dave Brailsford, a cycling coach. Matthew Syed, who also served on the Board, argues these radically different perspectives helped it to foster "robust exchanges" and "divergent thinking" and to develop "more sophisticated solutions" than would have otherwise been the case.

While clearly it is not possible to draw a causal link, it is nonetheless noteworthy that the England team achieved dramatically better results in the next two major international competitions, coming 4th in the 2018 World Cup and reaching the final of the 2020 European Championship, before narrowly losing in extra time.

Source: Matthew Syed, 'Rebel Ideas', 2020.

The appointment of the red team should therefore allow government to identify a broad range of possible risks to delivering a performance innovation mission, and ultimately ensure the plan they have is bold yet credible. The red team must have license to be "frank, blunt and critical".[61]

[59] Gandon, *Civil Unrest - A Portrait of the Civil Service through Brexit, the Pandemic, and Political Turbulence*.
[60] Syed, *Rebel Ideas: The Power of Diverse Thinking*.
[61] Barber, *How to Run a Government: So That Citizens Benefit and Taxpayers Don't Go Crazy*.

This team should continue to exist for the duration of the mission, to provide support and constructive challenge to government on *how* it is pursuing its goals: for example, on whether the chosen model of service delivery is the right one and whether, based on emerging results, government has been ambitious enough. It could likewise discourage government from arbitrarily changing its approach or compromising on the mission due to short-termism.[62]

Trajectory

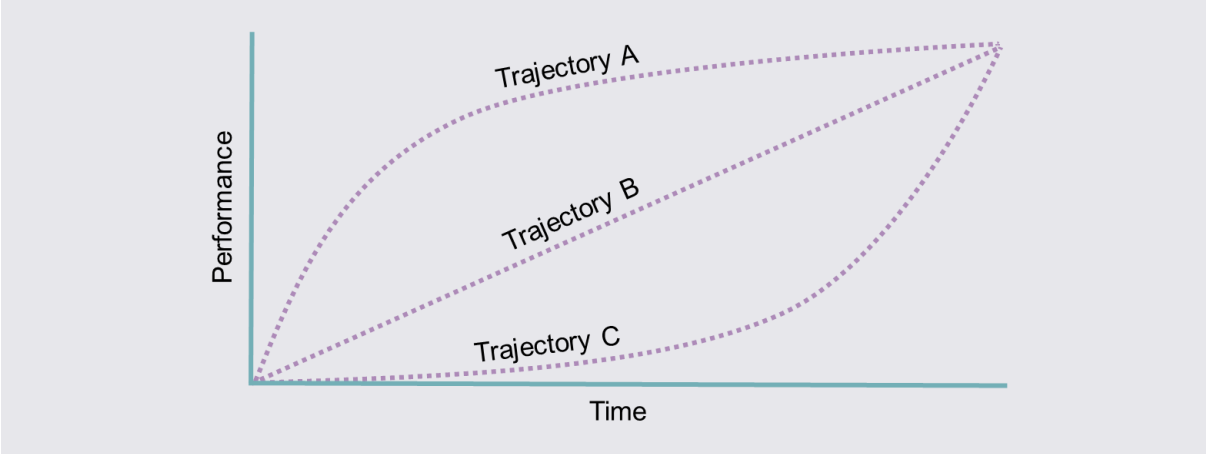
Another key part of the planning process for performance innovation missions, that the independent group could also contribute to, is the creation of a trajectory for how a mission is expected to progress over time. This could take the form of a stylised graph, connecting present-day performance to the level of performance government would need to achieve in future for a mission to be successful.

For example, if government is to eliminate homelessness in two years, it should also set clear expectations for the reductions in rough sleeping that should occur after six months, 12 months and 18 months. For some missions, it will be possible to improve performance in a linear way (a straight line trajectory); for others, a non-linear improvement in performance is much more likely (a curved trajectory).

Crucially, this forces government to confront whether the plan in place to deliver a mission is sufficient. It is also a clear, visual way of presenting how the success of a mission will be measured, which policymakers can reference at any point in the implementation timeline to say whether a mission is 'on track' or not.

A trajectory can also be used to better plan for contingencies and unexpected events. For example, government should not draw an ambitious trajectory for a healthcare mission without factoring in the likelihood of higher demand during winter; or an ambitious trajectory for crime reduction which does not account for the fact that crimes are more likely to occur when there are fewer daylight hours. Patterns should be anticipated and explicitly built into mission trajectories.[63]

Figure 5: Trajectory of a performance innovation mission



[62] Ministry of Defence, *The Good Operation: A Handbook for Those Involved in Operational Policy and Its Implementation*.
[63] Barber, *How to Run a Government: So That Citizens Benefit and Taxpayers Don't Go Crazy*.

Ambition

Finally, while an independent group has an important part to play in stress-testing the strategy for performance innovation missions, and strengthening their credibility, interviewees were clear the level of the mission ambition must remain a political decision. As Sir Michael Barber, former head of the Prime Minister's Delivery Unit puts it, "listen to the experts and check out the evidence but don't let them put you off".[64] Ideally, politicians should "consult without conceding on ambition".[65]

This is because the potential effectiveness of missions is bound up in how much risk they are willing to take: risks that must be underwritten by strong, consistent political leadership. Interviewees argued that some of the most transformative missions, including those initially described as impossible or wildly overambitious, ultimately owed their success to the power of "insane targets". An overreliance on experts and benchmarking – including comparisons to past performance or the performance of other countries – to set the ambition and scope of performance innovation missions can lead to an artificial ceiling being set on performance (see Figure 3).

Figure 6: The case of MRSA

Interviewees gave the example of a target set by the health team in the Prime Minister's Delivery Unit (PMDU) in 2004 to reduce MRSA blood stream infections (a major, deadly kind of hospital-acquired infection) by 50 per cent in three years. Given that most comparable countries were on a trajectory for MRSA infections to increase year-on-year – in what was then described as an "endemic" trend associated with increasing demand for hospital care – targeting such a large reduction was dismissed by many experts as overambitious and undeliverable.[66] In the UK, for example, MRSA cases had increased by 600 per cent in the decade prior to the target being set.[67]

Early on, however, the ambitiousness of the PMDU's target helped create followership for the mission across the health sector, with the Chief Nurse describing MRSA and the cleanliness of hospitals as their "top priority".[68] New infection prevention and control initiatives were put in place in hospital trusts, cultures of clinical practice changed, and progress was monitored through a mandatory, national surveillance programme.[69] By 2008, the once "unattainable" target of a 50 per cent reduction had been exceeded; and some hospital trusts reported a reduction of over 70 per cent.[70]

Sometimes, the consensus view of what is possible rapidly changes, often because a mission pushes the boundaries sufficiently. One interviewee pointed to the "Roger Bannister moment"

[64] Barber, *Accomplishment: How to Achieve Ambitious and Challenging Things*.
[65] Michael Barber, *How to Run a Government: So That Citizens Benefit and Taxpayers Don't Go Crazy* (London: Penguin Random House, 2016).
[66] Brian Duerden et al., 'The Control of Methicillin-Resistant Staphylococcus Aureus Blood Stream Infections in England', *Open Forum Infectious Diseases* 2, no. 2 (1 April 2015).
[67] Ibid.
[68] David Batty, 'Hospital Superbugs "Are Chief Nurse's Top Priority"', *Guardian*, 18 October 2004.
[69] National Audit Office, *Reducing Healthcare Associated Infections in Hospitals in England*, 2009. National Audit Office.
[70] Ibid

that occurs in performance innovation missions, when it becomes clear that a level of performance "previously thought impossible" becomes the standard for comparison.

A notable example is the target that 90 per cent of patients should begin treatment or be discharged within 18 weeks of a GP referral, introduced in 2004 when waits were "routinely longer than 18 months". This target was met and then exceeded four years later, in 2008.[71] Another is the target to halve the number of illegal asylum seekers set by then Prime Minister Tony Blair in 2003 with very limited consultation, to "bounce the system into action" and described at the time as "pie in the sky" thinking but also hit on schedule, six months later.[72]

Recommendation 6: An ambitious plan for performance innovation missions should be set by the departments relevant to achieving them, recognising the power of 'insane targets'. These plans should include the anticipated trajectory needed to complete each mission on time, enabling policymakers to straightforwardly determine whether a mission is 'on track'.

Recommendation 7: The plan to deliver performance innovation missions should be stress-tested by an independent Taskforce, which is chosen for its cognitive diversity and breadth of experience. The Taskforce should help government set out how success will be measured, and input on the level of ambition of the trajectory used for each mission.

4.2 Delivery

To understand and remove practical barriers to delivering performance innovation missions, and ensure departments maintain a sharp focus on them in addition to their other priorities, interviewees stressed the importance of having an empowered analytical team, or "Missions Unit", based in central government.

There is a significant body of research examining when delivery units have worked best, and the characteristics that enabled them to be effective.[73] In general the Missions Unit should be focused on: [74]

1. Tracking progress and using its authority to promote a single-minded focus on performance innovation missions (which are generally cross-sector and so rely on coordinated action across departments).
2. Analysing specific delivery challenges and helping to unblock them.

In order to perform these functions effectively, several characteristics of previously successful delivery units should be replicated within the Missions Unit.

[71] National Audit Office, *NHS Waiting Times for Elective Care in England*, 2014. National Audit Office.
[72] Paul Waugh, 'Pledge to Halve Asylum Applications within Six Months', *Independent*, 8 February 2003.
[73] See Nehal Panchamia and Peter Thomas, 'Public Service Agreements and the Prime Minister's Delivery Unit' (Institute for Government, 26 March 2014); Michelle Clement, 'The Art of Delivery: The Prime Minister's Delivery Unit 2001-2005', Webpage, GOV.UK, 26 August 2022.
[74] Ibid.

Diversity

First, to have a sufficient grasp on 'system' problems, delivery units must be interdisciplinary. This means combining staff with deep expertise in data science and analysis with generalists who can problem-solve and have experience delivering things (including by recruiting people from outside of government who have strong a track record of delivery). Too often, implementation is left to people with a narrow set of (mostly conventional, civil service) backgrounds.

Between 2001 and 2005, for example, the Prime Minister's Delivery Unit employed staff with very different experiences from one another – such as from consultancies, tech companies, high-performing hospital trusts, local councils, and academia.[75] Interviewees argued that delivery units should aim to integrate delivery and management capabilities, with exceptional policy and data skills.

Autonomy

Second, the delivery unit should, as far as possible, be organised around a small number of people who work with very high levels of autonomy. Several interviewees commented on the PMDU feeling "very different from normal Whitehall ways of working". To avoid becoming a "new, big bureaucracy to track a set of old bureaucracies", the original PMDU intentionally set a cap on how many staff it would employ (around 40 working on 20 priorities) and the size of its budget.[76] This meant for every pound it spent it influenced £50,000 of expenditure.[77]

A unit needed to support three to five missions could therefore benefit from being even smaller. Indeed, the late Vice Chairman of Berkshire Hathway, a company with one of the most successful track records in history and an annual revenue of $300 billion, partly attributed its success to preserving a "tiny" central headquarters – containing only "a Chairman, CFO, and a few assistants who mostly help the CFO with auditing, internal control, etc.". A delivery unit relies on the sharp focus that only relatively small, unbureaucratic teams can bring.[78]

At the heart of decision making

Third, a delivery unit should be physically situated near key political sponsors in government. Interviewees argued that the PMDU found it easier to achieve traction when it was located in the Treasury, where it could build the "right relationships" and persuade potential veto players, than when it was in the Cabinet Office – even though it was "institutionally" still part of No.10.

As Dr Michelle Clement, lecturer and No.10 researcher in residence writes, this enabled the PMDU to act as a "nexus between these bases of power" and work "in collaboration with Treasury officials", to assess the "deliverability" of spending plans.[79]

Sponsored from the top

Fourth, as with the Mission CEOs for technological innovation missions, the delivery unit must have strong personal sponsorship from the Prime Minister to drive accountability. In the case of the PMDU, this occurred through quarterly stocktake meetings that Tony Blair was said to spend "as much as half a day a week" preparing for. These were attended by relevant

[75] Barber, *How to Run a Government: So That Citizens Benefit and Taxpayers Don't Go Crazy*.
[76] Ibid.
[77] Ibid.
[78] Berkshire Hathaway, *Annual Report*, 2014.
[79] Clement, 'The Art of Delivery: The Prime Minister's Delivery Unit 2001-2005'.

Secretaries of State, SROs of each priority area, permanent secretaries and the Cabinet Secretary.[80]

As a result, progress updates from the PMDU had an outsized influence on the incentives of senior decision-makers, and how seriously its priorities were taken across government. Interviewees suggested that it "felt like Blair was personally in charge of targets", and "would often leave ticks or question marks on specific pieces of work".

Recommendation 8: A Missions Unit should be set up in the Treasury, with personal sponsorship from the Prime Minster. It should employ a small, diverse and highly capable team of staff, including specialists in policy, management and delivery, and data analysis.

4.2.1 Mission Unit leadership

While the PMDU was focused on a broad set of government priorities, including several business-as-usual priorities, like traffic congestion, education standards, and ensuring that trains ran on time, the Missions Unit should be much more intentionally organised around the delivery of a small number of hyper-ambitious goals.

First, the Missions Unit should have an authoritative, full-time Chief Executive, appointed at permanent-secretary level, who is the official point of contact for all performance innovation missions across government. Since performance innovation missions rely on actions taken by departments, this person must have a strong understanding of the public sector and an ability to navigate Whitehall, but also be able to act with a high level of autonomy, take risks and offer sincere challenge.

They should be offered generous financial incentives for reaching milestones towards each mission, accompanied by an expectation that they will stay in post long enough to oversee the first set of performance innovation missions. Like the CEOs of technological innovation missions, this person should be personally appointed by the Prime Minister.

Recommendation 9: The Missions Unit should have a full-time Chief Executive, personally appointed by the Prime Minister to serve at permanent secretary level, as the official point of contact for all performance innovation missions across government. They should be offered generous financial incentives for the completion of milestones towards delivering missions, and be expected to stay in post long enough to oversee the first set of missions.

The Chief Executive of the Missions Unit should in turn be responsible for appointing a 'Mission SRO' (Senior Responsible Owner), at second permanent secretary-level, to lead each of these missions, from inside or outside the civil service, depending on the skills and experience needed for that mission. The Mission SROs would effectively act as 'account managers' for the missions, holding the relationship with the departments responsible for delivering them, coordinating cross-departmental activity, and engaging relevant Secretaries of State and permanent secretaries on a regular basis.

[80] Panchamia and Thomas, 'Public Service Agreements and the Prime Minister's Delivery Unit'.

If necessary to attract the right external candidate, SROs would be appointed outside of the usual pay band maximum for a second permanent secretary, and like the Chief Executive, be offered generous financial incentives for achieving milestones towards mission delivery.

To support their role in coordinating cross-government activity, Mission SROs should be able to appoint their own team of senior civil servants, seconded from relevant departments. These staff would be re-located to the Missions Unit for the length of the mission, with their home departments making temporary appointments to cover their previous roles.

To achieve a homelessness mission, for example, a Mission SRO might choose to appoint Directors from the Levelling Up Department, the Department of Health and Social Care and the Ministry of Justice, to work in their team. Staff seconded to the Missions Unit would therefore have a high level of relevant policy expertise, and be able to support strong relationships between the Unit and the departments responsible for delivering missions. And, as a result, Mission SROs would have as much insight into, and control over, the 'delivery chain' for their missions as possible.

Finally, this arrangement would encourage departments to work collaboratively with the Missions Unit, secure the buy-in of officials from relevant departments and incentivise them to share relevant performance information with the Missions Unit.[81]

Recommendation 10: The Chief Executive of the Missions Unit should appoint a 'Mission SRO', at second permanent secretary-level, to oversee each performance innovation mission, from inside or outside the civil service, depending on who is most suitable for the role. If necessary to attract the right candidate, Mission SROs would be appointed above the usual pay band maximum for their grade. They would also have significant financial incentives for completion of mission-critical milestones.

Mission SROs would then appoint their own teams, comprised of senior civil servants from the departments relevant to delivering a mission, and seconded to the Missions Unit for the length of the mission. The SROs' home departments would make temporary appointments to cover their previous roles.

4.3 Governance

As well as having an elite team of officials driving performance innovation missions from central government, and unblocking barriers to progress, there must be clear leadership of these missions on the political side: bringing together the Secretaries of State most relevant to delivering them.

Historically, having a small, inner core of senior politicians has helped drive forward major change programmes, resolve intra- and inter-party disputes, and enabled more decisive action than is often possible in larger forums. Conversely, Cabinet government, which comprises over thirty ministers, was described in Lord Maude's review of the civil service last year as an "arcane" forum for decision-making, which rarely attaches "timelines and named individuals to action points".[82]

[81] Michael Barber, Paul Kihn, and Andy Moffit, 'Deliverology: From Idea to Implementation', Blog, McKinsey & Company, 1 February 2011.
[82] Maude, *Independent Review of Governance and Accountability in the Civil Service*.

One example of this informal arrangement was the 'Quad', which existed in the Coalition era of 2010 to 2015 and comprised the Prime Minister, Deputy Prime Minister, Chancellor and Chief Secretary to the Treasury. The group was perceived to be more effective at setting strategy than Cabinet or the Coalition Committee, which existed at the same time.[83] Though, as the academic Nick Pearce argues, its effectiveness is difficult to separate from the role it necessarily had to play in managing inter-party relations in the Coalition.[84]

As the Institute for Government's recent report on the centre of government points out, Tony Blair and Gordon Brown also made some of their most important, strategic decisions in much smaller forums than Cabinet, with an inner core of their most trusted ministers often having the final say.[85]

While these are solutions required due to the deficiencies of cabinet government, it is clear that performance innovation missions will need to be driven by a small group of senior ministers who have the necessary status, and power, to drive their coordination across government. To ensure missions are tightly gripped, monthly meetings should occur through a Cabinet-level 'Mission Board', chaired by the Prime Minister and attended by the relevant Secretaries of State for each mission, and the Cabinet Secretary. Meetings should focus on the full set of performance innovation missions – and aim to promote coherence between them – but have a standing agenda item to discuss progress on individual missions and how to overcome any challenges to delivery.

The Cabinet Secretary would have a key role to play in communicating the importance of performance innovation missions to permanent secretaries. As previous *Reform* research has found, senior officials will commonly "doff [their] cap" to the centre but continue to prioritise what is happening in their department over cross-government objectives – unless they know that the Prime Minister is personally interested in an agenda.[86]

Recommendation 11: A small, Cabinet-level Mission Board should meet monthly to coordinate cross-government action on performance innovation missions, attended by the Secretaries of State responsible for delivering those missions and the Cabinet Secretary. These meetings should be chaired by the Prime Minister.

The Cabinet Secretary should communicate any relevant action points to senior officials, working to address potential blockers. This Board should also monitor whether the measures chosen for performance innovation missions are appropriate, and refine them over time with the Missions Unit, so that they accurately reflect the long-term outcome government is trying to achieve.

4.3.1 Public reporting

Finally, this Board should work with the Missions Unit to refine the measures used by performance innovation missions over time. It is right that missions involve a higher level of

[83] Akash Paun and Stuart Halifax, *A Game of Two Halves: How Coalition Governments Renew in Mid-Term and Last the Full Term* (Insitute for Government, 2012).
[84] Nick Pearce, 'Reinventing the Centre', Blog, IPR blog, 12 March 2024.
[85] Institute for Government, *Power with Purpose: Final Report of the Commission on the Centre of Govenrment*, 2024.
[86] Pickles and Sweetland, *Breaking down the Barriers: Why Whitehall Is so Hard to Reform*.

risk than other kinds of government priority, and interviewees argued that for missions to effectively galvanise support, there must be a genuine "possibility of failure". But this should not prohibit government from revisiting the measures it has initially set, especially if there are extenuating circumstances that have knocked mission delivery off course.

For some performance innovation missions – like eradicating homelessness – there will be a significant time lag before outcomes begin to materialise and so choosing an interim measure based on an imperfect output and/or input could be a better measure of progress than the long-term outcome, as long as the long-term outcomes remains the overriding focus.

These measures should form the basis of a very concise, publicly available mission update, written by the Chief Executive of the Missions Unit, Mission SRO and the Cabinet Secretary, as a further incentive to really prioritise missions alongside business-as-usual government. This should be published quarterly and signed by each of the Secretaries of State on the Mission Board.

The update should contain red-amber-green (RAG) ratings, to assess whether these measures indicate that the initial trajectory set for the mission is likely to be met. The threshold for the RAG ratings assigned to performance innovation missions could be based on the definitions currently in use by the Infrastructure and Projects Authority:[87]

- Green: Successful delivery of the mission appears "highly likely" and "there are no major outstanding issues that at this stage appear to threaten delivery".
- Amber: Successful delivery of the mission appears "feasible" but "significant issues already exist requiring management attention". These issues "appear resolvable at this stage if addressed promptly".
- Red: Successful delivery of the mission "appears to be unachievable. There are major issues which, at this stage, do not appear to be manageable or resolvable. The programme/project may need re-baselining and/or its overall viability re-assessed".

To encourage an honest assessment of the deliverability of performance innovation missions, the independent red team described in Section 4.1 should also be required to provide a comment alongside any quarterly updates where it has a disagreement with a chosen RAG rating or its public justification.

Recommendation 12: The Chief Executive of the Missions Unit, together with the Cabinet Secretary and Mission SROs, should publish a concise, publicly available update, outlining progress towards performance innovation missions. This update should contain the measures used for these missions and whether they indicate that the trajectory initially set is likely to be met, as well as an overall RAG rating.

The Secretaries of State responsible for delivering these missions should be required to sign the public update. The independent Taskforce described in Recommendation 7 should also be required to issue a comment, attached to this update, if they determine that the RAG rating, or the way it has been justified, inaccurately reflects progress.

[87] Infrastructure and Projects Authority, *Infrastructure and Projects Authority: Assurance Review Toolkit*, 2021.

5. Conclusion

The growth of ‘wicked problems’, from climate change to rising economic inactivity, and poor health – which have no single solution and are potentially devastating for society – cannot be reversed by the State alone. Nor, however, are they likely to be solved by a passive State, too cautious to take important, long-term risks and too weak to identify and support the innovative capacity that exists in other sectors.

The State should not shy away from setting ambitious goals and putting in place a plan to deliver them. Its ability to do so matters not only to outcomes in the public sector, but to the confidence that exists, across society, in our ability to face up to modern challenges, innovate, and achieve ‘moonshot’ scientific and technological breakthroughs.

Depending on the nature of the challenge, however, very different approaches to governance will be needed. The extraordinary successes of previous, mission-led organisations, in the private and public sector, reveal important lessons for any incoming government with an ambitious set of priorities to deliver. *Mission control* provides a typology for considering different kinds of mission, focused on technological innovation and innovations in performance, and offers a blueprint for how the government machine can be geared towards both.

Achieving missions will require a sharp break from business-as-usual ways of working, but the prize – of a more agile and innovative state – is certainly worth striving for.

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@reformthinktank


info@reform.uk


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