



# INFRASTRUCTURE GOVERNANCE

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MEETING THE CHALLENGE OF  
RISING EXPECTATIONS

THE GERRARD REPORT

# FOREWORD

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A great deal has been written about the governance of public and private sector organisations, with the aim of creating a common understanding of what constitutes best practice and to encourage its adoption. The existing portfolio of codes and guidance rests upon a wealth of practical experience accumulated over many years and is often consulted upon and drafted in response to events that society is keen not to see repeated. It provides valuable support to boards in the discharge of their functions – largely on the basis of *comply or explain* – and it provides transparent benchmarks against which society can judge organisations and organisations can judge themselves. Moreover, these codes and guidance underpin a vision of continuous improvement in the way that our organisations are run.

The infrastructure sector has benefited in two ways from this: first, from general corporate codes of conduct, published by bodies such as the FRC and IoD; and second, from specialist guidance published by organisations such as the IPA for major programmes, the Department for Transport for major projects in construction and Federated Hermes Infrastructure for operational infrastructure assets. However, the volume of this guidance has now reached a point where it is quite difficult for members of an infrastructure board to assimilate all that is relevant and to distil it down to a manageable set of principles and practices. At the same time, rising expectations within society about the standards of Environmental, Social and Governance practices adopted by all organisations, and the transition to a net-zero carbon economy by 2050, mean that the governance bar for the infrastructure sector is rising rapidly. The recent stresses placed upon the sector by the Covid-19 pandemic and the expectation growing within society of better outcomes being possible on the back of the pandemic, add further pressure for change.

It is for these reasons that The Infrastructure Forum believes the time is now right to promote a set of refreshed governance recommendations for the infrastructure sector, which draws upon the materials already published and the excellent examples of best practice that are evident across the sector. To this end, in early 2020, we invited Mike Gerrard to lead a working group that would research and develop a set of recommendations that would be useful to members of boards across the infrastructure sector, regardless of whether their organisations are public or private sector, or whether they manage assets in operation, construction, early-stage development, or a combination of these. The conclusions of this work are set out in this report.

Graham Mather  
President  
The Infrastructure Forum

# ***THIS REPORT***

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During the many years that I have chaired, been a member of, or reported to boards within the infrastructure sector, I have always been struck by three things: first, the distinctive challenges that infrastructure organisations face – both within the public and private sectors; second, the passion of all those who work within the infrastructure sector for delivering safe, high quality, reliable and affordable services to the general public; and third, the sense of community within the sector which drives a culture of mutual support. So, when the Infrastructure Forum invited me to lead this working group, I didn't hesitate to accept, as I was confident that colleagues from across the sector would give freely of their time and be willing draw on their wide experiences to help inform this report. And such has been the case. The list of acknowledgements at the end of the report speaks for itself.

Mike Gerrard  
Working Group Lead

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# EXECUTIVE SUMMARY

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## R.1. The infrastructure sector is different

1. A substantial body of guidance exists to help the boards of infrastructure organisations. Much of the guidance is generic, although some is more sector-specific. Of the latter, five publications stand out: (i) IPA<sup>1</sup> - Improving Infrastructure Delivery, Project Initiation Routemap - Governance Module (2016); (ii) Federated Hermes Infrastructure – Governance of Public Service Infrastructure (2018); (iii) DfT<sup>2</sup>- Lessons from Transport for Sponsorship of Major Projects (2019); (iv) Ofwat – Board Leadership, Transparency & Governance (2019); and (v) UKGI<sup>3</sup> – UK Government’s Arm’s Length Bodies (ALBs) (2020).
2. The infrastructure sector is different from many other investment and operational business sectors – whether public or private sector – in terms of the challenges and opportunities it faces and so, potentially, deserves its own sector-specific guidance. This difference derives primarily from a combination of: **Accountability** - to end-users of the infrastructure, affected communities and stakeholders, in addition to sponsors and owners of the assets; **Scale** – of investments, which are often some of the largest that society has to fund, providing services to very large numbers of people, creating jobs (particularly during construction) and having the ability to shape markets; **Impact** – of investments on the environment and communities (both positive and negative) throughout the asset life-cycle; and the **Long-term** – nature of infrastructure investments, which are often of inter-generational benefit.
3. In respect of private sector infrastructure assets, there is one further difference, namely: **Social legitimacy** - being an existential challenge to the role of the private sector in owning public service infrastructure, notwithstanding the fact that it is the private sector which, in practice, delivers and maintains the vast majority of infrastructure assets, regardless of whether they are publicly or privately owned.

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<sup>1</sup> Infrastructure and Projects Authority

<sup>2</sup> Department for Transport

<sup>3</sup> UK Government Investments

4. These characteristics are brought further into relief by the roles that infrastructure plays within society, as regards: (i) supporting national productivity; and (ii) helping achieve national resilience in times of crisis, such as the Covid-19 pandemic. It is this combination of factors that takes the implied duties borne by members of infrastructure boards above and beyond those of most mainstream commercial businesses and public-sector organisations; and creates relationships founded on trust between infrastructure boards and their stakeholders.
  
5. The infrastructure sector and its governance are coming under steadily increasing scrutiny from the public, the media, regulators and Parliament. Moreover, an environment of low trust in the sector provides fertile ground for opposition to take root against new infrastructure investments. And with several major high-profile projects currently underway, it would not be an exaggeration to say that the sector's reputation is on-the-line. High quality governance has a crucial role to play in helping organisations meet society's rising expectations of the sector. A set of high-level governance principles and practices could help address these challenges. Their purpose would be to:
  - a. highlight existing generic guidance that has a particular relevance to infrastructure;
  - b. capture best practices that have been developed across the infrastructure sector and make them more widely known;
  - c. include such new provisions as are of sufficient importance to justify widespread awareness within the sector;
  - d. enable the sector as a whole to lead the agenda of accountability and demonstrate to its stakeholders that, in a post Covid-19 world, the sector understands what is expected of it; and
  - e. help embed the concept of continuous improvement within governance across the infrastructure sector.

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**Recommendation 1 – the infrastructure sector should develop and adopt a common set of high-level governance principles and practices.**

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## R.2. The sector should be addressed as one

6. All infrastructure organisations are engaged in the management of risk, which can range from the short-term pressures of a competitive market place and technological change, to the long-term costs of decommissioning assets after many decades of service. Nonetheless, many of the key issues faced by infrastructure organisations – such as environmental impact, disruption to communities caused by construction works, responding to customer concerns, reliability of services and accountability – are experienced throughout the sector; and stakeholders may see no real distinction between privately and publicly owned infrastructure organisations, or between private-equity owned or listed infrastructure businesses, or whether the assets in question are in formation or operation. Stakeholders simply see the infrastructure sector at work in society. Moreover, many of the issues that arise are consistent across the three phases of the infrastructure asset life-cycle – development, construction and operation – for example, as regards stakeholder relationships. Many infrastructure organisations are engaged in all three phases of the asset life-cycle as part of their business-as-usual (“BAU”).

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**Recommendation 2 – high-level principles and practices of governance should be applicable across the infrastructure sector, to both public and private sector organisations and across all phases of the asset life-cycle.**

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### R.3. Recommendations do not apply to all boards

7. Most people working within the infrastructure sector would accept that their organisation – whether public or private sector – has relationships that are variously political, legal, business or societal. Each of these relationships can create accountabilities – express or implied – with a stakeholder (e.g. Ministers, sponsors, owners, work-force, financiers, regulators, customers, suppliers, communities and commentators). These accountabilities can be unpacked into several component obligations (again express or implied) for which the infrastructure organisation is answerable, such as: (i) **Clarity**: being clear about which boards are accountable within the organisation; (ii) **Engagement**: being actively engaged with those stakeholders who have relationships with the infrastructure organisation; (iii) **Responsiveness**: listening and responding to requests and concerns raised by stakeholders, including providing justifications for taking or not taking specific actions; (iv) **Transparency**: providing reliable and timely information about the performance, plans and strategy of the infrastructure organisation and their impacts – e.g. on the environment (taking account of the need for confidentiality in the normal course of business and applicable FOI<sup>4</sup> and EIR<sup>5</sup> regimes etc.); (v) **Compliance**: being in compliance with applicable regulatory and statutory reporting obligations and codes of conduct etc; and (vi) **Balance**: demonstrating that there is an appropriate balance between the challenges and risks facing the organisation, its rewards for success and the consequences of failure.
  
8. These components of accountability are, of course, quite general in nature and could be said to apply equally to any organisation, not just those within the infrastructure sector. However, it is the special role that infrastructure plays within society (R1) and the large number of relationships held by a typical infrastructure organisation (each giving rise to an accountability) that moves the subject to centre-stage for infrastructure. For example, it can be argued that infrastructure organisations are accountable to future generations as much as our own, given that the decisions they take can have inter-generational consequences. Very few sectors of the economy can be said to face this kind of accountability. As a result, it can be argued that accountability itself should be a core value of an infrastructure organisation (R5).
  
9. These wider accountabilities sit alongside the formal accountabilities described in foundation documents of organisations and, in the case of the public sector, letters,

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<sup>4</sup> Freedom of Information (2000)

<sup>5</sup> Environmental Information Regulations (2004)

memoranda and framework documents with Departments, which create personal responsibilities for an Accounting Officer (usually the CEO of an ALB).

10. It should be for each infrastructure organisation to decide whether and the extent to which the recommendations made in this report are relevant to the efficient and effective functioning of a particular governance body within their organisation – an *Infrastructure Board*. However, the close linkage between the success criteria of an infrastructure investment and its chosen governance arrangements (R4), makes the assessment of whether a board is an Infrastructure Board (in the sense meant by this report) crucial; and the chair of each board will need to consult with the investment's sponsors in deciding whether they chair an Infrastructure Board.
  
11. Although a RACI<sup>6</sup> analysis of a board's function will give some indication as to the applicability of these recommendations, this will not be sufficient. This is because some sub-boards, committees or panels formed within the infrastructure sector, even though subordinate to the functioning of responsible or accountable boards, could still benefit from their application. Moreover, since the governance needs of projects, programmes and businesses within the sector typically evolve over time, this assessment needs to be carried out periodically (R10). It would be surprising if a major infrastructure organisation – whether directly responsible for development, construction or operational activities – did not conclude that at least one of its boards was an Infrastructure Board, in the sense meant in this report.

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**Recommendation 3 – the chairs of all boards, committees or panels established within the infrastructure sector to be responsible for determining, at the time of establishment and at regular intervals thereafter, whether they chair an Infrastructure Board, to which these recommendations would apply.**

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<sup>6</sup> Responsible Accountable Consulted Informed

## R.4. Governance arrangements reflect success criteria

12. All Infrastructure Boards should ask themselves the key question: are we, as a board, equipped to accept accountability for the successful formation/performance of these infrastructure investments, where success is defined by a combination of hard and soft criteria (aka a “balanced score card”) – which collectively go to the purpose of the investment (R8) – typically comprising, but not limited to:
- a. Raising the bar in health and safety management
  - b. Meeting the financial criteria of investors, or funders in the case of public sector expenditure limits
  - c. Completion to schedule
  - d. Meeting specification and quality standards, and achieving the expected functionality/delivery of benefits – such as improved productivity, quality of life, resilience, social equity etc.
  - e. Meeting conditions applied by regulators and through the planning process
  - f. Mitigating environmental impacts in accordance with regulation and best practice
  - g. Satisfying the reasonable expectations of other key stakeholders
  - h. Minimising and mitigating community impacts
  - i. Delivering within relevant carbon budgets
13. All of these success criteria involve the management of risks; and the appropriate design of governance arrangements is derived by combining these success criteria with four of the key considerations for good governance identified by the IPA in its guidance (Improving Infrastructure Delivery, Project Initiation Routemap - Governance Module (2016))<sup>7</sup> – namely: accountability; authority; alignment of incentives; and avoiding conflicts of interest. These principles of design for governance arrangements are, of course, applicable across all three phases of an infrastructure asset’s life – development, construction and operational. However, it is the characteristic diversity of these success criteria, accountabilities and authorities (e.g. often straddling both the public and private sectors) for infrastructure that makes the appropriate design of governance arrangements far from straight-forward and can make them look very different from those adopted within the mainstream corporate sector. The extent to which the success criteria are well articulated will be a major

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<sup>7</sup> A list of its key recommendations is included in Annex A

determinant of how effective the reporting regime will be (R8), for example in the case of criteria d. and h. above.

14. Whereas the concept of success criteria implies that it is enough to comply, the objective of all Infrastructure Boards should, of course, be to lead and exceed the relevant thresholds, consistent with the collective aim of raising the governance bar across the sector.

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**Recommendation 4 – the design of governance arrangements for an infrastructure organisation should be tested to ensure their alignment with its success criteria, accountabilities, authorities and incentives, and avoidance of conflicts.**

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## R.5. Behaviours and values underpin governance

15. Successful Infrastructure Boards are those that can reconcile a series of apparent contradictions in arriving at decisions, including: (i) the ability to take risks vs an aversion to surprises; (ii) attention to detail vs mastery of the big picture; (iii) pressure to meet short-term targets vs the need to deliver long-term outcomes; (iv) creating a culture of trust vs the need for independent assurance; (v) an unswerving focus on objectives vs responding to changing stakeholder pressures; (vi) delivery of financial vs social returns; and (vii) being held to account for matters that are not necessarily within its control.
16. The key factors that nurture behaviours within an Infrastructure Board, which can help it deal with these tensions are: (i) the quality of reported information (R8); (ii) sufficient time being made available for the necessary scrutiny and debate (R7); (iii) the range of skills and perspectives within the board being sufficiently SQEP<sup>8</sup> (R6); (iv) a capacity to act quickly and decisively in addressing issues and emerging problems; (v) creating a safe environment in which bad news is received and processed with the same supportive behaviours as good news (R10); (vi) the self-awareness of the board in terms of these capabilities and capacity; and, most importantly, (vii) the values adopted by the organisation.
17. Public and private sector Infrastructure Boards are equally capable of exhibiting these behaviours and, conversely, are equally capable of not - albeit that the reasons for departures from appropriate behaviours may differ. All infrastructure organisations are incentivised, one way or another, to manage the risks inherent in developing, constructing and operating assets. These incentives are variously driven by markets, contracts, regulation or public administration frameworks; and, ultimately, these incentives cascade down to individuals within the infrastructure organisation whose job is to make it all happen.
18. However, non-executive members of Infrastructure Boards who represent private sector invested capital are likely to be in a different position, as regards incentives, from all other non-executives. Of course, it is inherent in the apparent contradictions described above, that all decisions must be taken within the context of competing factors, many of which will militate against the sole pursuit of financial performance. Nonetheless, without a strong voice in favour of taking difficult commercial decisions

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<sup>8</sup> Suitably Qualified and Experienced Person

and resolving problems early, an Infrastructure Board can struggle to achieve the requisite behaviours.

19. In the case of public sector Infrastructure Boards, there can be no equivalent member (executive or non-executive) who has the same “skin-in-the-game” perspective of a private sector shareholder representative. So, the approach must be to get as close as possible to this, by the careful selection of non-executive board members who are used to acting in this capacity, and by encouraging these members essentially to role-play as if they did have financial skin-in-the-game. The reciprocal concern of behaviour within private sector Infrastructure Boards being too heavily influenced by members with financial skin-in-the-game, can similarly be addressed by including sufficient members accustomed to managing wider accountabilities, who are encouraged to be advocates for these within the board.
  
20. It is for each organisation to determine its values and the associated organisational culture it wishes to promote, which experience shows are most effective when owned “bottom-up” within an organisation. Nonetheless, within the infrastructure sector you would expect there be to some commonality of values embraced by its constituent organisations, whether public or private sector, based upon the sector’s distinctive features and the key roles it plays within society (R1). In a sense, these values could be said to constitute the essential DNA of infrastructure governance. Examples of values that have a strong claim to being universal within the infrastructure sector include: **Stewardship** - where this is the parent value for: long-termism and sustainability - including decarbonisation and environmental responsibility; effective asset management; reliability; and inter-generational legacy – viz leaving an asset in a better condition than you found it; **Accountability** – where this is the parent value for: tight financial discipline; stakeholder engagement and responsiveness; customer care and service quality; value-for-money; transparency and disclosure; and **Health & Safety** - which must always be a *value*, rather than a *priority*, as priorities can change whereas the supremacy of health and safety considerations cannot, both as regards the workforce, supply chain and users of the infrastructure.

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**Recommendation 5 – the core values of the infrastructure sector should be recognised, not only because of the crucial role they play in underpinning behaviours, but also as reference points to be used by all Infrastructure Boards when choosing their own sets of values.**

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## R.6. Infrastructure boards need suitably qualified and experienced people

21. The competence of an Infrastructure Board is an assessment of how well matched are the individual and collective skills and experiences of its members with the functions performed by the board, within the overall governance framework of the host infrastructure organisation – public or private sector. There are several variables at play here, including the different categories of members (e.g. executive and non-executive), their independence and their diversity. If members are drawn too heavily from a particular background, it will undermine the collective expertise of the board and its ability to challenge, support and hold to account the executive management team. To the extent that the function of the board evolves with the maturing life-cycle of an asset, so the necessary skills and composition of the board must also change, requiring a careful balance to be maintained versus continuity of board memory.
22. The distinctive features of the infrastructure sector, which underlie differences between the challenges faced by its boards and those in other sectors (R1) lead to a particular need for an Infrastructure Board to be comprised of members with the right set of skills. The concept of testing whether a board member is a Suitably Qualified and Experienced Person (“SQEP”<sup>9</sup>) can be helpful when considering the optimum blend of backgrounds for members of an Infrastructure Board. This does not mean that every individual should themselves be SQEP across all aspects of the board’s remit, but rather that they should collectively cover the range of specialist knowledge required and have diversity of skill, thought and experience. And, in practice, especially during development and construction phases, the optimum blend may well involve forming standing panels of experts to support the board (e.g. on subjects such as design, procurement or future operations). At its root, SQEP refers to an ability to understand the information being presented to the Infrastructure Board, its limitations and how the associated risks can be mitigated and managed.
23. Three measures could help maintain the depth of SQEP talent available to Infrastructure Boards: first, a sector-wide CPD<sup>10</sup> programme for infrastructure board members; second, the creation of a board apprenticeship scheme designed to help grow and sustain the future bench-strength of candidates for membership of infrastructure boards - where such a scheme could be modelled on the successful

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<sup>9</sup> A concept originally developed for the nuclear power industry

<sup>10</sup> Continuing Professional Development

apprenticeship scheme<sup>11</sup> which already exists for listed company boards and which was established, inter alia, to help meet diversity targets; and third, the formation of more networks to support non-executive board members working within the infrastructure sector. These initiatives could be taken forward by third parties that have either sector-wide responsibilities or overviews, such as the IPA, ICE or by companies offering general board-room support, such as the Big-4 accountancy or executive search firms.

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**Recommendation 6 – all organisations appointing an Infrastructure Board (supported by the respective chair of that board) to ensure that its members meet the on-going test of being Suitably Qualified and Experienced Persons; and steps be taken to maintain the depth of SQEP talent available to the sector more generally.**

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<sup>11</sup> <https://www.boardapprentice.com>

## R.7. Empowering non-executive members boosts board effectiveness

24. Non-executive members play a crucial role in supporting, challenging and holding the executive members of an infrastructure organisation to account; so Infrastructure Boards are expected to include non-executive members: whether the board is in the public or private sectors (and, if private, whether the company is listed or unlisted); within a sponsor or delivery organisation; an organisation concerned with development, construction or operational activities; a corporate or programme board; or a board running BAU, a project, or a combination of these.
25. A range of measures is available to help empower and equip non-executive members, including: (i) ensuring that there is a sufficient number of independent members; (ii) treating them as being indistinguishable (whether de jure or de facto<sup>12</sup>) from the executive members, as regards their responsibilities and liabilities; (iii) appointing an independent chair; (iv) having some of the non-executive members also sit on functional boards within the infrastructure organisation (e.g. Programme Boards, stakeholder committees, or panels), which may not themselves have been classified as an Infrastructure Board by the host organisation; (v) ensuring they have access to all the sub-committees of the board; (vi) forming focal relationships between individual non-executive members and specific sites, assets, or groups of assets; (vii) holding deep-dive workshops or “clinics” for the non-executive members in the run-up to key decisions, or providing independent briefings on topical issues<sup>13</sup>; (viii) implementing a programme of CPD (R6) to help them keep abreast of an often fast changing environment within the infrastructure sector; (ix) non-executive members being able to initiate assurance reviews (e.g. Gateway Reviews); (x) ensuring that a portion of board agenda time is always open for the non-executive members to pre-nominate topics; (xi) making sure that at key stages in the evolution/life-cycle of an asset, the control points (gates) are board decisions; (xii) ensuring that (following notification to the chair<sup>14</sup>), the non-executive members have clear permission to consult legal, financial and technical advisers, whenever they need to; (xiii) having the right, in exceptional circumstances, to raise matters directly with sponsors/investors; and (xiv) ensuring that the non-executive members themselves are able to devote sufficient time to these board duties, especially during periods of intense risk that are a common feature of infrastructure asset development, construction and operation.

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<sup>12</sup> Companies Act (2006) Part 10, Chapter 2, General Duties of Directors.

<sup>13</sup> Such as emerging regulatory, competition or stakeholder issues

<sup>14</sup> CEO or company secretary

26. Experience suggests that the traditional time commitment expected of non-executive board members (e.g. 25 days pa) – whether within the public or private sectors – significantly underestimates the actual time commitment required on Infrastructure Boards. In the case of their chairs the required time commitment is, of course, correspondingly even greater.

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**Recommendation 7 – the chair of each Infrastructure Board to prepare and implement an on-going programme of empowerment for its non-executive members.**

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## R.8. High quality reporting builds stakeholder trust

27. At the centre of all governance arrangements and, in particular, as between owners and managers, or between sponsors and delivery organisations, lies the duty to report. For boards of companies, these obligations are detailed in legislation and codes; and for public bodies, also within statutes and agreements with ALBs. The major component of these reports is usually financial (audited) information about the performance of the organisation. Recent trends towards increased disclosure and transparency within the corporate sector has widened the non-financial components of these reports, to include narrative on strategic, stakeholder and ESG<sup>15</sup> issues (including carbon - TCFD<sup>16</sup>) and social value.
28. Within society, there are growing trends of opposition to proposals for major new infrastructure investments and to the social legitimacy of private investment in public infrastructure services. The sector's response to these trends needs to include a combination of proactive transparency and disclosure by Infrastructure Boards and, equally importantly, advocacy for the role of infrastructure within society and why society can have confidence in the sector's governance arrangements.
29. High quality reporting, disclosure and transparency is a key means by which infrastructure organisations, of all complexions, can build the confidence and trust of sponsors, owners, financiers, employees, supply chains and wider stakeholders. Clearly, an Infrastructure Board may only have reporting obligations that are internal to its own host organisation (for example, a Programme Board). Nonetheless, the same principles still apply and it is only by reporting high quality information upwards that the more senior boards can, in turn, meet their own external reporting obligations. These should include galvanising stakeholder support for the wider purpose of their infrastructure assets, by reference to all of their success criteria - financial and non-financial, such as: benefits for the local community, boosting productivity, levelling-up the economy, improved quality of life, carbon reduction, resilience, greater social equity etc. Reporting systems that achieve this need to be designed, resourced and adopted from the outset. The production of reports and more general information about an infrastructure investment – in language and through communication channels suited to their audience – is a major undertaking for any infrastructure organisation.

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<sup>15</sup> Environmental, Social and Governance

<sup>16</sup> Task Force on Climate-Related Financial Disclosures

30. Consistent with a sector value of accountability, all Infrastructure Boards should see themselves as being in the vanguard of best practice in reporting within the infrastructure sector. If the infrastructure sector is unable to communicate its commitment to long-termism, its wider purpose and its responsiveness to stakeholder concerns about ESG, for example – which are, after all, effectively “home turf” for the infrastructure sector - then there is little hope of other sectors of the economy being able to do this. The environmental agenda, in particular, is evolving rapidly and the sector needs to be responsive to this. A strategy for building stakeholder trust and confidence will also include reporting on the organisation’s values at work (R5) and assurance activities (R9).
31. Accountability is most readily achieved if the objectives and target outcomes of an infrastructure investment – financial and non-financial – are: (i) defined in clear and measurable terms (e.g. KPIs) up-front; and (ii) reported against.

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**Recommendation 8 – reporting systems to be designed by all Infrastructure Boards (outward and inward facing) to galvanise stakeholder support for the wider purpose of infrastructure and to build confidence in its delivery, through transparency of assurance processes and commitments to ESG principles**

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## R.9. Assurance is as important as audit

32. Nothing undermines the trust and confidence that the general public, sponsors, owners and wider stakeholders place in an infrastructure organisation as much as media headlines about cost overruns, delays or persistently unreliable services. Moreover, the damage done by such headlines can be sector-wide and not just limited to the reputation of the embarrassed infrastructure organisation itself. All members of the sector have to be responsive to such instances of poor performance and work together to improve the collective track record and reputation of the sector. The disciplines of risk management, operations management and programme management are, of course, central to the achievement of on-time, on-budget and reliable performance. And these management topics lie outside the scope of this report. Nonetheless, when it comes to the discipline of assurance, it can be said to straddle the line between day-to-day executive management and governance and, for the purpose of this report, it is treated as a function of governance. The justification for this is that the duties of board members include taking all reasonable steps to satisfy themselves that the reports they issue are accurate, complete and up to date – the empowerment of the non-executive members being central to this (R8). Within the infrastructure sector, assurance just as much as audit plays a pivotal role in helping board members fulfil this duty.
33. The method of assurance commonly deployed within the infrastructure sector is the so called three lines of defence model. The first line of assurance being the checks undertaken by the individuals doing the primary work, according to the standards of their profession; the second line of assurance is provided by the managers and supervisors within the project/programme/BAU team, who have to sign-off the primary work<sup>17</sup>; and the third line is provided by independent teams mobilised from outside of the project/programme/business-as-usual (BAU). The latter is typically mobilised in three different forms: on-going, periodic and ad hoc. Examples of on-going assurance include the appointment of expert panels and firms of consultants (e.g. P-Reps<sup>18</sup>); examples of periodic assurance include the reviews undertaken by technical advisers appointed by lenders to an infrastructure organisation, or by regulators; and examples of ad hoc assurance include Critical Friend, Red Team and other forms of independent reviews. One of the most important functions of all assurance processes is to make sure that lessons learned from past under-performance by the same or other infrastructure organisations (or other sectors,

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<sup>17</sup> or by semi-independent experts being employed by the organisation but not involved in the original work

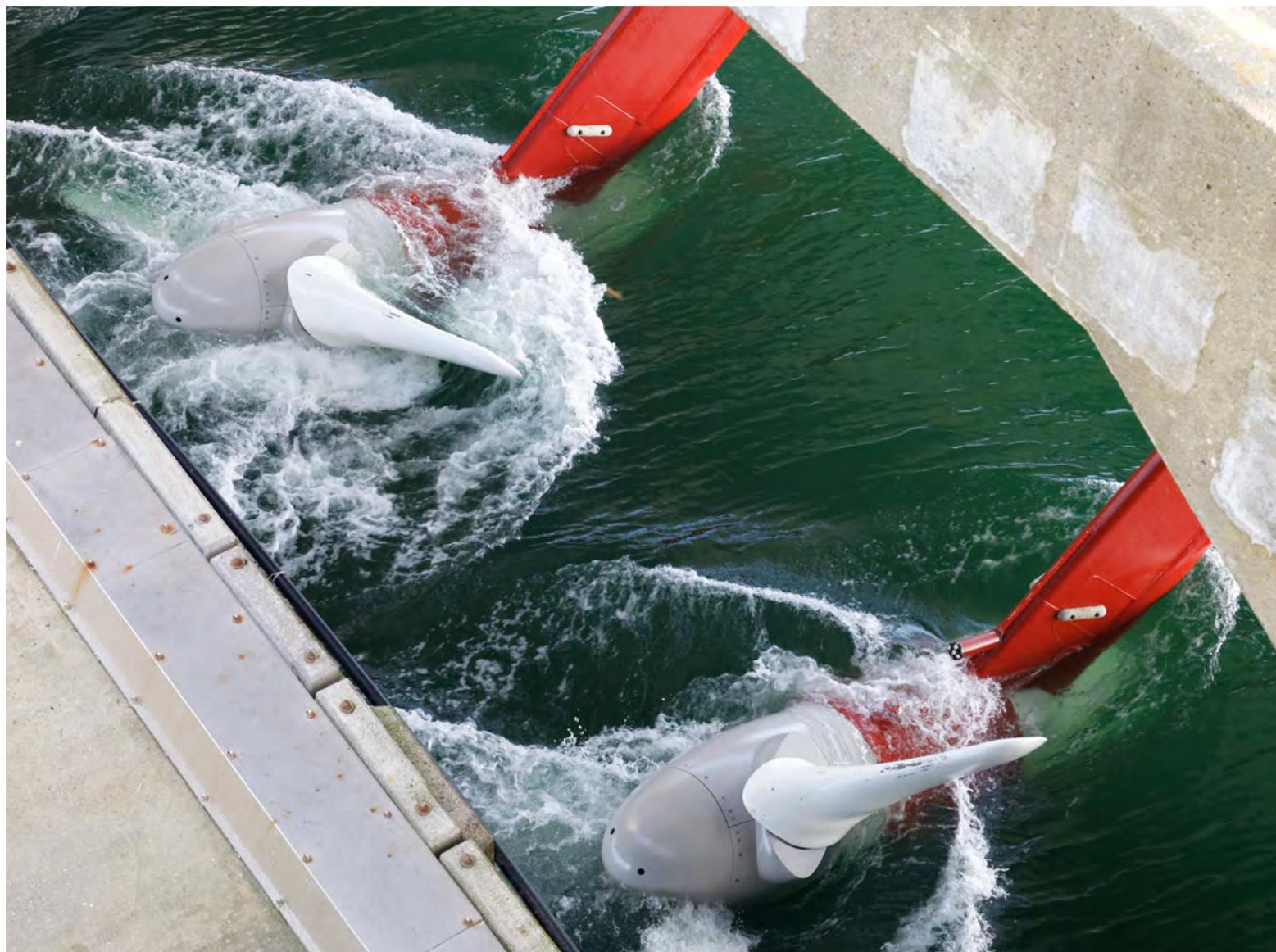
<sup>18</sup> Project or Programme Representatives

countries etc), are applied. Ensuring that there is an adequate budget for the assurance process itself is a key role of Infrastructure Boards.

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**Recommendation 9** – all Infrastructure Boards to ensure that an assurance plan is in place and adequately funded; that the reports from the third parties providing assurance are both forward and backward looking and include explicit examples of how lessons from within the infrastructure sector have been applied; and that the reports they issue (as an Infrastructure Board) include a section on assurance, which is complementary to its audited financial report.

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## R.10. Independent reviews assist board performance

34. The close relationship between the success criteria of an infrastructure organisation and the design of its governance arrangements (R4) is most evident within the complex governance diagrams of the development phases of major infrastructure projects – which can require several Infrastructure Boards and many more supporting boards, committees and panels. However, this complexity can often extend into the construction and operational phases of assets, driven by the need to ensure that risk management and oversight arrangements are fit for purpose. Successful management of the crucial relationship between BAU for the sponsoring organisation and delivery of a major new investment, similarly requires well designed governance arrangements. However, it is not always easy for organisations to be objective when balancing these kinds of factors and over-governancing can be as much of a threat to success as under-governancing. Independent reviews supported by external experts can play a valuable role in designing the most efficient and effective governance arrangements, recognising that the choice of most appropriate governance arrangements will evolve during the life of the asset, both across implementation phases (i.e. in transition between development, construction and operation) but also within a phase.
35. A private sector organisation that cannot process bad news and report it promptly to its accountable board, is very likely to go bust. Within the public sector, the equivalent is an organisation that is seen to have failed by exceeding its expenditure limits. More than anything, it is the culture (i.e. values and behaviours) (R5) of an organisation that determines how it processes and escalates bad news; and the culture of an organisation comes from the top, from the accountable board. So, of all the foundation stones of good corporate governance, perhaps the most important is whether the board itself is high-performing, particularly as regards promoting the right values and behaviours. Within the infrastructure sector, the stakes are that much higher than other sectors of the economy, in terms of why the sector is different (R1).
36. Measures that can be used to help ensure that an Infrastructure Board is high-performing, include: (i) the overall design of governance arrangements (R4); (ii) the values and behaviours it has adopted (R5); (iii) the quality of its reporting (R8); (iv) the competence of its members and the extent to which there is sufficient diversity of thought, or a skills gap (R6); (v) the extent to which its non-executive members are suitably empowered (R7); (vi) having a suitable assurance plan in place (R9); and (vii)

regular performance reviews<sup>19</sup> of the board and its sub-committees (which include a discussion about organisational culture) and cover the effectiveness of such other key boards, committees and panels as exist within the overall governance arrangements of the infrastructure organisation. Foremost it is a duty of the chair (in consultation with sponsors/ shareholders) to ensure that the board remains high-performing.

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**Recommendation 10 – the chair of each Infrastructure Board to monitor and assess the extent to which it is a high-performing board and to take such steps as may be needed to ensure that it is, including commissioning periodic independent reviews.**

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<sup>19</sup> Internally led and, no less frequently than every three years, externally led

# INTRODUCTION

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37. Infrastructure Boards work much like boards in any other sector, in terms of: defining an organisation's mission and strategy; delegating functions and controls; supporting, challenging and holding to account the executive management team; and exercising accountability to parent organisations, shareholders/sponsors and wider stakeholders. Nonetheless, the challenges facing the infrastructure sector and its key characteristics are sufficiently different to other sectors of the economy as to justify a specific set of high-level governance principles and practices, the purposes of which are to:
- a. highlight existing generic guidance that has a particular relevance to infrastructure;
  - b. capture best practices that have been developed across the infrastructure sector and make them more widely known;
  - c. include such new themes as are of sufficient importance to justify widespread awareness within the sector;
  - d. enable the sector as a whole to lead the agenda of accountability and demonstrate to its stakeholders that, in a post Covid-19 world, the sector understands what is expected of it; and
  - e. help embed the concept of continuous improvement in governance across the infrastructure sector.
38. The report recommends that even a relatively light-touch adoption of some common principles and practices of governance across the sector could yield benefits, accessible to all infrastructure organisations, whether the organisation is within the public or private sectors and, if the private sector, whether listed or privately owned. The recommendations fall under the broad categories of accountability, risk management and board performance; and are organised under ten key themes that have received widespread support from Infrastructure Forum members who have responded to consultation drafts of this report circulated during the course of its preparation.
39. The report's recommendations are designed to be practical and relevant to the particular circumstances of an Infrastructure Board - whether the board be accountable, responsible or otherwise directing, overseeing and supporting the formation, delivery, operation and management of infrastructure assets. The report presents an essentially "board-centric" view of governance issues – i.e. as seen through the eyes of board chairs and members.

40. And so, for example, it does not consider the capabilities of sponsors and investors in infrastructure, nor the issues and tensions they face. Nor does the report cover issues such as executive remuneration<sup>20</sup>, distribution policy, taxation and financial structuring, all of which are important for the infrastructure sector, but lie beyond the boundary of governance that has been adopted, to keep the report as succinct as possible.
41. Annexes are included to provide: (A) relevant extracts from extant guidance; (B) a summary of the report's recommendations; (C) a bibliography; and (D) some possible areas for further research in relation to infrastructure governance. The report also includes an index of major topics, to assist the reader.
42. Traditionally, infrastructure was seen as something that its boards couldn't get wrong, whereas today stakeholders often see infrastructure as a sector whose boards regularly do get it wrong! This at a time when the pressures on the sector are rising, whether from transition to a net-zero carbon economy by 2050, the growing importance of ESG reporting, push-back from affected communities and regulators, political pressures or media comment. Through this report, the Infrastructure Forum hopes to show how this trend can be reversed and confidence steadily rebuilt. That is, to meet the challenge of rising expectations that are being placed upon the governance of infrastructure.

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<sup>20</sup> Although some references are made in Annex A

## SECTION 1: THE INFRASTRUCTURE SECTOR IS DIFFERENT

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43. The governance of listed businesses has benefited from a series of reviews and published codes of best practice over the last 30 years, for example: the Cadbury (1992), Hampel (1998) and Higgs Reviews (2003); and the Combined Code of corporate governance, which was first issued in 2003 and has since been regularly updated, most recently as the UK Corporate Governance Code (2018) and UK Stewardship Code (2020) published by the FRC<sup>21</sup>. The AIC<sup>22</sup> also publishes a Code of Corporate Governance for stock-market listed investment companies, most recently updated in 2019. In parallel with these initiatives, the unlisted equity market - which is of particular relevance to the infrastructure sector - has also benefited from consultations concerning best practices in corporate governance, resulting in published guidance, including: the IoD<sup>23</sup> Corporate Governance Guidance and Principles for Unlisted Companies (2010); and the Walker Guidelines for Disclosure and Transparency in Private Equity (2018). Most codes are issued on the basis of comply or explain, and those where an organisation specifically signs-up to the code work on an apply and explain basis.
44. The second category of guidance relevant to governance practices within the infrastructure sector, includes excellent publications such as: IPA<sup>24</sup> - Improving Infrastructure Delivery, Project Initiation Routemap - Governance Module (2016); Federated Hermes Infrastructure – Governance of Public Service Infrastructure (2018); DfT - Lessons from Transport for Sponsorship of Major Projects (2019); Ofwat – Board Leadership, Transparency & Governance (2019); and UKGI – UK Government’s Arm’s Length Bodies (2020).
45. The essential point is that the infrastructure sector is different from many other investment and operational businesses – whether public or private sector – in terms of the challenges and opportunities it faces and so deserves its own sector-specific guidance. This is the motivation of The Infrastructure Forum in undertaking this research and in recommending these high-level governance principles for Infrastructure Boards.

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<sup>21</sup> Financial Reporting Council

<sup>22</sup> Association of Investment Companies

<sup>23</sup> Institute of Directors

<sup>24</sup> Infrastructure and Projects Authority

46. This difference derives primarily from a combination of:
- a. **Accountability** - to end-users of the infrastructure, affected communities and stakeholders - not just to the sponsors and owners of the assets;
  - b. **Scale** – of investments, which are often some of the largest that society has to fund, providing services to very large numbers of people, creating jobs (particularly during construction) and having the ability to shape markets;
  - c. **Impact** – of investments on the environment and communities (both positive and negative) throughout the asset life-cycle; and
  - d. **Long-term** – nature of infrastructure investments, which are often of inter-generational benefit.
47. In respect of private sector infrastructure assets, there is one further difference, namely:
- e. **Social legitimacy** - being an existential challenge to the role of the private sector in owning public service infrastructure - notwithstanding the fact that it is the private sector which, in practice, delivers and maintains the vast majority of infrastructure assets, regardless of whether they are publicly or privately owned. Of course, the reasons that some stakeholders challenge the role of the private sector includes their perceptions of unreasonable financial returns and a lack of consumer choice, as much as concerns about governance. Nonetheless, the responsibility for turning around these perceptions rests primarily within the relevant Infrastructure Boards, which should always have a clear rationale for why they are the best custodians for their public service assets.
48. Three further characteristics of the infrastructure sector are worth highlighting, not because they are unique to the sector, but because in combination with the characteristic of Scale they present significant governance challenges for the sector. These are: (a) Reliance - that all citizens place upon infrastructure when going about their daily lives; (b) Health & Safety – considerations being of paramount importance due to the sometimes hazardous nature of the operations involved and the very large numbers of people who come into contact with infrastructure assets; and (c) Carbon – intensity of the infrastructure sector, which is proportionate to the large scale of the assets involved, as well as being dependent on their design, methods of construction, operation and maintenance.
49. The characteristics of Accountability, Scale, Impact and the Long-term are brought further into relief by the role that infrastructure plays within society in supporting national productivity. It is this combination of factors that take the implied duties borne by

members of Infrastructure Boards above and beyond those of most mainstream commercial businesses and public-sector organisations; and that create relationships founded on trust between infrastructure boards are their stakeholders.

50. The infrastructure sector and its governance are coming under steadily increasing scrutiny from the public, the media, regulators and Parliament. Moreover, an environment of low trust in the sector provides fertile ground for opposition to take root against new infrastructure investment, as is being increasingly witnessed. And with several major high-profile projects currently underway, it would not be an exaggeration to say that the sector's (and arguably even the UK's) reputation is on-the-line.
51. The Covid-19 pandemic has placed enormous financial and logistical pressures on all sectors of the economy including infrastructure, whose performance although seldom reported has been one of the bright-spots of the crisis – whether it's been the proven capacity within the digital networks to support a rapid and widespread move to home-working and a replacement of face-to-face meetings by video-conferencing; or the uninterrupted delivery of the utility services - water, sewerage, electricity and gas; or the continued running of public transport, despite the health risks for its staff. All have stood as examples of the vital role which infrastructure plays in assuring society's resilience in times of crisis. However, in a post Covid-19 world we can expect one consequence of this impressive track-record and contribution to national resilience, to be an increased focus on the accountability of the infrastructure sector – viz: the acceleration of a trend already underway within society as regards its expectations of the infrastructure sector and its governance. A set of high-level governance principles and practices will help address these challenges.

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Accordingly, it is recommended that the infrastructure sector should develop and adopt a common set of high-level governance principles and practices.

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## **SECTION 2: THE SECTOR SHOULD BE ADDRESSED AS ONE**

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52. Traditionally, the infrastructure sector is analysed according to a timeline divided into three periods: first, the development phase of an asset during which its needs-case is established, designs prepared, planning consent obtained, funding and finance mobilised and contracts let; followed by a construction phase which sees the asset being built and commissioned; and, lastly, an operational phase during which the asset serves the community. The first of these periods typically lasts 3-7 years; the second up to 12 years; and the last 25-100 years, sometimes longer than this, for example in the case of tunnels, dams and flood defences.
53. In this report, the traditional timeline is inverted and the three phases arise during the main body of this report in reverse order (respectively in Boxes 1, 2 and 3). There are several reasons for this approach: first, the operational phase is the longest of the three phases and is, after all, the reason the asset is being created; second, it is the period during which the intended financial and social returns on the investment are delivered, or not; and third, some of the issues that arise during the development and construction phases are present throughout the life-cycle of an asset – e.g. as regards the importance of stakeholder relationships. It can also be said that if you don't adequately define or understand the (operational) destination, then the navigation of the (development and construction) journey will be that much harder. Nonetheless, there are of course some governance issues which are specific to each of these phases of asset delivery and these are discussed in the appropriate sections below. A good example of this is the tensions that can arise within a sponsor organisation between business-as-usual (BAU) activities and the demands of a major new project in formation (S10).
54. It is in the nature of the infrastructure sector that some delivery organisations are formed as start-ups (sometimes referred to as "pop up" clients), either to continue in independent existence or be later absorbed back into a sponsor organisation; some are spun-out of existing infrastructure businesses; and some are permanent organisations. In all these cases, important issues of transition arise between the different phases of an infrastructure investment, which are discussed later in his report.
55. All infrastructure organisations are engaged in the management of risk, which can range from the short-term pressures of a competitive market place and rapid technological change, to the long-term costs of decommissioning assets after many decades of service.

Nonetheless, some key issues – such as environmental impact, disruption to communities caused by construction works, responding to customer concerns, reliability of services and accountability – are experienced throughout the sector; and stakeholders may see no real distinction between privately and publicly owned infrastructure organisations, or between private-equity owned or listed infrastructure businesses, or whether the assets in question are in formation or operation. Stakeholders simply see the infrastructure sector at work in society. Moreover, many infrastructure organisations are engaged in all three phases of the asset life-cycle as part of their BAU. Lastly, as regards the challenge of social legitimacy in relation to the private sector delivery of public service infrastructure, one of the best ways to respond to this challenge is to demonstrate that all infrastructure businesses, of whatever hue, conform to the same high standards of governance.

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Accordingly, it is recommended that high-level principles and practices of governance should be applicable across the infrastructure sector, to both public and private sector organisations and across all stages of the asset life-cycle.

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## **SECTION 3: RECOMMENDATIONS DO NOT APPLY TO ALL BOARDS**

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56. The infrastructure sector uses many different types of boards, committees and panels to help achieve: (i) the distinction between project sponsorship and delivery, or between ownership and asset management; (ii) joint working between the public and private sectors; (iii) engagement with stakeholders, including customers; and (iv) access to expertise. This variety of “boards” is most easily explained if mapped by a RACI<sup>25</sup> analysis. Many of these boards and committees will be non-executive and exist simply to advise the accountable boards, or to consult key stakeholders, or to help achieve alignment between stakeholders, who may be a mixture of public and private sector organisations. And, of course, there is a strong linkage between the success criteria to which an infrastructure organisation is being managed and the right choice of overall governance arrangements (S4). Diagram 1. illustrates the typical governance structure for an infrastructure service provider in operation – private or public sector - highlighting board (and committee) functions according to a RACI classification.
57. Accountability tends to be one of those concepts that people find hard to describe, but nonetheless all recognise when they see it! The literature offers some help, but can also confuse by using the concept of responsibility to explain accountability when the two are quite different, viz: a board can delegate its responsibility for something, but cannot delegate its accountability. Given the importance of wider accountability as a defining characteristic of the infrastructure sector, which differentiates it from governance in other sectors, a working description is essential within a report like this.
58. Most people working within the infrastructure sector would accept that their organisation – whether public or private sector – has relationships that are variously political, legal, business or societal. Each of these relationships can create accountabilities – express or implied – with a stakeholder (e.g. Ministers, sponsors, owners, work-force, financiers, regulators, customers, contractors, suppliers, communities and commentators). These accountabilities can be unpacked into several component obligations (again express or implied) for which the infrastructure organisation is answerable, such as: (i) **Clarity**: being clear about which boards are accountable within the organisation; (ii) **Engagement**: being actively engaged with those stakeholders who have relationships with the infrastructure

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<sup>25</sup> Responsible, Accountable, Consulted, Informed

organisation; (iii) **Responsiveness**: listening and responding to requests and concerns raised by stakeholders, including providing justifications for taking or not taking specific actions; (iv) **Transparency**: providing reliable and timely information about the performance, plans and strategy of the infrastructure organisation and their impacts – e.g. on the environment (taking account of the need for confidentiality in the normal course of business and applicable FOI<sup>26</sup> and EIR<sup>27</sup> regimes etc.); (v) **Compliance**: being in compliance with applicable regulatory and statutory reporting obligations and codes of conduct etc.; and (vi) **Balance**: demonstrating that there is an appropriate balance between the challenges and risks facing the organisation, its rewards for success and the consequences of failure.

59. These components of accountability are, of course, quite general in nature and could be said to apply equally to any organisation, not just those within the infrastructure sector. However, it is the special role that infrastructure plays within society (S1) and the large number of relationships held by a typical infrastructure organisation (each giving rise to an accountability) that moves the subject to centre-stage for infrastructure. For example, it can be argued that infrastructure organisations are accountable to future generations as much as our own, given that the decisions they take can have inter-generational consequences. Very few sectors of the economy can be said to face this kind of accountability. As a result, it can be argued that accountability itself should be a core value of an infrastructure organisation (S5).
60. These wider accountabilities sit alongside the formal accountabilities described in foundation documents of organisations and, in the case of the public sector, letters, memoranda and framework documents with Departments<sup>28</sup> which create personal responsibilities for an Accounting Officer (usually the CEO in the case of an ALB).
61. The analysis and recommendations in this report have been drafted as widely as possible, so as to be of the greatest potential help to the infrastructure sector. However, as you move along the RACI spectrum from Accountable boards to those that are formed simply to keep stakeholders Informed (and, indeed, as you move from larger to smaller scale organisations) so what is said here will clearly be of progressively less relevance. It is for the chair of each board, committee or panel, within an infrastructure organisation, in consultation with the sponsors of that organisation (as appropriate), to determine whether and the extent to which this report is relevant to that particular board – an Infrastructure Board.

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<sup>26</sup> Freedom of Information (2000)

<sup>27</sup> Environmental Information Regulations (2004)

<sup>28</sup> Managing Public Money, HM Treasury (2018); and Corporate Governance in Central Government: code of good practice (2017)

62. For example, the infrastructure sector sometimes uses “HoldCo” structures as collective investment vehicles which invest in underlying infrastructure businesses and other largely passive investment companies without any staff, or day-to-day operational functions<sup>29</sup>; and it is doubtful whether the boards of any of these would see the subject of this report as directly relevant. Conversely, it would be surprising if a major infrastructure organisation – whether directly responsible for development, construction or operational activities – did not conclude that at least one of its boards was an Infrastructure Board, in the sense meant in this report.
63. Although a RACI analysis of a board’s function will give some indication as to the applicability of these recommendations, this will not be sufficient. This is because some sub-boards, committees or panels formed within the infrastructure sector, even though subordinate to the functioning of responsible or accountable boards, could still benefit from their application. Moreover, since the governance needs of projects, programmes and businesses within the sector typically evolve over time, this assessment needs to be carried out periodically (S10).

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Accordingly, it is recommended that the chairs of all boards, committees or panels established within the infrastructure sector to be responsible for determining, at the time of establishment and at regular intervals thereafter, whether they chair an Infrastructure Board, to which the recommendations of this report would apply.

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<sup>29</sup> Such as investment vehicles that contract-out all the component activities of infrastructure asset formation and service delivery

## BOX 1 – THE OPERATIONAL PHASE

The Operational Phase is often viewed as having lower levels of inherent risk than the Construction and Development Phases of an infrastructure asset. The truth of this lies in how much market risk is faced by the business managing the asset – e.g. passenger demand risk, strength of competition, market price volatility etc. – or indeed how much technology or environmental risk is faced – e.g. solar panel efficiency or consistency of river flow - in the case of some renewable energy investments.

The priority for an Infrastructure Board is, of course, to manage these risks whilst still delivering the required public infrastructure services safely, reliably, affordably etc. Moreover, to do so within the financial limits prescribed by parent or sponsor organisations, in the case of the public sector; or shareholders and regulators in the case of the private sector. The sustainability of the infrastructure sector relies upon the ability of its boards to deliver financial returns to those whose capital has been invested in the assets and social returns to its stakeholders. The increasing array of KPIs<sup>30</sup> by which infrastructure business are judged, including those driven by the ESG<sup>31</sup> agenda and the imperative of wide-scale decarbonisation, mean that operational infrastructure businesses, both public and private sector, face a widening range of risks that have to be managed. The boards of operational infrastructure assets will need to rise to these growing challenges.

Many key public-sector infrastructure service providers are constituted as Companies Act entities (typically CLGs<sup>32</sup>) – for example, Network Rail, HS2 Limited, Crossrail Limited and Highways England Limited and, in consequence, members of their boards are bound by the same provisions of the Act as are board members of private sector infrastructure companies, such as Yorkshire Water, BT, Centrica and SSE etc. For example, when complying with their statutory duty to promote the success of the company, all these directors – public and private sector alike - must have regard to the following matters (not an exhaustive list) (Section 172 Companies Act 2006 – See Annex A)

- a. likely consequences of any decision in the long term
- b. impact of the company's operations on the community and the environment
- c. company's reputation

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<sup>30</sup> Key Performance Indicators

<sup>31</sup> Environmental Social and Governance

<sup>32</sup> Company Limited by Guarantee

Whilst clearly drafted within the Act as universal provisions applicable to all sectors, for the reasons discussed (S1), these matters lie at the heart of good infrastructure governance and so provide a very helpful foundation for much of what is said in this report.

However, there are two points of potential divergence within the infrastructure sector, as regards good governance, that need to be highlighted: first, not all public-sector infrastructure delivery organisations are constituted as limited companies, such as CLGs; and second, listed companies enjoy a greater provision of guidance and codes of conduct for good governance than unlisted. Although this latter point is most directly relevant to private equity owned infrastructure businesses, it should also be noted that CLGs are, by definition, unlisted and so fall outside of the remit of major guidance such as the UK Corporate Governance Code (2018).

Taking each point of divergence in turn: first, for all bodies that are arm's length from Government, the UKGI<sup>33</sup> has published helpful guidance which is consistent with the aims of this report (UKGI: UK government ALBs – the case for them in specialised delivery and how to optimise their use (2020)). A summary of its key recommendations is included in Annex A; and second, Federated Hermes Infrastructure has published helpful guidance for private equity owned infrastructure businesses – Governance of Public Service Infrastructure (2018). The latter provides a perspective from a key private equity market participant that has recognised the specific needs of the infrastructure sector. Some of its key recommendations are worth summarising here (a full list is given in Annex A):

- a. Ensuring that board membership covers the requisite skills, knowledge and diversity
- b. Promoting the success of the company and avoiding conflicts with shareholder interests
- c. Undertaking board effectiveness reviews
- d. Appointing an independent chair and non-executives that are not shareholder representatives
- e. Forming a Stakeholder Committee of the Board
- f. Transparency and Disclosure to include non-financial reporting

It can be noted how many of these recommendations relate to the fundamentals of good governance discussed above. Moreover, it is throughout the operational period of an asset that the key infrastructure sector differences identified really become apparent, year-in and year-out, notably: accountability; scale; impact; long-term; reliance; health and safety; and carbon (S1). The long-term nature of some infrastructure businesses can be illustrated by the fact that a company like Thames Water can trace its origins back through more than 400 years of continuous water (and later waste-water) service provision! A long-term perspective is a key component of good governance arrangements for infrastructure assets in operation.

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<sup>33</sup> UK Government Investments

### OPERATIONAL PHASE

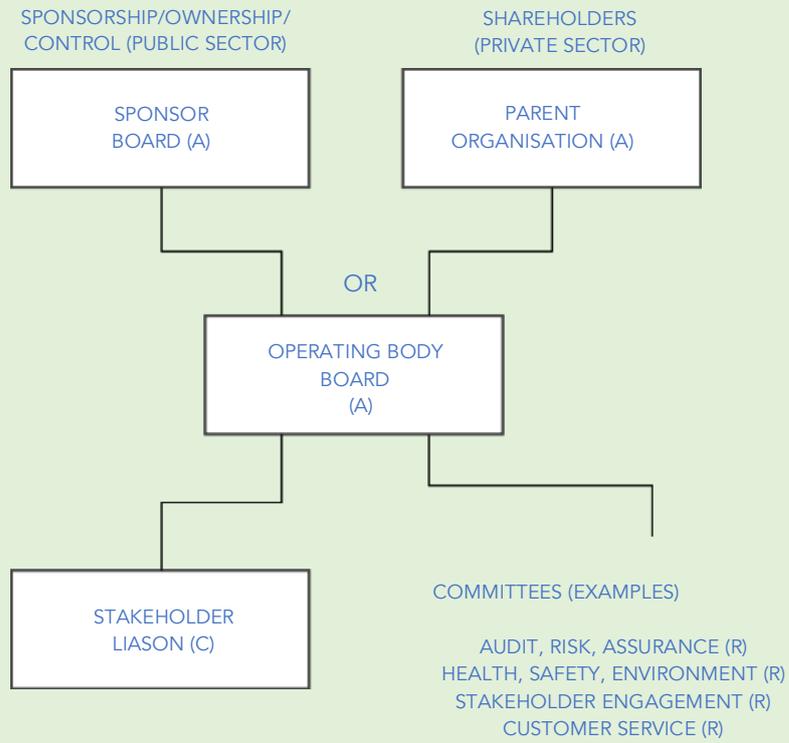


DIAGRAM 1 – TYPICAL GOVERNANCE DIAGRAM FOR THE OPERATIONAL PHASE



## SECTION 4: GOVERNANCE

### ARRANGEMENTS REFLECT SUCCESS

### CRITERIA

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64. All Infrastructure Boards should ask themselves the key question: are we, as a board, equipped to accept accountability for the successful formation/performance of these infrastructure investments, where success is defined by a combination of hard and soft criteria (aka a “balanced score card” – which collectively go to the purpose of the investment (S8) – typically comprising, but not limited to:
- a. Raising the bar in health and safety management
  - b. Meeting the financial criteria of investors, or funders in the case of public sector expenditure limits
  - c. Completion to schedule
  - d. Meeting specification and quality standards, and achieving the expected functionality/ delivery of benefits – such as improved productivity, quality of life, social equity etc
  - e. Meeting conditions applied by regulators and through the planning process
  - f. Mitigating environmental impacts in accordance with regulation and best practice
  - g. Satisfying the reasonable expectations of other key stakeholders
  - h. Minimising and mitigating community impacts
  - i. Delivering within relevant carbon budgets
65. All of these success criteria involve the management of risks; and the appropriate design of governance arrangements is derived by combining these success criteria with four of the key considerations for good governance identified by the IPA in its guidance (Improving Infrastructure Delivery, Project Initiation Routemap - Governance Module (2016))<sup>34</sup> – namely: accountability; authority; alignment of incentives; and avoiding conflicts of interest – and by deploying the different types of Infrastructure Boards (S3), as appropriate. These principles of design for governance arrangements are, of course, applicable across all three phases of asset life – development, construction and operational. The extent to which the success criteria are well articulated will be a major determinant of how effective the reporting regime will be (S8), for example in the case of criteria d. and h. above.

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<sup>34</sup> A full list of the recommended characteristics of good governance is included in Annex A

66. However, it is the characteristic diversity of these success criteria, accountabilities and authorities (e.g. often straddling both the public and private sectors) within the infrastructure sector that makes the appropriate design of governance arrangements far from straight-forward and can make them look very different from those adopted within mainstream corporate sectors. An example is shown in Diagram 2 of the kind of construction phase governance arrangements that can result. The question of the underlying purpose of an infrastructure asset and its relationship with reporting arrangements is considered below (S8).
67. The detailed accountabilities, responsibilities, delegations and functions of boards and their committees are generally described in foundation documents, such as: memoranda and articles of incorporation, accounting officer letters, shareholder agreements, development agreements and general terms of reference. There is much excellent generic guidance available on these topics.
68. There are two further issues to consider within the context of selecting the types of infrastructure boards required and their roles: first, that the governance needs of a project (or an organisation) will evolve over time, not just in transition between each of the three classical phases (development, construction and operation), but often also within a phase, in response to the passage of key milestones, or changes within the operating or risk environments impacting on the infrastructure assets and the services they deliver; and second, that the governance hand-over points between the three classical phases are high risks events in themselves, with important issues of continuity of board memory and changing skill sets to consider and balance (S6).
69. Finally, it should be stressed that whereas the concept of success criteria implies that it is enough to comply, the objective of all Infrastructure Boards should be to lead and exceed the relevant thresholds, consistent with the collective aim of raising the governance bar across the sector.

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Accordingly, it is recommended that the design of governance arrangements for an infrastructure organisation be tested to ensure their alignment with its success criteria, accountabilities, authorities and incentives, and avoidance of conflicts.

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## BOX 2 – THE CONSTRUCTION PHASE

Although the risks of project failure are generally greatest in the Development Phase of an asset, it is during the Construction Phase that the stakes are usually highest. This is when the big money is spent and the consequences of cost overruns and delays in completion have the greatest implications for sponsors, financiers and key stakeholders. A discussion of governance during construction can easily stray into the realm of best practices in project (or programme) management, which are not the subject of this report<sup>35</sup>. There is an extensive library of guidance, manuals and books on the subject of project management and no attempt is made here to summarise or cross-reference this.

The nature of activities undertaken during construction and the serious consequences of failure mean that the risks inherent in managing an infrastructure asset are essentially amplified during the Construction Phase - for example as regards: health & safety, financial discipline, procurement, community impact, stakeholder engagement and disclosure. This places considerable pressure on governance arrangements; and so the factors that support the attainment of a high performing board are especially relevant here (S10).

The distinction between investors in a private sector infrastructure company and the roles and responsibilities of the company itself provide a helpful analogue, within the public sector, in distinguishing between a sponsor body and a delivery body. The latter being the client organisation, which tenders contracts and has responsibility for programme management etc. This model was adopted for London 2012, Crossrail, HS2 and the Restoration and Renewal of the Palace of Westminster.

There are three further issues to highlight that are specific to the Construction and Development Phases and go to the heart of good governance: the first concerns tension between BAU for the sponsors/parent organisation and the demands of the new project (S10); the second concerns the topic of assurance (S9); and the third, change control:

### *Change Control*

Evidence shows that change<sup>36</sup> is a major driver of late construction completion and of cost overruns. In consequence, a great deal has been written about the subject and much helpful

<sup>35</sup> See, for example, Project 13 ([www.P13.org.uk](http://www.P13.org.uk)); and [www.gov.uk/guidance/project-and-programme-management](http://www.gov.uk/guidance/project-and-programme-management)

<sup>36</sup> ICE - Reducing the gap between cost estimates and outturns for major infrastructure projects and programmes -<https://www.ice.org.uk/getattachment/news-and-insight/policy/gap-between-estimates-and-outturns/ICE-Report-Reducing-the-gap-between-cost-estimates-and-outturns-for-major-infrastructure-projects-and-programmes.pdf.aspx>

guidance is available, mostly from the perspective of programme management. One of the reasons that private sector projects are generally less prone to change during construction, is that financiers (equity and debt) will: first, insist so far as possible that the design and all other key potential sources of change are buttoned-down prior to release of the main works construction contracts; and second, to the extent that requests for changes arise during construction, they are under tight limits of delegation to the delivery team and, above relatively minor thresholds, must be referred to the sponsors (i.e. equity) and, above higher limits, to lenders. The potential for public sector sponsors to themselves be the source for change requests (e.g. due to political considerations) illustrates both the difficulty which public sector projects face during construction and the benefit that can come from delivery bodies being separate and distinct from the sponsorships function. The timing of change requests and their implementation are crucial to ensuring that value for money is maintained and that the outcomes of changes can be effectively measured within the programme control systems.

In circumstances where a contractor or supplier submits a price for a client-initiated change order, or a compensation event on the basis of expenditure incurred outside of the scope of contracted prices, an important interaction can arise between the requirement of the infrastructure organisation to report and the need for confidentiality during the period of commercial negotiation, when these matters are settled (which can run to years). So, a cautionary note needs to be sounded concerning reporting: that the pursuit of transparency should not undermine negotiating positions.

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The final word on the Construction Phase needs to be given to the report published jointly by DfT and IPA - *Lessons from Transport for Sponsorship of Major Projects (2019)*. The two critical success factors identified in the report for successful governance during construction are: (a) the need for accountability to be unambiguous; and (b) a recognition that behaviours matter more than process. A summary of the key recommendations of this report are included in Annex A.

### CONSTRUCTION PHASE

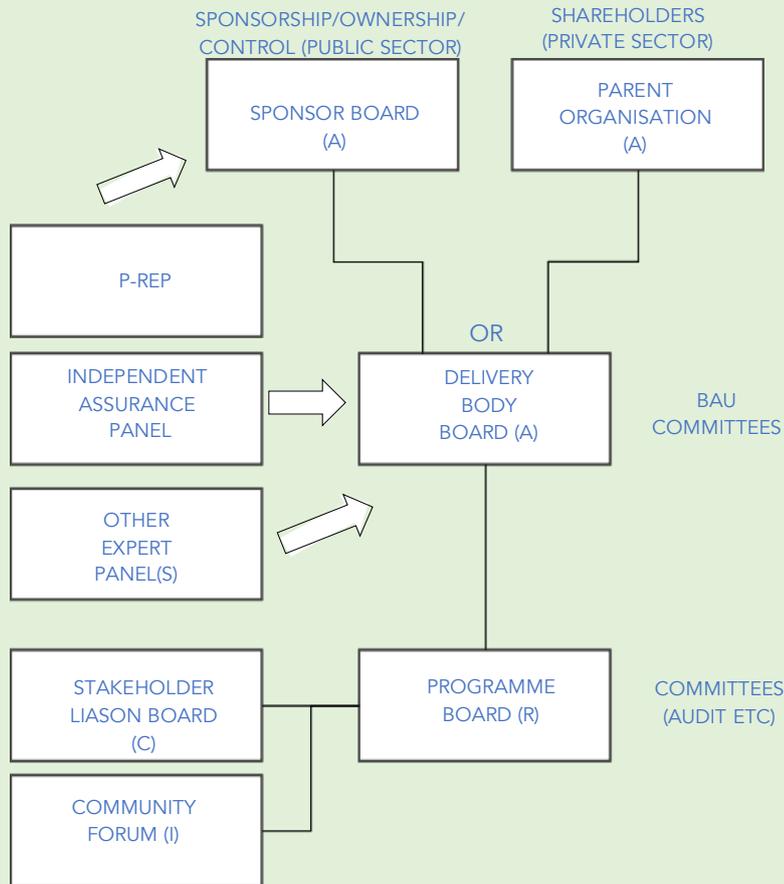
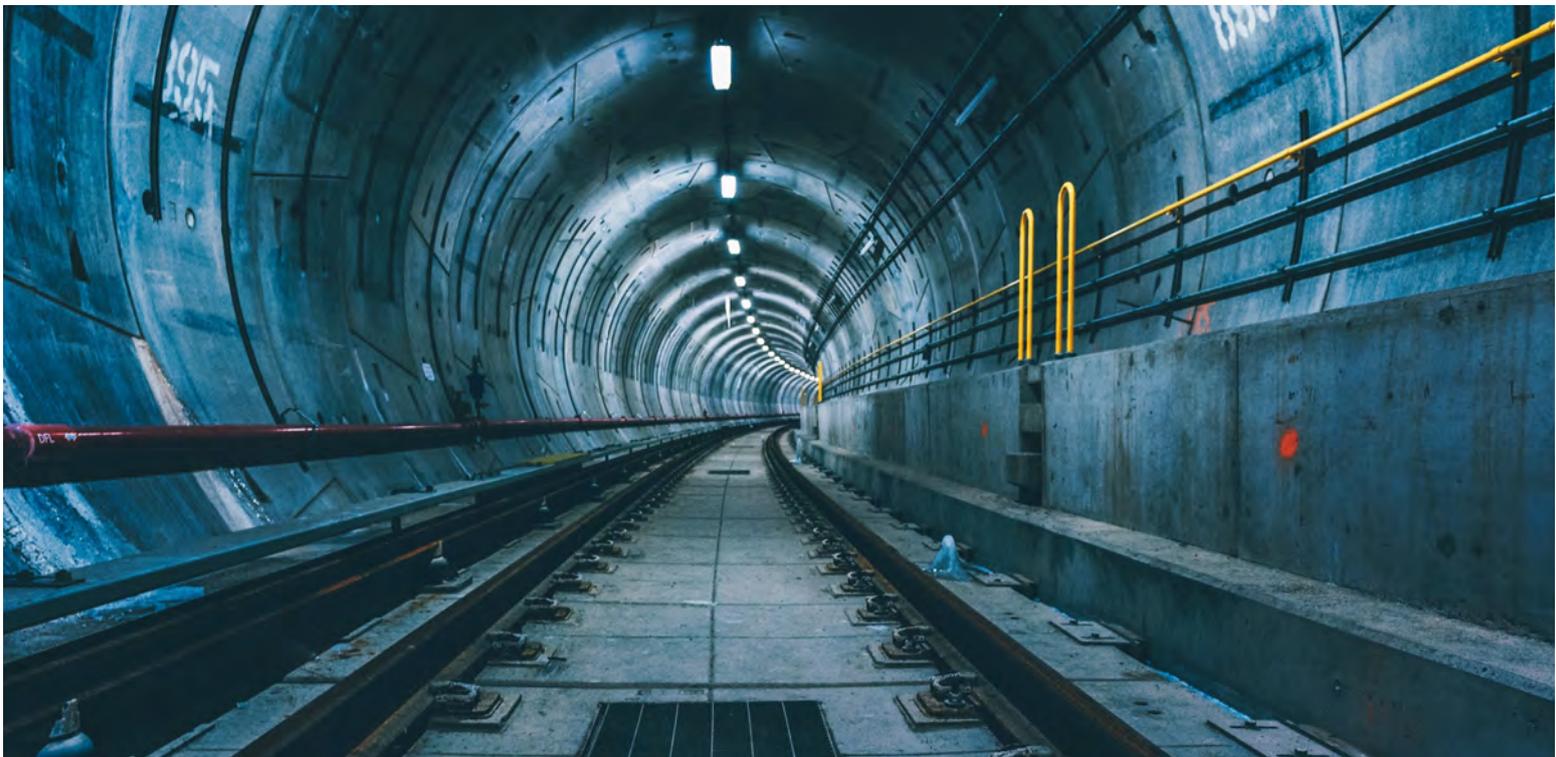


DIAGRAM 2 – TYPICAL GOVERNANCE DIAGRAM FOR THE CONSTRUCTION PHASE



## **SECTION 5: BEHAVIOURS AND VALUES UNDERPIN GOVERNANCE**

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70. The subject of behaviours within the context of governance has been well covered in the literature and there is no reason to summarise this material here. It is also a subject on which it is easy to make observations that can read like statements of the obvious, so we tread with care! The reason for including it within this report is that it comprises the link between values and board performance (S10), which are both key themes of infrastructure governance; moreover, as the DfT - Lessons from Transport for Sponsorship of Major Projects (2019)<sup>37</sup> report observed: behaviours matter more than process.
71. Successful Infrastructure Boards are those that can reconcile a series of apparent contradictions in arriving at decisions, for example: (i) the ability to take risks vs an aversion to surprises; (ii) attention to detail vs mastery of the big picture; (iii) pressure to meet short-term targets vs the need to deliver long-term outcomes; (iv) creating a culture of trust vs the need for independent assurance; (v) an unswerving focus on objectives vs responding to changing stakeholder pressures; (vi) delivery of financial vs social returns; and (vii) being held to account for matters that are not necessarily within its control.
72. Key factors that nurture the behaviours within an Infrastructure Board, which can help it deal with these apparent contradictions and the tensions they create, are:
- a. **The quality of reported information** (including from expert panels etc.) as supplemented by information gathered by board members themselves through direct interactions within the organisation (e.g. through membership of subordinate committees, Programme Boards, stakeholder forums, site visits etc) (S8).
  - b. **Sufficient time** being made available for the necessary scrutiny and debate within the context not only of board meetings themselves but also “deep-dive” sessions, pre-board discussions, follow-ups and site visits etc (S7).
  - c. **The range of skills and perspectives** within the board being sufficiently SQEP<sup>38</sup> to absorb, constructively challenge and discuss the information it receives and manage the apparent contradictions described above (S6).
  - d. **A capacity to act quickly and decisively** in addressing issues and emerging problems.
  - e. **Creating a safe environment** in which bad news is received and processed with the same supportive behaviours as good news.

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<sup>37</sup> See Annex A

<sup>38</sup> Suitably Qualified and Experienced Person

- f. **Self-awareness of the board** in terms of its capabilities and capacity described above.
73. Public and private sector Infrastructure Boards are equally capable of exhibiting these behaviours and, conversely, are equally capable of not - albeit that the reasons for departures from appropriate behaviours may differ. For example, an Infrastructure Board that is too close to political pressures which require announcements of good news (and the avoidance of bad) and a board that is too close to shareholder pressures for short-term financial returns, will both face skewed boardroom environments in which decisions are taken.
74. All infrastructure organisations are incentivised, one way or another, to manage the risks inherent in developing, constructing and operating assets. These incentives are variously driven by markets, contracts, regulation or public administration frameworks; and, ultimately, these incentives cascade down to individuals within the infrastructure organisation whose job is to make it all happen. The way in which personal incentives interact with organisational values and culture to drive behaviours, need no coverage here. It is the job of remuneration committees to integrate these factors within an overall HR policy and, again, there is plenty of literature on this subject.
75. The point to note however, is that non-executive members of Infrastructure Boards who represent private sector invested capital are likely to be in a different position, as regards incentives, from all other non-executives, whether the board is public or private sector. These incentives, in combination with the greater empowerment that shareholder nominated board members enjoy, must inevitably drive different behaviours, such as having an especially sharp focus on the control of cost, risk and schedule. Of course, it is inherent in the apparent contradictions described above, that all decisions must be taken within the context of competing factors, many of which will militate against the sole pursuit of financial performance. Nonetheless, without a strong voice in favour of taking difficult commercial decisions and resolving problems early, an Infrastructure Board can struggle to achieve the requisite behaviours. Fire-fighting of difficult commercial situations is a core skill of private sector investors.
76. In the case of public sector Infrastructure Boards, there can be no equivalent member (executive or non-executive) who has the same "skin-in-the-game" perspective of a private sector shareholder representative. So, the approach must be to get as close as possible to this, by the careful selection of non-executive board members who are used to acting in this capacity, and by encouraging these members essentially to role-play as if they did have financial skin-in-the-game. The reciprocal concern of behaviour within private sector Infrastructure Boards being too heavily influenced by members with financial skin-in-the-game, can similarly be addressed by including sufficient independent

members accustomed to managing wider accountabilities, who are encouraged to be advocates for these within the board.

77. The possibility of a more structured approach to the elimination of behavioural differences between public and private sector Infrastructure Boards, as regards their approach to risk management, lies beyond the scope of this report<sup>39</sup>.
78. The related subject to consider in conjunction with behaviours is an organisation's values. The two together help define the culture of an organisation and how it takes decisions. Since the decisions taken by boards within the infrastructure sector often involve complex and difficult trade-offs, between financial and non-financial criteria and between different stakeholder groups, the values adopted by an infrastructure organisation are all the more important in supporting the efficient functioning of its governance arrangements, regardless of whether it is a public or private sector organisation, or whether engaged in development, construction or operational activities, or any combination of these. It is, of course, for each infrastructure organisation to determine its own values, which experience shows are most effective when owned "bottom-up". Nonetheless, within the infrastructure sector you would expect there be to some commonality of values embraced by its constituent organisations, whether public or private sector, based upon the sector's distinctive features and the key roles it plays within society (S1). In a sense, these values could be said to constitute the essential DNA of infrastructure governance.
79. A concept often discussed within the context of the infrastructure sector is asset stewardship, which arises naturally from the long-term nature of infrastructure assets and their inter-generational character – each generation seeking to leave an asset in a better condition than they found it. In some respects, the concept of **stewardship** can itself be seen as a core value of the sector. A working definition of stewardship is given below<sup>40</sup>:
80. *Stewardship is the responsible formation, management, operation and maintenance of infrastructure assets which create long-term value for their sponsors, owners and users of the assets, leading to sustainable benefits for the economy, the environment and society.*
81. It is the parent value for: long-termism and sustainability - including decarbonisation and environmental responsibility; effective asset management; reliability; and inter-generational legacy. Examples of other values that have a strong claim to being universal within the infrastructure sector include: **Accountability** – where this is the parent value for: tight financial discipline; stakeholder engagement and responsiveness; customer care

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<sup>39</sup> See Annex D

<sup>40</sup> Paraphrased from that used by the FRC's UK Stewardship Code (2020)

and service quality; value-for-money; transparency and disclosure; and **Health & Safety** - which must always be a value, rather than a priority, as priorities can change whereas the supremacy of health and safety considerations cannot, both as regards the workforce, supply chain and users of the infrastructure

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Accordingly, it is recommended that the core values of the infrastructure sector be recognised, not only because of the crucial role they play in underpinning behaviours, but also as reference points to be used by all Infrastructure Boards when choosing their own sets of values.

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## **SECTION 6: INFRASTRUCTURE BOARDS NEED SUITABLY QUALIFIED AND EXPERIENCED PEOPLE**

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82. There are essentially four categories of members of infrastructure boards: executive, non-executive connected (e.g. being a shareholder representative, or Departmental/IPA nominee), non-executive independent (i.e. having no affiliation to any of the stakeholders) and observers (who may be connected or independent, but have no right to engage in the proceedings of the board). The relevant blend of membership is determined by the role of the board and related RACI analysis and, to the extent that the function of the board evolves with the maturing life-cycle of an asset, so the necessary skills and composition of the board must also change.
83. As regards accountable boards, or those which otherwise hold executive responsibility, one of the most important concepts in corporate governance is the absence of distinction between the duties and liabilities of executive and non-executive board members (Part 10, Chapter 2, Companies Act (2006)). Whilst not formally the case for boards that are established outside the remit of the Companies Act, this concept is nonetheless a solid foundation for efficient and effective functioning of Infrastructure Boards in general, whether established within the public or private sectors. Clearly, this would not apply to board members who are observers. Nonetheless, the description of “observer” belies the crucial role that such members of an Infrastructure Board can play, in terms of offering a practical demonstration of transparency and stakeholder communication.
84. To be effective in supporting, challenging and holding the executive team to account, the non-executive members must be free to act as critical friends of the executives and have a good understanding of the concerns of absent stakeholders. Much excellent generic guidance exists on matters such as the duties of directors, board size, tenure, diversity, succession and executive remuneration etc. and there is no need to repeat this here. However, there are four issues concerning the membership of Infrastructure Boards that go to the heart of good governance within the sector and so deserve specific mention: member background; member independence; achieving the right balance of skills; and growing the talent pool. Taking each in turn:

### *Member Background*

85. The defining characteristics of the infrastructure sector (S1) necessarily require board members to cover a wide range of critical subject matters. If members are drawn too heavily from a particular background, it will undermine the collective expertise of the board and its ability to perform effectively. Several areas of expertise, for example, are relevant to all three phases of the asset life-cycle, and yet will not necessarily be found within the ranks of sponsor/investor organisations, whether public or private sector, namely: customer experience, stakeholder engagement and health & safety. The ICE<sup>41</sup> review into the lessons for the infrastructure sector arising from the Grenfell Tower disaster (In Plain Sight 2018)<sup>42</sup> drew attention to the need for infrastructure board members to be SQEP, a concept originally formed within the nuclear power industry. This is a helpful test when considering the optimum blend of backgrounds for board members<sup>43</sup>. This does not mean that every individual should themselves be SQEP across all aspects of the board's remit, but rather that they should collectively cover the range of specialist knowledge required and have diversity of skill, thought and experience. And, in practice, especially during development and construction phases, the optimum blend may only be achievable by forming standing panels of experts to support the board (e.g. on subjects such as design, procurement or future operations).
86. All boards face the challenge of balancing the benefits of continuity of membership and associated board memory, with the need to maintain independence of judgement and to regularly inject fresh thinking. In the case of the infrastructure sector, this challenge is overlaid by two compounding effects: first, the scale and complexity of the underlying projects, whether sitting alongside BAU activities or stand-alone, can take new board members many months to master; and second, the different phases of asset formation (development, construction and operational) can require some fundamentally different skill sets, so making the transition periods between these phases especially risky for a board.

### *Member Independence*

87. The long-term nature of many infrastructure assets and their operational businesses (both public and private sector) requires that those boards, which are ultimately accountable for these assets and their related services, take a correspondingly long-term view. This is

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<sup>41</sup> Institution of Civil Engineers

<sup>42</sup> ICE, In Plain Sight, 2018. [https://www.ice.org.uk/getattachment/news-and-insight/policy/in-plain-sight/In-Plain-Sight.pdf.aspx#\\_ga=2.66601838.1561835340.1594888959-2121473837.1594888959](https://www.ice.org.uk/getattachment/news-and-insight/policy/in-plain-sight/In-Plain-Sight.pdf.aspx#_ga=2.66601838.1561835340.1594888959-2121473837.1594888959)

<sup>43</sup> A potentially logical extension to the infrastructure sector of the trend towards "fit and proper" testing for appointments - e.g. within the health sector

not always easy if the majority of board members represent interests with much shorter time horizons. Moreover, the complex stakeholder environments within which infrastructure is usually delivered and that require multiple competing factors to be reconciled (S5), make it essential that the Infrastructure Board as a whole is able to make these difficult decisions with an independence of judgement.

88. The importance of non-executive members who are (and are seen to be) independent of any holding company, or wider conflicting interests, has been recognised by Ofwat (Annex A) who recommend that independent non-executives be the largest single group of directors on a relevant board. Finding the right balance between those members with skin-in-the game and those without, is a key challenge for all Infrastructure Boards, for which an organisation's purpose (S8) and success criteria (S4) are helpful guides.

#### *Achieving the Right Balance of Skills*

89. Notwithstanding the four different types of board members already mentioned (i.e. executive, non-executive etc), the question of skills balance is considered here only in relation to the pool of non-executives. Within a privately financed infrastructure organisation, investor-nominated non-executives bring a powerful focus on financial outcomes, financial risk management and on the need to fix emerging problems as soon as possible. It is hard for those chosen to represent public sector sponsor/funders of infrastructure investments to perform a similar function on Infrastructure Boards, as they generally don't face the same incentives or perceptions of risk. Conversely, of course, a too narrow focus on financial returns to the exclusion of a project's social returns, or a perspective that is relentlessly short-term despite the long-term purpose of infrastructure can also lead to the failure of an investment.
90. The issue of skills balance is also potentially acute within Infrastructure Boards that are public sector sponsor/funder boards for infrastructure investments. Whilst the sponsor board may have similar accountabilities for the full range of financial and social outcomes as the board of the delegated arm's length infrastructure delivery organisation that it owns, it may not have access to the same range of non-executive skills. This constraint can make it hard for the board to achieve a good match between its composition and its accountable mandate. Moreover, the proximity of a sponsor board to political pressures can only make the challenge of maintaining focus on project outcomes that much harder.
91. The concept of SQEP can be helpful in achieving a collective matching of member skills with board accountabilities (recognising the role of expert panels in supporting boards). Diversity of expertise and perspective on an Infrastructure Board is as important as practical experience, and an understanding of what leads to successful delivery and

performance within the sector. At its root, SQEP refers to an ability to understand the information being presented, its limitations and how the associated risks can best be mitigated and managed. In practice and recognising the importance of diversity in expertise and perspective, it is unlikely that more than half of members of an Infrastructure Board will need to have practical experience of infrastructure delivery or operations.

### *Growing the Talent Pool*

92. Three measures could help maintain the depth of SQEP talent available to Infrastructure Boards: first, a sector-wide continuing professional development (CPD) programme for infrastructure board members; second, the creation of a board apprenticeship scheme designed to help grow and sustain the future bench-strength of candidates for membership of infrastructure boards - where such a scheme could be modelled on the successful apprenticeship scheme<sup>44</sup> which already exists for listed company boards and which was established, inter alia, to help meet diversity targets; and the third the formation of more networks to support non-executive board members working within the infrastructure sector. These initiatives could be taken forward by third parties that have either sector-wide responsibilities or overviews, such as the IPA, ICE or by companies offering general board-room support, such as the Big-4 accountancy or executive search firms.

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Accordingly, it is recommended that all organisations appointing an Infrastructure Board (supported by the respective chair of that board) ensure that its members meet the on-going test of being Suitably Qualified and Experienced Persons; and steps be taken to maintain the depth of SQEP talent available to the sector more generally.

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<sup>44</sup> <https://www.boardapprentice.com>

## **SECTION 7: EMPOWERING NON-EXECUTIVE MEMBERS BOOSTS BOARD EFFECTIVENESS**

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93. Non-executive members play a crucial role in supporting, challenging and holding the executive members of an infrastructure organisation to account. So, all boards for which the analysis and recommendations of this report are judged to be relevant (S3) should be expected to have non-executive members, whether the board is: public or private sector (listed or unlisted); within a sponsor or delivery organisation; concerned with development, construction or operational activities; a corporate or programme board; or a board overseeing and directing BAU, a project or a combination of these. The first step to empowerment of the non-executive members is to ensure that there are a sufficient number of them on the board; the second step is the adoption of the principle that there be no distinction (whether de jure or de facto) between executive and non-executive members of the board (S3), as regards their duties and liabilities; and the third step is to have a chair who is independent of the executive team and the interests that control the host organisation.
94. The infrastructure sector has a generally good track-record of empowering its non-executive members. The origins of this good practice lie, in part, in the widespread use of third-party independent scrutiny and challenge, for example in the form of: MPRG/Gateway Reviews, Critical Friend Reviews, Red Team Reviews and their private sector equivalent, which can be loosely grouped under the title of “independent reviews”. These reviews are generally timed to coincide with key decision points or milestones in the progress of an infrastructure investment and, although widely applied during development and construction phases, they are equally applicable during operational phases as a diagnostic tool. These reviews are undertaken by third party experts (and not by the non-executives themselves) but, crucially, they provide the non-executive board members with access to independent deep-dive information and advice about progress and risks within their infrastructure business or project. They provide an important third line of defence against unwelcome surprises. There is a close linkage between this activity and the subject of assurance (S9).
95. To perform effectively, non-executive members on all boards face the task of absorbing sufficient and relevant information within relatively short periods of time. This challenge can be doubled within infrastructure businesses and projects because of their often large-

scale, complex nature and fast-moving operating and stakeholder environments. A non-executive member who is a shareholder (or sponsoring Departmental) representative, or is otherwise representing an influential stakeholder (such as the IPA) quite naturally enjoys a powerbase in a way that independent non-executives do not.

96. Nonetheless, a number of initiatives can be taken by the chairs of Infrastructure Boards to help empower and equip their non-executive members, including: (i) having some of the non-executives also sit on functional boards within the infrastructure business or project (e.g. Programme Boards, stakeholder committees, or assurance panels), which may not themselves have been classified as an Infrastructure Board by the host organisation; (ii) ensuring they have access to all the sub-committees of the board; (iii) forming focal relationships between individual non-executives and specific sites, assets or groups of assets; (iv) holding deep-dive workshops or “clinics” for non-executive members in the run-up to key decisions, or to provide independent briefings on emerging regulatory<sup>45</sup>, competition or stakeholder issues<sup>46</sup>; (v) implementing a programme of CPD to help them keep abreast of an often fast changing environment within the infrastructure sector (S6); (vi) non-executive members being able to initiate assurance reviews (e.g. Gateway Reviews); (vii) ensuring that a portion of board agenda time is always open for non-executive members to pre-nominate topics; (viii) making sure that at key stages in the evolution/life-cycle of an asset, the control points (gates) are board decisions; (ix) ensuring that (following notification to the chair<sup>47</sup>), the non-executive members have clear permission to consult legal, financial and technical advisers, whenever they need to; (ix) having the right, in exceptional circumstances, to raise matters directly with sponsors/investors; and (x) ensuring that the non-executive members themselves are able to devote sufficient time to these board duties, especially during periods of intense risk that are a common feature of infrastructure asset development, construction and operation.
97. The traditional time commitment expected of non-executive board members – whether within the public or private sectors – is 25 days pa. This is typically predicated on a pattern of 8-12 board meetings a year with associated preparation time, attendance at committees, Away Days and related interactions. However, the experience of many non-executive members of Infrastructure Boards suggests that this rule of thumb can significantly underestimate the true time commitment, particularly if some of the measures described above are implemented (e.g. forming focal relationships with specific sites or assets). In the case of chairs, the time commitment is correspondingly greater. It

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<sup>45</sup> Which could be provided by the regulators themselves

<sup>46</sup> Current issues of technology, for example affecting data and digital twins, would also fall into this category

<sup>47</sup> CEO or company secretary

could be helpful to the sector if the true level of time commitment were more widely recognised and communicated during board recruitment processes.

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Accordingly, it is recommended that the chair of each Infrastructure Board prepare and implement an on-going programme of empowerment for its non-executive members.

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## **SECTION 8: HIGH QUALITY REPORTING BUILDS STAKEHOLDER TRUST**

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98. Reporting forms the cornerstone of all governance arrangements and there is no need to summarise here the underlying statutory regimes which apply both to public and private sector organisations. However, there are several areas to highlight where the reporting activities of infrastructure organisations can and should go beyond the norm, largely due to the sector differences discussed above (S1) and numerous success criteria for infrastructure assets (S4), where these are: (i) the potentially diverse stakeholder audiences for these reports and the key role that transparency plays in building stakeholder confidence and trust; (ii) the special requirements of projects in development and construction; (iii) the situation of Infrastructure Boards that may be inward-looking to a host infrastructure organisation (e.g. a Programme Board); and (iv) current trends in increased narrative reporting (such as for ESG issues) and reasons why it is in the interests of the infrastructure sector to be a leader in this area. These are each discussed below.
99. That said, a cautionary note needs to be sounded about the dangers of reporting becoming an industry in itself. There is plenty of evidence that lengthy annual reports issued by companies are read by relatively few and, end-to-end, by no one other than the proof editors, notwithstanding that much of what is in those reports is driven by the need to comply with relevant statutes, codes and regulations. For current purposes, reporting should be seen through the lens of its relevance to stakeholders and based on quality more than quantity of information.

### *Stakeholders*

100. The objective of building stakeholder trust and confidence in an infrastructure organisation can only be met by high standards of reporting, disclosure and transparency. So far as possible, this information needs not only to respond to the expectations of stakeholders, but also to remove the fertile ground of ignorance in which suspicion and opposition can take root. The sheer diversity of stakeholders within the sector and the scale of many infrastructure assets implies a correspondingly major communications challenge for infrastructure organisations. A key objective for all Infrastructure Boards is to galvanise stakeholder support for the wider purpose of their infrastructure assets, by reference to all of their success criteria - financial and non-financial, such as: delivering benefits for the local community, boosting productivity, levelling-up the economy, improved quality of life, carbon reduction, resilience, greater social equity etc. Too often

the narrative around the delivery and performance of infrastructure strips away all of its success criteria other than “completion to budget and schedule”. Crucial though these criteria are, their impact on stakeholder confidence is heavily conditioned by whether wider success criteria for the investment have already been acknowledged and are supported by stakeholders.

101. It is important to design, resource and adopt a reporting system to cover this ground, from the outset, including designing the best communication channels with stakeholders. Three examples serve to illustrate the range of communication channels that Infrastructure Boards need to consider: (i) holding “Community AGMs” attending by the whole Infrastructure Board; (ii) the use of social media for reaching younger stakeholder groups; and (iii) the use of hoardings which surround construction sites. The latter, in particular, can be a powerful way of communicating the purpose and outcomes of an infrastructure investment to affected communities. A further interpretation of the relationship between infrastructure provider and community is to see the relationship as a form of covenant under which the social returns on the investment are explained, consulted upon and supported by commitments from the infrastructure provider. Of course, stakeholders such as regulators, may themselves report on the activities of infrastructure organisations, using league tables and other comparisons to highlight good and poor performance. External and independent perspectives like this underpin accountabilities.
102. Accountability is most readily achieved if the objectives and target outcomes of an infrastructure investment – financial and non-financial – are: (i) defined in clear and measurable terms (e.g. KPIs) up-front; and (ii) reported against. Announcing outcomes is preferable to announcing projects. Any project that delivers its outcomes cannot be a failure, even if the processes underpinning its delivery did not go according to plan.

#### *Development and Construction Phases*

103. At the core of all reporting that supports governance arrangements lie annual audited financial accounts for the prior year. Over recent decades, this routine information has been increasingly supplemented by narrative reporting about the future strategies and operations of the reporting organisation. However, this narrative generally falls well short of forecasts on which stakeholders can rely. And yet this is the position in which many infrastructure organisations find themselves – viz facing stakeholder expectations of accurate forecasts of costs and timescales for the formation of assets that can run many years into the future. Clearly, this is a matter for assurance rather than audit activity (S9). It presents unique disclosure and transparency challenges for the sector given that stakeholder trust, built over many years, can be lost in an instant by an unexpected

announcement of a revised forecast for completion of an asset. The duties of all Infrastructure Board members include taking all reasonable steps to satisfy themselves that the reports they issue are accurate, complete and up to date and, within the infrastructure sector, assurance is just as important as audit in helping board members fulfil this duty (S9). The formation of joint audit and assurance committees of Infrastructure Boards underlines the point.

### *Programme Boards*

104. Clearly, an Infrastructure Board may only have reporting obligations that are internal to its own host organisation (for example, a Programme Board). Nonetheless, the same principles of reporting, transparency and disclosure still apply; and it is only by providing high quality and timely information upwards within the host organisation that the more senior boards can, in turn, meet their external reporting obligations. Moreover, the language used to explain the case for an infrastructure investment is as important as the supporting evidence and economic justification, and Programme Boards can play key roles in developing the right narrative for communicating with stakeholders; for example, based on headlines of investment purpose and outcomes, rather than budgets. It is as important to explain why a project is “shovel worthy” as much as why it is “shovel ready”.
105. The generation of reports and other information about an infrastructure investment – in language and through communication channels suited to their audience – is a major undertaking for any infrastructure organisation. The scale of secretariat function needed to support Infrastructure Boards and Programme Management Offices, in implementing communications plans, is easily underestimated.

### *Current Trends*

106. There are two drivers of the trend towards increased transparency and disclosure by infrastructure organisations, one proactive and the other reactive. Taking the proactive first:
107. The infrastructure sector, as a whole, has to get better at explaining its benefits to society and why it can be trusted. This requires concerted action not just at the centre, by organisations like the IPA, NIC<sup>48</sup> and ICE, but also by each and every organisation active in the sector, public and private sector. There are growing trends of opposition to proposals for major new infrastructure investments and to the social legitimacy of private investment in public infrastructure services. The sector’s response to these trends needs

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<sup>48</sup> National Infrastructure Commission

to include a combination of proactive transparency and disclosure by Infrastructure Boards and, equally importantly, advocacy for the role of infrastructure within society and why society can have confidence in the sector's governance arrangements. For example, boards should track the social value that their organisations deliver, which is a much wider measure than traditional considerations of value-for-money (TIF, Moving on From the Green Book, 2020<sup>49</sup>) and which includes issues such as inter-generational legacy. An infrastructure organisation needs an unofficial social license to thrive, as much as its official ORR, Ofgem, Ofwat, Ofcom etc. regulatory license.

108. Even without these motivations for proactive transparency and disclosure, there are external pressures to which infrastructure organisations are increasingly being obliged to react, principally from ESG, FOI, EIR and the Task Force on Climate-related Financial Disclosures (TCFD)<sup>50</sup>. The ESG agenda is here to stay and the pressure it exerts on infrastructure businesses and projects will only increase. However, in many ways, the infrastructure sector can be seen as "home turf" for the ESG agenda. Some infrastructure organisations, which have committed to best practices in environmental management, social engagement and governance, can claim with justification that the ESG agenda has simply caught-up with what they have been doing for some years. However, this is the exception rather than the rule and infrastructure organisations have to embrace a greater and steadily growing duty to report on ESG matters, regardless of whether they are public or private sector, or whether owned by listed or private equity, or whether accountable for development, construction or operation. The importance, noted above, of assurance in respect of reported information is especially true of ESG reporting.

109. Of all the fundamental building blocks of good governance, the one that perhaps most lends itself to the goal of continuous improvement is reporting, transparency and disclosure. New reporting regulations are issued, disclosure standards developed, best practices defined and pressures exerted by society on infrastructure organisations for greater transparency, pretty much on a continual basis. This moving landscape is now a mainstream activity for the sector. The opportunity and self-interested incentive for the sector is to be (and to be seen to be) in the vanguard of this process of continuous improvement, not a follower.

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<sup>49</sup> The Infrastructure Forum, Moving on From the Green Book, 2020. [https://fea715ce-3c56-4c71-9893-f1a800dfb282.filesusr.com/ugd/d9a995\\_f05c94ef148647c29f53395bedc3e9fd.pdf](https://fea715ce-3c56-4c71-9893-f1a800dfb282.filesusr.com/ugd/d9a995_f05c94ef148647c29f53395bedc3e9fd.pdf)

<sup>50</sup> In its Green Finance Strategy, the Government sets out its expectation for all listed companies and large asset owners to report in line with the (Financial Stability Board) Task Force on Climate-Related Financial Disclosures (TCFD) recommendations by 2022

110. At the time of writing this report, several initiatives to improve standards of ESG investing and reporting were already well established – such as UN PRI<sup>51</sup>, Eurosif<sup>52</sup>, LSE<sup>53</sup> Green Economy Mark, the Global Reporting Initiative and SASB<sup>54</sup>. The number of such initiatives can be expected to grow, so the challenge for the infrastructure sector is two-fold: first to establish a consistent base-line across the sector for a minimum level of best practice in ESG reporting; and second to agree a means by which the collective expertise within the sector can be combined to help move this agenda forward, so that the infrastructure sector can retain a position of leadership.
111. A strategy of building stakeholder trust and confidence will also include reporting on the organisation's values at work (S4) and assurance activities (S9), these latter especially during the construction phase of an infrastructure asset. If the infrastructure sector is unable to communicate its commitment to long-termism, its wider purpose and its responsiveness to stakeholder concerns about ESG, for example, then there is little hope of other sectors of the economy being able to do this.

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Accordingly, it is recommended that reporting systems be designed by all Infrastructure Boards (outward and inward facing) to galvanise stakeholder support for the wider purpose of infrastructure and to build confidence in its delivery, through transparency of assurance processes and commitments to ESG principles

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<sup>51</sup> UN Principles of Responsible Investment

<sup>52</sup> Europe-based national sustainable investment fora

<sup>53</sup> London Stock Exchange

<sup>54</sup> Sustainability Accounting Standards Board

## SECTION 9: ASSURANCE IS AS IMPORTANT AS AUDIT

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112. The general subject of assurance quite properly comes within the scope of project (and programme) management, so it is not for general coverage in this report except insofar as its interaction with governance arrangements determines whether a board can be confident of delivering on those objectives for which it is accountable, or responsible as the case may be. The model of assurance commonly adopted in the infrastructure sector is the so called three lines of defence model. The first line of assurance being the checks undertaken by the individuals doing the primary work, according to the standards of their profession; the second line of assurance being provided by the managers and supervisors within the project/programme team, who have to sign-off the primary work<sup>55</sup>; and the third line being provided by independent teams mobilised from outside of the project/programme (often constituted as panels of experts). The key point of interaction between this assurance framework and the duties borne by members of an Infrastructure Board arises when a board member has to apply the test of whether they have taken all reasonable steps to satisfy themselves that the situation is as reported to the board – the empowerment of the non-executive members being central to this (S7).
113. A key behavioural risk factor for all projects during their Development Phase is optimism and, of course, much helpful guidance exists on optimism bias and how it should be taken into account within business cases etc. However, the particular point to highlight here from a governance perspective, is the importance of independent assurance processes in managing and mitigating this risk. Nothing undermines public and stakeholder confidence in a delivery team quite as much as changes in headline capital costs figures during the Development and Construction Phases. Moreover, the damage done by such headlines can be sector-wide and not just limited to the reputation of the embarrassed infrastructure organisation itself. All members of the sector have to be responsive to such instances of poor performance and work together to improve the collective track record and reputation of the sector.
114. The earlier discussion of non-executive member empowerment referred to the importance of independent periodic reviews of projects (e.g. undertaken as Critical Friend, MPRG, Gateway reviews etc.). An important adjunct to this, particularly during the Construction Phase, is the role of an independent professional firm which reports directly to the board and which provides on-going third line assurance that is complementary to

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<sup>55</sup> or by semi-independent experts being employed by the organisation but not involved in the original work

the periodic and ad hoc reviews that may be commissioned. A standing panel of experts can provide a similar function, sometimes combined with ad hoc Critical Friend review support.

115. The practice of employing an independent firm, typically an engineering firm, to provide periodic challenge to and assurance of the information being generated from within the host delivery organisation's management information system (MIS) (especially cost and timescale forecasts to completion) is, of course, common. When employed by project lenders they are generally called technical advisers; and when employed by project sponsor bodies, they can be called Programme-Representatives (or "P-Reps"). It is important for Infrastructure Board members to: (i) understand the role of assurance, especially as regards providing them with confidence in the assessments it receives (via the MIS) of delivery risks; (ii) ensure that the budget for assurance is adequate; and (iii) that the assurance arrangements are visible to key stakeholders as this, in itself, is a confidence-building measure. Whoever is providing the independent assurance, their analyses and reports should routinely include a list of key lessons learned from comparable projects in the past (including from other sectors, countries etc) and how they have been applied in the current project<sup>56</sup>.
116. However, it can be seen that privately financed projects, in which lenders take project risk, have an inherent advantage over publicly funded/financed projects, as they provide an additional layer of independent assurance through the roles of lenders' technical advisers and, where applicable, the advisers appointed by economic regulators. For example, it would be normal for a lenders' technical adviser to be required to comment on forecasts of the costs to be incurred and timetable to completion of construction. Moreover, the private sector shareholders of projects will generally face much sharper incentives to see effective management of delivery risks than their public-sector counterpart project sponsors. It is the realisation of this difference that has driven much of the recent thinking on appropriate governance and assurance arrangements for major public-sector projects. For example, the corporate formation of delivery authorities operating at arm's length from sponsor/client bodies (Box 2). By itself, of course, incorporation does not address the risk management and assurance challenges of infrastructure delivery. However, in combination with the governance principles and practices outlined in this report, it can provide a solid foundation for this.
117. Assurance frameworks must evolve over time, in response to the changing risk profiles of infrastructure assets (from their development, through construction into operation) and be bespoke to the specific circumstances of the activities being assured (e.g. safety,

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<sup>56</sup> Assurance is itself a fast changing area, with technology playing an increasing role, for example by using artificial intelligence to assure prospective construction schedules

design, cost estimation, procurement, refurbishment, finance, logistics etc.). Public sector business cases typically require an Integrated Assurance and Approvals Plan (IAAP) to be included, which is a helpful discipline that deserves wider adoption across the infrastructure sector, throughout all phases of the asset life-cycle, where the IAAP will address the key implementation tests of capability and capacity.

118. Returning to the key test of whether board members have taken all reasonable steps to satisfy themselves that the situation is actually as reported, it is important to note the mutual support provided to assurance activities by: the culture of the organisation (for example, whether reporting a failure is seen as itself an act of failure, or not) (S4); and audit. The differences that define the infrastructure sector (S1) – especially concerning scale, risk and impact - mean that assurance should be seen as fulfilling a role of similar importance to audit.
119. However, a cautionary note is needed before concluding on the subject of assurance, as regards two associated risks: first, that assurance can create a moral hazard insofar as each additional layer of assurance can relieve pressure, that would otherwise bear, on earlier layers of assurance, to get it right first time; and second, that the project resources diverted to support an assurance programme risk becoming the “main show” rather than supporting successful project delivery. In short, over-assurance can be as much of a risk to successful delivery as under-assurance, and the best way to achieve the right balance is through the preparation of an IAAP, at the outset, which is signed-off by key stakeholders.

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Accordingly, it is recommended that all Infrastructure Boards ensure that an assurance plan is in place and adequately funded; that the reports from the third parties providing assurance are both forward and backward looking and include explicit examples of how lessons from within the infrastructure sector have been applied; and that the reports they issue (as an Infrastructure Board) include a section on assurance which is complementary to its audited financial report.

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## SECTION 10: INDEPENDENT REVIEWS

### ASSIST BOARD PERFORMANCE

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120. The best place to start when planning for project delivery is with the IPA's Improving Infrastructure Delivery: Project Initiation Routemap (2016). Its key recommendations for governance are included in Annex A; and the governance issues it identifies are covered throughout the narrative of this report. The close relationship between the success criteria of an infrastructure organisation and the design of its governance arrangements (S4) is most evident within the complex governance diagrams of the Development Phases of major infrastructure projects – which can require several Infrastructure Boards and many more supporting boards, committees and panels (see Diagram 3).
121. However, this complexity can often extend into the construction and, occasionally, the operational phases of assets, driven by the need to ensure that risk management and oversight arrangements are fit for purpose. Successful management of the crucial relationship between BAU for the sponsoring organisation and delivery of a major new investment, similarly requires well designed governance arrangements. It is not always easy for an organisation to be objective when balancing these kinds of factors and over-governancing can be as much of a threat to success as under-governancing. The management of tensions between “BAU and project” may involve the use of a Special Purpose Vehicles (SPV) for a project and so this issue is discussed next.
122. It is often (but not always) the case that SPVs are created to deliver very large-scale infrastructure investments<sup>57</sup>, (often referred to as “mega-projects”) within both the public and private sectors. The reasons for this are typically: (i) to create a distinction between sponsorship of an asset (the role of parent organisations) and delivery of the asset (the role of a subsidiary SPV); (ii) to create a focussed organisation that is dedicated to the investment's success and not subject to distractions; (iii) to ring-fence the investment's risk management arrangements; and (iv) to separate the funding and finance arrangement from those of the parent organisation(s). The parent organisation(s) and the investment/delivery SPV will all have Infrastructure Boards in the sense meant in this report; and the relationship between parent and SPV will typically be defined through a scheme of delegation.

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<sup>57</sup> The Institute for Government has adopted the classification that “major” projects are those with a capital cost in excess of £100million and “mega” projects are those with a capital cost over £1 billion.

123. The Operational and Construction Phase governance diagrams shown in this report (Diagrams 1 and 2) both relate to situations where the infrastructure asset is being held within an SPV, typically due to its scale relative to that of the sponsor/parent organisation. However, it is important to note that the majority of infrastructure assets constructed each year comprise incremental additions to existing networks and portfolios and do not justify the use of an SPV ring-fence<sup>58</sup>. The decision on whether a new infrastructure asset should be delivered within a ring-fenced organisation, or not, involves careful balancing of operational considerations with the benefits of SPVs. The IPA Project Initiation Routemap guidance (2006) provides an excellent framework for working through this decision. The interactions with BAU (and especially where the decision may be novel for an organisation) also make it essential that independent expert advice informs this decision.

124. Several governance issues illustrate the point:

- a. to the extent that a new investment is delivered from within BAU and not through a ring-fenced entity, the governance arrangements of BAU need to be tested to ensure that they are fit-for-purpose for the new investment and not assumed to be such, simply because the project is being delivered under BAU;
- b. the larger the new investment relative to the scale of BAU, the greater will be the tensions created within the delivery organisation, which will permeate right up to the Infrastructure Board that is accountable for its delivery. The tensions will run across almost every aspect of BAU, including: resource allocation, budgeting and control systems, management band-width, HR policies, procurement policies, communication strategies, stakeholder engagement frameworks etc. The management and ultimately governance distractions caused by dealing with these issues are not to be underestimated and need careful assessment; and
- c. regardless of whether an SPV is being used or not, the tension between the BAU/sponsor team and the project/SPV team will inevitably be that much greater where the project/SPV team is larger and better resourced than the corresponding BAU/sponsor team, with important implications for the BAU/sponsor governance arrangements.

125. Once an asset has entered its Operational Phase, it will have become almost by definition BAU, whether delivered on a stand-alone basis, or managed as part of portfolio of operational assets. So, the governance risk factor of "BAU vs project" should not survive into the Operational Phase.

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<sup>58</sup> The Institute for Government estimates that in 2017 roughly 25% of infrastructure capital spend was invested in "mega" projects (with a capital value greater than £1 billion); 10% in "major" projects (with a capital value between £100 million and £1 billion); and the balance of 65% in "small" projects (having a capital value of less than £100 million).

## BOX THREE – THE DEVELOPMENT PHASE

The risks of project failure during the Development Phase are typically much higher than during later Construction or Operational Phases, for two reasons: first, because so much more can go wrong during a Development Phase (see the list below of things that must come together for a project to succeed in development); and second - and perhaps more tellingly – because a decision not to proceed further with a project should be an acceptable outcome from a governance perspective, during this phase. That is, if either the fundamental needs case for the project changes, or if the project no longer has a realistic prospect of delivering its required benefits affordably, or when needed, then it is important that the accountable Infrastructure Board retains the independence and objectivity of judgement to make these calls, despite the development costs that may have to be written-off in consequence.

The Development Phase starts with a project's inception and ends when all the arrangements are in place that will allow construction of the main works to begin. This progress can be mapped against a series of approval steps which, in the public sector, are generally described as:

- a. Project Initiation Document
- b. Strategic Outline Business Case
- c. Outline Business Case
- d. Final Business Case

Each private sector sponsor organisation will have its own equivalent steps by which investment cases are approved<sup>59</sup> and which, of course, often include steps such as authorising the submission of bids to construct and operate the infrastructure asset, in response to a public-sector tender. And, indeed, many public-sector infrastructure organisations also have their own bespoke sector-specific investment case approval processes, such as Network Rail's GRIP process (Governance for Railway Investment Projects). All such approval processes focus on key issues such as affordability, deliverability, value-for-money, financial viability, resilience to adverse scenarios, and ESG considerations.

Throughout the Development Phase, the role of an Infrastructure Board is threefold: (i) to oversee and direct the approvals process; (ii) to ensure completion of numerous development activities that both feed into the approval process and prepare the project for its Construction Phase; and (iii) to ensure that the project meets its success criteria (hard and soft) (S4). The development activities typically include:

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<sup>59</sup> There is an extensive literature, both public and private sector, on how to prepare investment cases and which lies beyond the scope of this report and so these are not cross-referenced.

- a. Establishing a compelling investment case
- b. Stakeholder, community and customer engagement
- c. Securing land, easements and rights of way etc.
- d. Completing environmental impact assessments
- e. Design work to support planning and construction tender
- f. Obtaining planning consent and/or statutory powers
- g. Negotiating supply and off-take agreements
- h. Obtaining regulatory licenses and other consents
- i. Tendering contracts for the construction of the main and other works
- j. Environmental, economic and financial modelling
- k. Securing short-term and well as long-term funding and/or finance
- l. Undertaking ground investigation and other preliminary works
- m. Mobilising, managing and transitioning the evolving teams needed to complete the above

It is apparent from this wide range of activities that Infrastructure Board(s) held accountable for the successful conduct of a project through development, will typically need to both: (i) form a series of sub-boards (or panels) onto which appropriate subject matter expertise can be brought; and (ii) form a series of boards and forums for engaging with stakeholders and other third parties. A typical example of Development Phase governance arrangements is shown in Diagram 3.

As a general rule of thumb, the costs incurred in developing a project are in the range 3-5% of the overall cost of building it<sup>60</sup>. This excludes land acquisition and early construction works, such as utility diversions which are sometimes undertaken ahead of the main works. An important exception to this rule arises when the project is delivered over multiple construction sites, for which multiple separate environmental impact assessments, community engagement activities etc. have to be undertaken. This can lead to figure much higher than 5%. There is little evidence of economies of scale within this range, as project complexity generally increases with project scale. So, for example, a project with a capital cost of £2 billion will expect to incur development costs lying in the range £60-100M. That is, the equivalent of what for many organisations could be a major project in its own right.

The implications of this are two-fold: first, that the delivery of value-for-money applies as much to the development activity itself, as to the later construction expenditure – viz involving social as well as financial measures of return; and (ii) that the Infrastructure Board(s) for the Development Phase must be equipped to be accountable for this. There are three reasons

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<sup>60</sup> This excludes the costs of private sector contractors, investor, operators and lenders bidding for an opportunity

why change will be necessary and, moreover, should be welcomed during the Development Phase.

*Change Control*

There are three reasons why change will be necessary and, moreover, should be welcomed during the Development Phase, in stark contrast to the Construction Phase where it is generally to be avoided (Box 2). The first concerns stakeholder engagement where, if there is no evidence that consultations influence project conception, design and implementation, all the energy, credibility and trust will ebb away from the consultation process which, at the very start of such a long-term and crucial relationship, is very damaging to a project. The second reason is related to the first but is much more objective in that a planning application needs to be supported by evidence of meaningful public consultation. Third, and last, is that change is the natural adjunct to optioneering and both of these form the evidence by which an Infrastructure Board can be confident that the project’s scope, design and delivery plans have been thoroughly optimised.

**DEVELOPMENT PHASE**

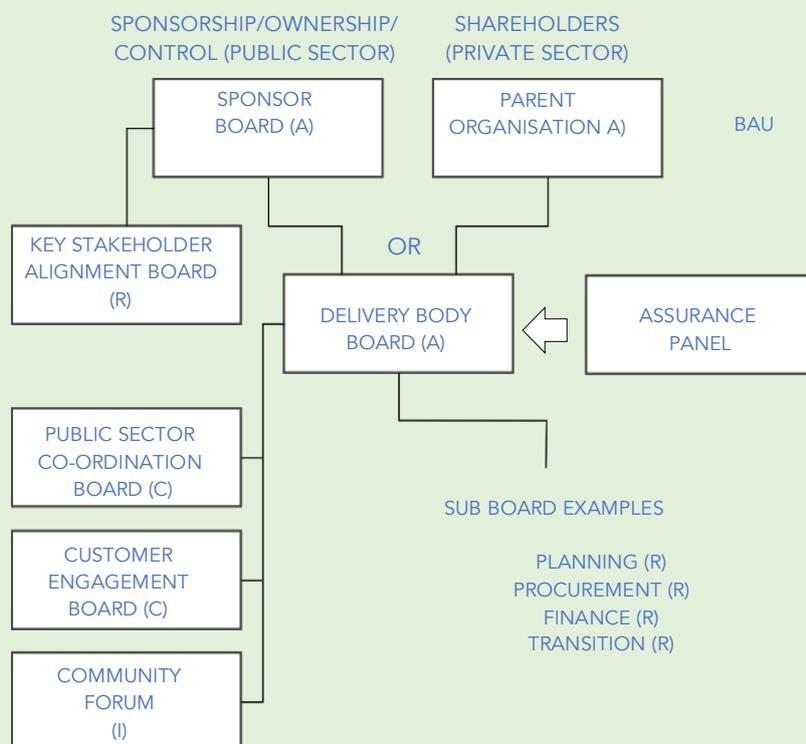


DIAGRAM 3 – TYPICAL GOVERNANCE DIAGRAM FOR THE DEVELOPMENT PHASE

126. At the apex of all effective governance sits a high-performing board; and, as before, a great deal of excellent guidance already exists on this subject which there is no need to repeat here, covering both the harder aspects of board performance (like committee formation and processes) as well as the softer aspects (like leadership). However, there are some aspects to this corpus of best practice which are of particular relevance to the infrastructure sector and need to be highlighted, namely: the overall design of governance arrangements (S4); the behaviours and values adopted by the organisation (S5); the competence of its members and the extent to which there is sufficient diversity of thought, or a skills gap (S6); the extent to which its non-executive members are suitably empowered (S7); the quality of its reporting (S8); and having a suitable assurance plan in place (S9).
127. The ability of an organisation to process and escalate bad news is determined mostly by its culture and the culture of an organisation comes from the top – i.e. from its most senior accountable board. A private sector organisation that cannot process bad news and report it promptly to its accountable board, is very likely to go bust. Within the public sector, the equivalent is an organisation that is seen to have failed by exceeding its expenditure limits. The observation already made about behaviours being more important than processes (S4) underlines the point; and a board needs to be self-aware in this respect. Within the infrastructure sector, the stakes can be very high for an organisation because of the health & safety, scale, reliance and environmental impact considerations of asset formation and operation.
128. So, without a high-performing board, an infrastructure organisation is going to struggle to meet these challenges and successfully manage the risks they face. Again, plenty of expertise and experience is available to help boards undertake regular performance reviews<sup>61</sup>. Traditionally, these reviews have been limited to the most senior boards within organisations (and mostly within the private sector). However, within the infrastructure sector, there may be several Infrastructure Boards within any given organisation and each need to be subject to the same regular performance review process as its most senior board, as well as relevant sub-committees and panels – with particular attention being needed at the risky transition points of Development-to-Construction Phase and Construction-to-Operational Phase.
129. Foremost it is a duty of the chair (in consultation with sponsors/shareholders) to ensure that the board remains high-performing.

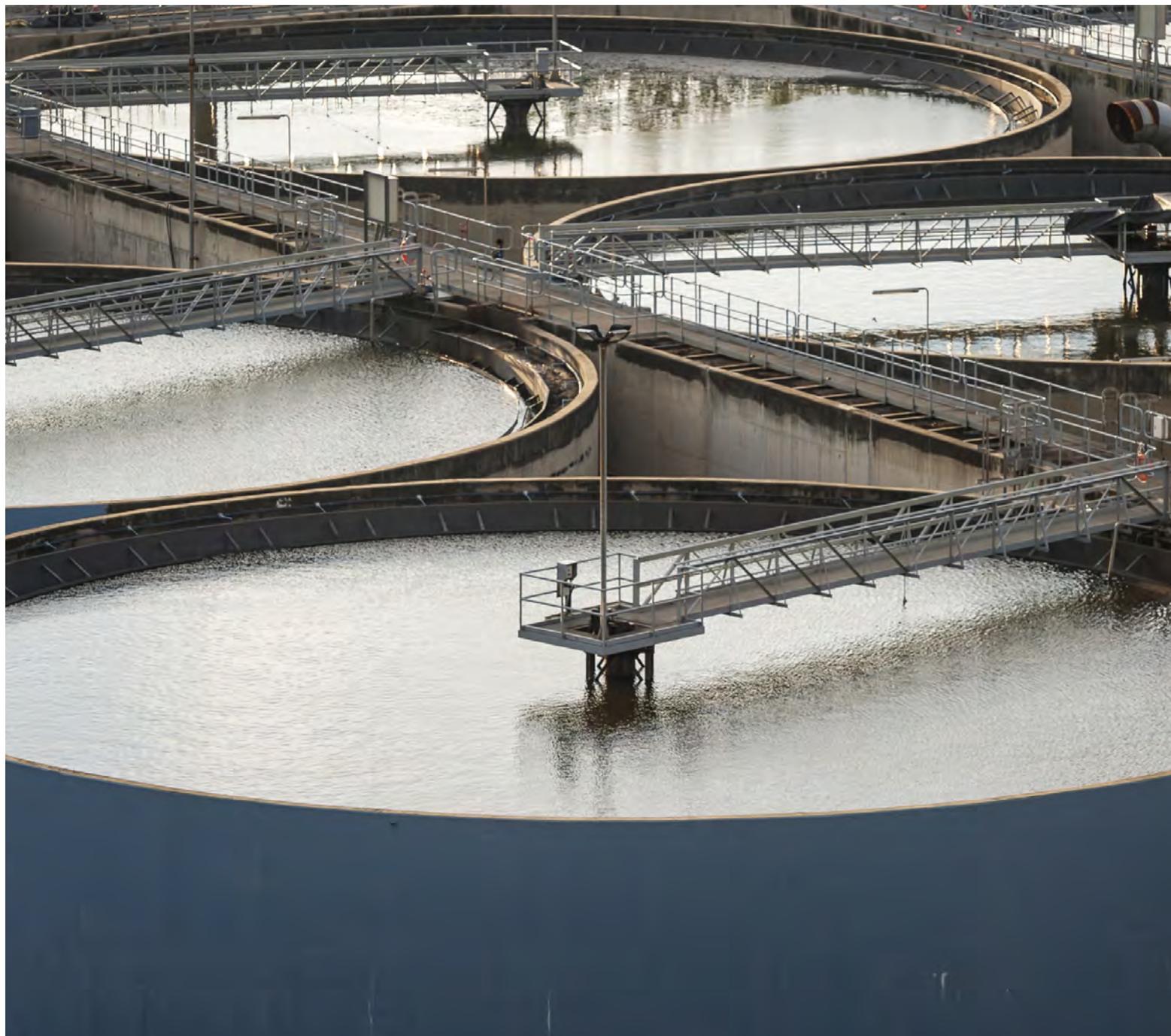
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<sup>61</sup> Internally led and, no less frequently than every three years, externally led

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Accordingly, it is recommended that the chair of each Infrastructure Board monitor and assess the extent to which it is a high-performing board and to take such steps as may be needed to ensure that it is, including commissioning periodic independent reviews.

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## The Author

**Mike Gerrard** has held management, board and advisory positions on numerous infrastructure projects, programmes and businesses in the UK and abroad, based within both the public and private sectors. He is currently chair of INPP Limited, the listed infrastructure investment company, and chair of LP committees for unlisted renewable energy funds managed by Impax Asset Management Limited. He is a senior adviser to Agilia Infrastructure Partners.

# ANNEX A – HIGHLIGHTS FROM EXTANT GUIDANCE

## Box (i) – UKGI Critical Success Factors for Delivery Through an Arm’s Length Body (2020)<sup>62</sup>

1. Clear purpose and objectives
2. Clear accountabilities for the ALB Board, the Department and SROs<sup>63</sup>
3. Sponsorship of the ALB
4. Capability and Capacity
5. Delegation and Controls
6. Transparency, Management Information, Assurance and Risk
7. Behaviours

## Box (ii) - Federated Hermes Infrastructure: Governance of Public Service Infrastructure (2018)

1. Insufficient coverage of requisite skills and knowledge (diversity)
2. Duty to promote the success of the company – avoiding conflicts with shareholder interests
3. Board effectiveness reviews
4. Independent chair
5. Independent non-executive directors (“NEDs”) (i.e. not shareholder representatives)
6. Stakeholder Committee
7. Remuneration aligned to ESG and Health Safety as well as financial performance
8. Transparency and Disclosure:
9. Non-financial reporting
10. Comply or explain

<sup>62</sup> UK Government ALBs – the case for them in specialised delivery and how to optimise their use (2020)

<sup>63</sup> Senior Responsible Owner

### Box (iii) – Companies Act (2006) Duties of Directors

1. To act within the directors' powers (Section 171);
2. To promote the success of the company and to act in good faith (Section 172);
3. To exercise independent judgement (Section 173);
4. To exercise reasonable care, skill and diligence (Section 174);
5. To avoid conflicts of interest (Section 175);
6. Not to accept benefits from third parties (Section 176); and
7. To declare interest in proposed transactions or arrangements (Section 177)

Section 172 sets out some of the matters a director must have regard to in order to comply with their statutory duty to promote the success of the company. These include, among other matters:

1. the likely consequences of any decision in the long term;
2. the interests of the company's employees;
3. the company's business relationships with suppliers, customers and others;
4. the impact of the company's operations on the community and the environment;
5. company reputation;
6. the need to act fairly as between the members of the company.

### Box (iv) - IPA Improving Infrastructure Delivery: Project Initiation Routemap (2016) (Governance Module)

#### Characteristics of good governance

For infrastructure projects, good governance is about a balance between the natural desire of sponsor(s) to retain control, and the need of the delivery team to have sufficient freedom to allow it to manage the risks to meet the project objectives. It is characterised by:

1. A clear statement of the objectives and parameters for delivery between the sponsor(s) and the executive team, including arrangements for remedy in the event of difficulty;
2. The project being sufficiently autonomous with a single controlling mind;
3. A clear system of delegation and determined process for timely decisions that fall outside the limits of delegation;
4. A determined process for controlling change;

5. A determined process for reporting and other communications between sponsor(s) and executive team;
6. A collaborative culture and working relationship between sponsor(s) and executive team;
7. Board members having sufficient understanding of the project content to make reasonable timely decisions (or seek advice to help them); and
8. A defined system for assurance at all levels.

## **Box (v) – DfT/IPA: Lessons from transport for sponsorship of major projects (2019)**

### **Accountability must be unambiguous**

1. Ensure clarity of role and extent of autonomy
2. Hold delivery organisation's Board accountable for controlled delivery
3. Evolve governance and personnel across the lifecycle stages
4. Maintain a stable scope and operating environment
5. Joint sponsorship requires careful design and operation
6. Join up across Departments

### **Behaviours matter more than process**

1. Act decisively when in exception
2. Invest in building relationships between leaders
3. Use control gates to step back and consider status objectively
4. Challenge the objectivity of delivery confidence assessments
5. Recognise both the value and limitations of independence assurance
6. Invest in preparing contingency plans for the most significant risks
7. Identify, capture, share and apply lessons

### **Control schedule and benefits as well as cost**

1. Use an evidence range rather than a single target date
2. Set a realistic cost envelope
3. Protect benefits
4. Test value for money through benchmarking
5. Increase focus on managing schedule

### Deal with systems integration risk

1. Ensure clear organisational accountability for systems integration
2. Reduce systems integration risk by controlling complexity
3. Protect the test phase diligently

### Enter service cautiously

1. Ensure clear accountability for the decision on whether to commission
2. Manage the whole portfolio to protect other projects and service users
3. Prepare to recover from disruption when new services are introduced

## Box (vi) - Ofwat: Board leadership, transparency and governance – principles (2019)

### 2.1 Purpose, values and culture

The Board of the Appointee establishes the company's purpose, strategy and values, and is satisfied that these and its culture reflect the needs of all those it serves.

#### Provisions

1. The board develops and promotes the company's purpose in consultation with a wide range of stakeholders and reflecting its role as a provider of an essential public service.
2. The board makes sure that the company's strategy, values and culture are consistent with its purpose.
3. The board monitors and assesses values and culture to satisfy itself that behaviour throughout the business is aligned with the company's purpose. Where it finds misalignment, it takes corrective action.
4. Companies' annual reporting explains the board's activities and any corrective action taken. It also includes an annual statement from the board focusing on how the company has set its aspirations and performed for all those it serves.

### 2.2 Standalone regulated company

The Appointee has an effective Board with full responsibility for all aspects of the Appointee's business for the long term.

## Provisions

1. The regulated company sets out any matters that are reserved for shareholders or parent companies (where applicable); and explains how these are consistent with the board of the regulated company having full responsibility for all aspects of the regulated company's business, including the freedom to set, and accountability for, all aspects of the regulated company's strategy.
2. Board committees, including but not limited to audit, remuneration and nomination committees, report into the board of the regulated company, with final decisions made at the level of the regulated company.
3. The board of the regulated company is fully focused on the activities of the regulated company; takes action to identify and manage conflicts of interest, including those resulting from significant shareholdings; and ensures that the influence of third parties does not compromise or override independent judgement.

### 2.3 Board leadership and transparency

The Board of the Appointee's leadership and approach to transparency and governance engenders trust in the Appointee and ensures accountability for their actions.

## Provisions

Regulated companies publish the following information in a form and level of detail that is accessible and clear for customers and stakeholders:

1. An explanation of group structure;
2. An explanation of dividend policies and dividends paid, and how these take account of delivery for customers and other obligations (including to employees);
3. An explanation of the principal risks to the future success of the business, and how these risks have been considered and addressed;
4. The annual report includes details of board and committee membership, number of times met, attendance at each meeting and where relevant, the outcome of votes cast; and
5. An explanation of the company's executive pay policy and how the criteria for awarding short and long-term performance related elements are substantially linked to stretching delivery for customers and are rigorously applied. Where directors' responsibilities are substantially focused on the regulated company and they receive remuneration for these responsibilities from elsewhere in the group, policies relating to this pay are fully disclosed at the regulated company level.

## 2.4 Board structure and effectiveness

The Board of the Appointee and their committees are competent, well run, and have sufficient independent membership, ensuring they can make high quality decisions that address diverse customer and stakeholder needs.

### Provisions

1. Boards and board committees have the appropriate balance of skills, experience, independence and knowledge of the company. Boards identify what customer and stakeholder expertise is needed in the boardroom and how this need is addressed.
2. Independent non-executive directors are the largest single group on the board.
3. The chair is independent of management and investors on appointment and demonstrates objective judgement throughout their tenure. There is an explicit division of responsibilities between running the board and executive responsibility for running the business.
4. There is an annual evaluation of the performance of the board. This considers the balance of skills, experience, independence and knowledge, its diversity, how stakeholder needs are addressed and how the overarching objectives are met. The approach is reported in the annual report and any weaknesses are acted on and explained.
5. There is a formal, rigorous and transparent procedure for new appointments which is led by the nomination committee and supports the overarching objective.
6. To ensure there is a clear understanding of the responsibilities attached to being a non-executive director in this sector, companies arrange for the proposed, final candidate for new non-executive appointments to the regulated company board to meet Ofwat ahead of a formal appointment being made.
7. There is a majority of independent members on the audit, nomination and remuneration committees and the audit and remuneration committees are independently led.

## **ANNEX B – SUMMARY OF RECOMMENDATIONS**

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1. The infrastructure sector should develop and adopt a common set of high-level governance principles and practices.
2. High-level principles and practices of governance should be applicable across the infrastructure sector, to both public and private sector organisations and across all phases of the asset life-cycle.
3. The chairs of all boards, committees or panels established within the infrastructure sector to be responsible for determining, at the time of establishment and at regular intervals thereafter, whether they chair an Infrastructure Board, to which these recommendations would apply.
4. The design of governance arrangements for an infrastructure organisation should be tested to ensure their alignment with its success criteria, accountabilities, authorities and incentives, and avoidance of conflicts.
5. The core values of the infrastructure sector should be recognised, not only because of the crucial role they play in underpinning behaviours, but also as reference points to be used by all Infrastructure Boards when choosing their own sets of values.
6. All organisations appointing an Infrastructure Board (supported by the respective chair of that board) to ensure that its members meet the on-going test of being Suitably Qualified and Experienced Persons; and steps be taken to maintain the depth of SQEP talent available to the sector more generally.
7. The chair of each Infrastructure Board to prepare and implement an on-going programme of empowerment for its non-executive members.
8. Reporting systems to be designed by all Infrastructure Boards (outward and inward facing) to galvanise stakeholder support for the wider purpose of infrastructure and to build confidence in its delivery, through transparency of assurance processes and commitments to ESG principles

9. All Infrastructure Boards to ensure that an assurance plan is in place and adequately funded; that the reports from the third parties providing assurance are both forward and backward looking and include explicit examples of how lessons from within the infrastructure sector have been applied; and that the reports they issue (as an Infrastructure Board) include a section on assurance, which is complementary to its audited financial report.
  
10. The chair of each Infrastructure Board to monitor and assess the extent to which it is a high-performing board and to take such steps as may be needed to ensure that it is, including commissioning periodic independent reviews.

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## **ANNEX D – POSSIBLE AREAS FOR FURTHER RESEARCH**

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During the development of this report, a number of suggestions were made by consultees for areas where further recommendations might usefully be made for the infrastructure sector, including:

1. Bid evaluation criteria that reflect wider measures of success than least cost and which specifically incentivise good governance (e.g. within an ESG framework)
2. The SQEP of infrastructure owners/sponsors/investors
3. Investigating structured approaches to the elimination of behavioural differences between public and private sector Infrastructure Boards, as regards their approach to risk management.

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