

The Infrastructure Governance Code

Engineering great decisions to change society

January 2023

[ice.org.uk](https://www.ice.org.uk)

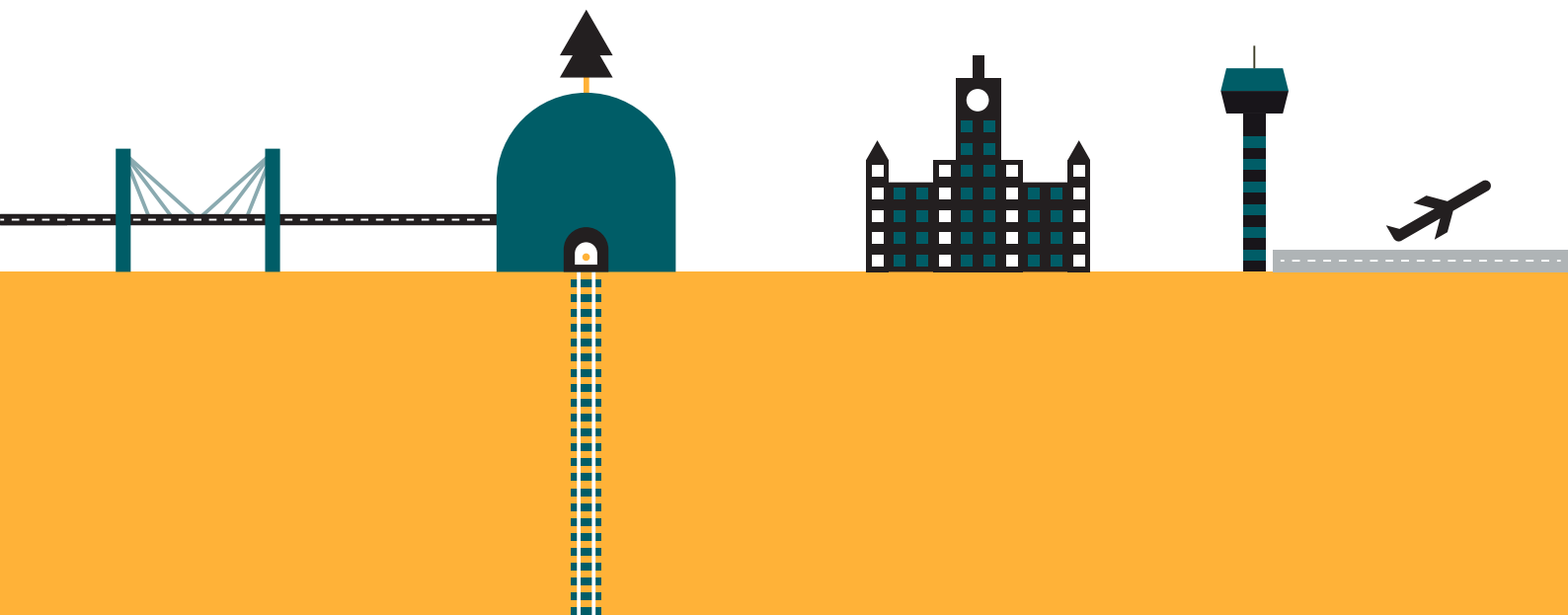




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“This Code provides a structured system of good practice and challenge that creates the right environment to support effective decision-making”



Welcome

As an industry, we are acutely aware of the significant challenges that face us – not least the climate crisis, but also the pressures created by a growing global population with expectations of better living standards.



For civil engineers, creating societal benefit is a requirement of our Royal Charter and what we have done throughout our history. However, we must now act more effectively, and with greater urgency, to deliver positive solutions not only for the people we serve but also for the planet and for future generations.

The complexity and scale of these challenges mean we need to look beyond our own organisations and collaborate with others who share our aims. We should be focused collectively on planning and delivering projects in more integrated, productive and sustainable ways to create outcomes that are firmly rooted in the UN Sustainable Development Goals (SDGs).

We must recognise that some of our projects have not been perceived as being successful. The increasing complexity of what we deliver is a factor, but we also need to challenge mindsets, culture and the way we deliver as we reach for improved productivity and sustainability.

The Infrastructure Client Group's Project 13 is a significant partner initiative for the Institution of Civil Engineers (ICE) that responds to this issue by creating a community of global infrastructure organisations that are working together to establish new delivery models. Project 13's core message is that the traditional transactional models adopted for major projects and programmes are inadequate for delivering the high-performing infrastructure networks that businesses and the public require. The enterprise model brings together owners, partners, users, advisers, suppliers and other stakeholders in more integrated, long-term arrangements that incentivise better outcomes.

Good governance is critical to enabling good outcomes. This Infrastructure Governance Code is born out of Project 13 and has been developed by practitioners for practitioners across our industry. It is structured around principles organised into six themes, to be used on a 'comply or explain' basis, underpinned by supporting provisions. In short, it provides a structured system of good practice and challenge that creates the right environment to support effective decision-making – which, in turn, will lead to better outcomes not only for those sponsoring and delivering projects but also for society and the world.

Keith Howells

ICE President 2022-23

Foreword

The UK Government delivers some of the most challenging, ambitious and innovative projects this country has seen. The scale and scope of these projects rank among some of the biggest in the world.



That is why the National Infrastructure and Construction Pipeline (published in September 2021) forecasts more investment in infrastructure than ever – amounting to nearly £650bn over the coming decade.

This investment will be a significant contributor to economic stability, which is needed at this moment. At a time when efficiency is paramount to the UK and the taxpayer, infrastructure and major projects will play a critical role in encouraging growth, national renewal and better productivity.

Still, with greater investment comes greater responsibility. We must ensure that everything we build is ‘greener’ and more sustainable if we are to achieve net zero by 2050. That is why we are investing in carbon-friendly solutions, factoring biodiversity into projects and increasing carbon removal to mitigate the impacts of climate change.

The Infrastructure and Projects Authority (IPA)’s policy paper, *Transforming Infrastructure Performance: Roadmap to 2030*¹, outlines this in greater detail. It describes a vision for the future in which we collectively prioritise the societal outcomes we need, including embedding critical thinking about how we embrace net zero, modern construction processes and new technologies so that project outcomes are fit for our ever-changing world.

We must also ensure projects are established and governed in a way that sets them up for success from the start, meaning they are delivered on time and within budget. Delivering on projects’ intended outcomes, particularly in an evolving technological world, will require an increasingly systematic and informed governance approach. Establishing and maintaining high-quality governance arrangements throughout a project’s life is therefore essential for diversity of thought, challenge and effectiveness. This Infrastructure Governance Code has been drawn up by a cross-section of

¹ www.bit.ly/TIPRoadmap

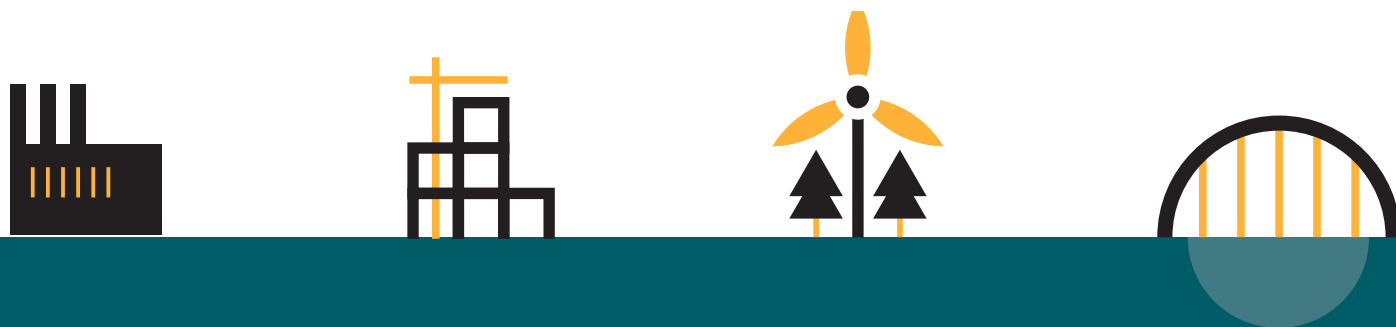
experienced industry experts, as part of the continuing development of Project 13. It responds to issues raised in recent reports from the IPA and the National Audit Office (NAO), and recognises the growing adoption of more sophisticated delivery arrangements, as well as a transition from ‘transactions’ to ‘enterprises’.

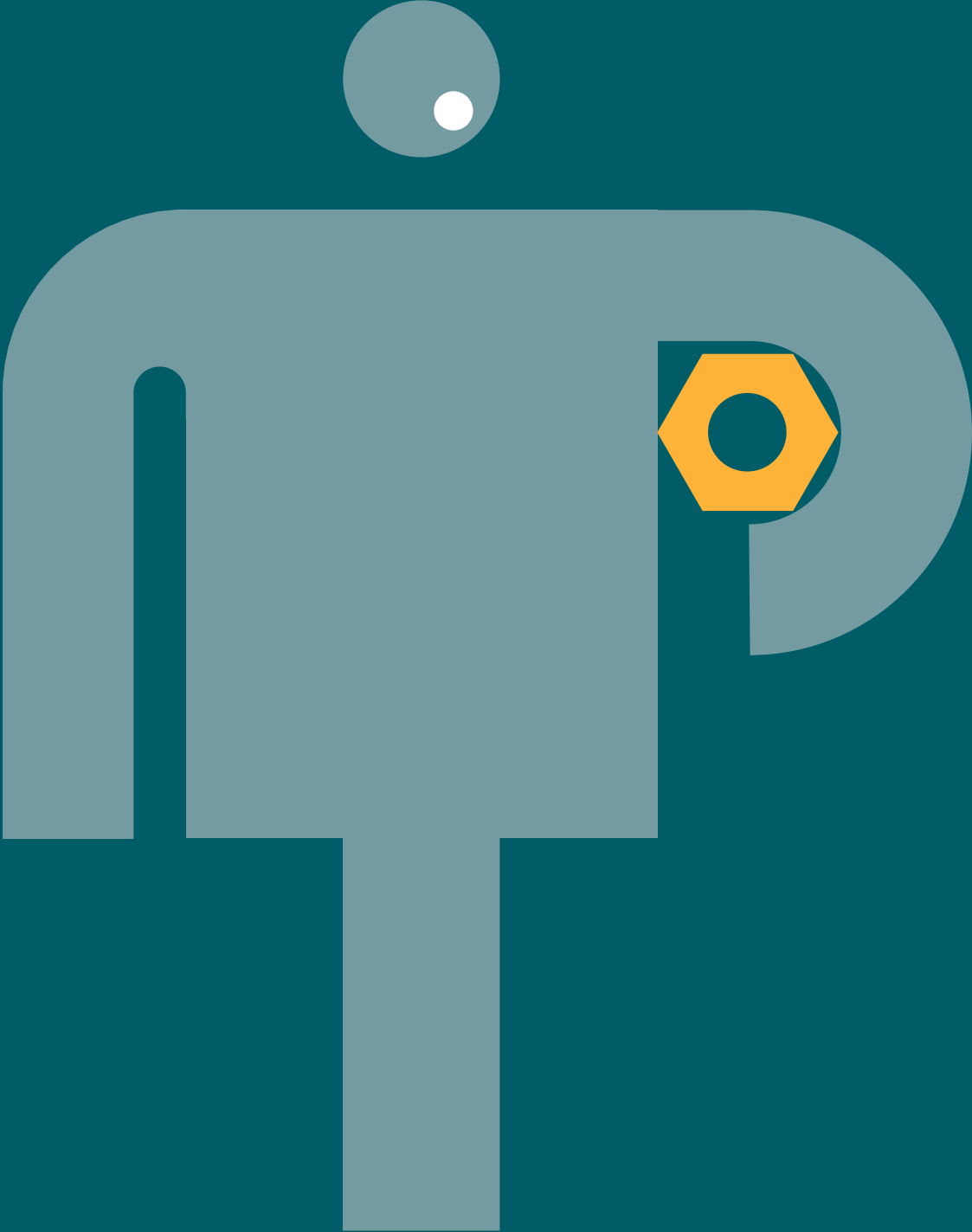
With its ‘comply or explain’ approach, the Infrastructure Governance Code can be adapted to a project’s context, and serves to complement the guidance contained in the IPA’s Routemap modules. In particular, it provides a basis for sponsors to develop an increased trust in project boards, the governance they deliver, and their focus on optimising a project’s outcomes.

The Infrastructure Governance Code, and the associated IPA guidance, seek to establish a higher standard for future delivery governance. It is all part of driving project delivery to a place it has never been. A place with innovation, digital transformation and protecting our planet at its heart. With the largest Government Major Projects Portfolio now on record, it really is time to create change and a brighter future for our citizens.

Nick Smallwood

Chief executive, Infrastructure and Projects Authority





Also endorsed by



At the heart of every great project is great governance.

From London's Battersea Power Station redevelopment to Birmingham's Big City Plan, hundreds of billions of pounds are generated by these incredible infrastructure projects while bringing significant benefit to the lives of the people they were designed and built for.

By setting a higher standard for the way we make decisions, challenge and respond to uncertainty, we can deliver projects that will offer benefits for generations to come.

The Infrastructure Governance Code is an essential guide to how projects should be governed in the volatile, uncertain, complex and ambiguous environments that nearly all major infrastructure projects face today.

Adam Boddison
Chief executive

Since the 17th century, corporate governance codes have been used to set out the relationships between shareholders, directors and management.

Over the years they have been refined to cover employees, suppliers, customers, communities and the environment, and to consider not only investor returns but also long-term organisational success and social responsibility.

The UK has been at the forefront of developing governance practices through a 'comply or explain' approach, most recently in the 2018 UK Corporate Governance Code.

Still, challenges remain in applying such codes to infrastructure. These projects, involving multiple organisations, can create ambiguity over decision-making, accountability and transparency.

That is why the Major Projects Association welcomes the publication of the Infrastructure Governance Code. It is a must-read for anyone involved in the governance arrangements of infrastructure projects, from members of governance bodies to those who support, assure or report to them.

Andy Murray
Executive director

Certainty and confidence are central to infrastructure project success.

The Royal Institution of Chartered Surveyors (RICS) endorses this Code as an important step towards better outcomes for projects and programmes by seeking to ensure that all stakeholders and funders are clear about project priorities and the route map to delivering them. Only then, with good infrastructure project governance, can everyone be confident that a successful project can be achieved – on time, to budget and to the required standard.

RICS is proud to have been involved (with others) in the creation of the Construction Innovation Hub Value Toolkit, which provides a robust way to create a value framework (as described in the Code). The intention is to ensure that cost and social value are balanced with human and environmental issues and that clients can make informed decisions about those priorities.

RICS welcomes the publication of this Code, given that it should be the means to assist with environmental solutions for the good of us all and therefore it should be read and used.

Steven Thompson
Senior specialist,
construction standards

Introduction

Context

There are many reports and much guidance material that incorporate learning from previous projects and the latest academic thinking. There is some published guidance on the role of governance and good practice in major projects and how this should be set up. However, there is little on how the boards that govern these major projects should be established and operate. This Code applies to all infrastructure schemes that are seeking to adopt the Project 13 enterprise delivery model as well as those seeking to adopt best practice outside of Project 13.

This Code fills a gap and supplements many of the existing reports and guidance. The research that informed its development identified a variety of factors that compromised the successful attainment of outcomes. These factors include lack of clarity on the outcomes, insufficient capability, inadequate data, poor definition of accountabilities, behaviours, and inappropriate structures to achieve the systematic environment of effective challenge that underpin quality decision-making.

Accordingly, the Code has been structured to support the effective operation of the project board and its governance arrangements to create a platform for success. In particular, it recognises that good governance is founded on a systematic interaction between 'executive' and 'non-executive' that provides sufficient scrutiny to support effective decision-making and a greater ability to deliver the mission.

Sponsors having trust in project boards and the governance they deliver is a prerequisite of the board receiving sufficient delegation to govern effectively and thus optimise a project's outcomes. This Code complements and builds on other guidance, specifically the IPA's Project Routemap Governance module², which provides a structured approach to establishing effective governance arrangements during project set-up.

This Code consists of several themes, each of which is supported by a series of principles. The principles, in turn, are expanded via a number of provisions that suggest what needs to be done, although not how to achieve it – this is left to the user to

² www.bit.ly/IPARoutemapGovernance

ascertain in their specific time and context to maintain alignment with the goals of the project and the enterprise.

The principles also provide sufficient flexibility for the Code to encompass the wide-ranging circumstances encountered in infrastructure delivery. Such an approach recognises that governance structures might range from individual internal projects to formally constituted arm's-length bodies.

Throughout this guide, the term 'project' is used to cover both projects and programmes. The term 'sponsor', or 'senior responsible owner' (SRO), in the context of government projects, is the person accountable for the delivery of the project outcomes and, in effect, the day-to-day owner. The term 'non-executive director' (NED) is used where individuals carry a legal and fiduciary duty to the organisation/project. Where this is not relevant owing to the legal or governance structure of the project, the duties of this role should be filled by independent advisors sitting on the board. Such advisors would carry out the scrutiny function while not carrying formal fiduciary accountability.

Why we need a code

Nearly all major long-term infrastructure investments are subject to change as a result of new challenges – for example, climate change, energy transition, digitisation, emerging technologies and societal needs. Such changes are often outside of a project's immediate control. These challenges have increased progressively in scale, complexity and pace as infrastructure projects have become larger, longer and more complex. They are challenges facing any business that is required to maintain successful outcomes over many years and therefore in circumstances of emerging external risk.

Corporate and charity organisations faced with such challenges have recognised the importance of governance in setting the platform for organisational success, promoting constructive challenge to optimise outcomes, and responding to emerging risks and uncertainties. These are codified in the Financial Reporting Council (FRC)'s Corporate Governance Code³ and in the Charity Governance Code⁴. Until now, no equivalent has existed for infrastructure project boards, despite the sector-specific governance challenges in creating effective temporary organisations that deliver the infrastructure outcomes that society depends upon.

3 www.bit.ly/FRCCorpGovCode

4 www.charitygovernancecode.org

While there are some successes, infrastructure projects have a reputation for failing to deliver to their original expectations. There is a rich history of efforts to document and learn the reasons for success or failure.

Many of these lessons have focused on why things do not go according to the original plan, or as expected. Some of these projects may have cost more or taken longer than planned, some may not have delivered on their intended outcomes for the client, or some may have been abandoned before being implemented.

According to the IPA, the Association for Project Management (APM) and the National Audit Office, many of the issues with infrastructure projects are down to failures in governance that is either not sufficient, or not suitable.

Recently, infrastructure owners have recognised that traditional project management bodies of knowledge and the transactional approaches to project organisation that dominate the market provide scant support for the predictable delivery of value by focusing on assets and outputs.

This recognition has driven the progressive development of accompanying governance, vested in boards that are obliged to deliver stewardship across multiple organisations and a plethora of stakeholders. This Code presupposes that the establishment of such a board, granted sufficient authority by the infrastructure owner, is a prerequisite for effective governance and thus greater predictability in delivering value.

These boards and the scope of their actions are in the context of an enterprise that involves all of the organisations and stakeholders that have a role in delivering the project's outcomes. The organisations and people involved not only include those who deliver, but those who maintain, regulate and use assets. Engaging and involving these entities in the governance of the project increases the potential for better outcomes.

Enterprise delivery principles represent a holistic application of good practice. To some extent, all major infrastructure schemes that necessitate the creation of a temporary inter-organisational arrangement entail the creation of an enterprise. Project 13 builds the case for a more significant shift, from traditional transactional delivery models towards a more effective model of enabling the formation and performance of that enterprise.

Owners are increasingly adopting the principles of Project 13 and setting up enterprises within their companies to deliver investments in new infrastructure or new services. It is important that these enterprises have effective governance arrangements that align with the governance of the organisation that owns them. In the private sector, and increasingly in the public sector, such enterprises usually encompass expertise in operations, maintenance and customer services from the owner organisation.

In recent years, the challenges and opportunities for infrastructure projects have grown. In turn, this has brought a renewed focus on how we respond. For example, the UK Government's Construction Playbook⁵ sets out how projects and programmes should be delivered, with production platforms underpinned by digital systems and integrated supplier ecosystems. The IPA, meanwhile, has established fundamentals of successful project delivery through its Principles for Project Success⁶. Both these examples focus on outcomes that are delivered by integrated teams operating with transparency and trust.

This document focuses on the establishment and operation of project boards with the principles for governance, to support the key pillars of Project 13 and to promote good governance across the wider sector. Like the UK Corporate Governance Code from which it draws, this Code is an essential guide to the establishment of good governance in major infrastructure projects and should be read in conjunction with the IPA's Project Routemap Governance module, which provides wider context on governance good practice. This document brings together good practice and lessons learnt from many reports and sets out how projects should be delivered.

Learning from recent lessons

Institutionally, the UK has been learning the lessons from our perceived project failures, while the UK Government has provided a rich source of lessons from its large portfolio of projects delivered over many years. Some of these lessons are captured in reports from the sponsoring departments, such as the Department for Transport (DfT) and the Ministry of Defence. But the majority are from bodies set up to oversee projects and assure their delivery, such as the NAO, the Public Accounts Committee (PAC) and the Cabinet Office (CO) with the IPA.

5 www.bit.ly/GovConstructionPlaybook

6 www.bit.ly/IPAPrinciplesSuccess

There is also a rich source of information from professional bodies, including the ICE and the APM, as well as academics who have published papers, books, reports and guidance on effective and efficient delivery. Many of these lessons are distilled into guidance on good practice, standards, training and assurance.

These reports, publications and guidance include:

- Principles for Project Success (IPA)
- Transforming Infrastructure Performance: Roadmap to 2030 (IPA)
- The UK Construction Playbook (CO)
- Project Routemap series of modules (IPA)⁷
- Completing Crossrail (NAO)⁸
- Lessons Learned from Major Programmes (NAO)⁹
- High Speed 2: A Progress Update (NAO)¹⁰
- The Government's Management of Major Projects (Public Accounts Committee)¹¹
- Lessons from Transport for the Sponsorship of Major Projects (DfT, IPA)¹²
- Reducing the Gap Between Cost Estimates and Outturns for Major Infrastructure Projects and Programmes (ICE)¹³
- A Systems Approach to Infrastructure Delivery (ICE)¹⁴
- Governance of Co-Owned Projects (APM)¹⁵
- Conditions for Project Success (APM)¹⁶
- Wilful Blindness (Margaret Heffernan)¹⁷
- Behavioural Economics and Finance (Michelle Baddeley)¹⁸

The following sections summarise this good practice for establishing and running project boards, which is captured in principles for governance in the remainder of this document.

Mission purpose outcome

Delivering any project, including major infrastructure projects, requires a focus on why it is needed and what is being delivered. The purpose may be to regenerate a region through improved transport rather than simply to build a road or railway. The first of the IPA's Principles for Project Success is a focus on outcomes. This is also a theme that runs through the IPA's Routemap modules. In particular, the ICE's Systems Approach to

7 www.bit.ly/IPAProjectRoutemap

8 www.nao.org.uk/reports/crossrail

9 www.bit.ly/NAOLessons

10 www.bit.ly/NAOHSTwo

11 www.bit.ly/GovMgtProjects

12 www.bit.ly/TransportLessons

13 www.bit.ly/ICECostGap

14 www.bit.ly/ICESystemsApproach

15 www.bit.ly/APMGovernance

16 www.bit.ly/APMConditions

17 www.mheffernan.com

18 www.bit.ly/MBaddeley

Infrastructure Delivery and the Project Routemap's Requirements module¹⁹ emphasise the need for a clear and commonly understood vision of success and baselined project requirements – plus a clear process to manage and prioritise them.

The NAO, in its Lessons Learned from Major Projects report, highlights the clear alignment between objectives and scope. The ICE, meanwhile, in its paper on reducing the cost gap, concludes that success should recognise whole-life economic and social value and not just focus on time and cost.

The Construction Playbook also emphasises an outcome-based approach to unlock innovation as well as the importance of working with suppliers to make informed decisions.

These outcome perspectives apply not only to what is delivered but also how it is delivered, ensuring safety and environmental awareness. The Transforming Infrastructure Performance: Roadmap to 2030 advocates taking decisions that acknowledge the interconnected nature of these systems so that outcomes that maintain the right balance can be secured. This is the enterprise approach.

Organisation

Any project requires clear organisation and clarity on the roles, responsibilities, accountabilities and authorities of all involved in delivering the outcomes. This ensures people are clear about their roles, and those of others in delivery.

The DfT's Lessons from Transport for the Sponsorship of Major Projects document highlights a lack of clear accountability as a contributory factor to project failure. It says there must be clarity in the role and in the extent of authority and autonomy of everyone involved.

This accountability should not be confused with those who may have a view, but no accountability. The DfT also points out that this organisation and authority must evolve in line with the needs of the project. It should operate in an open environment where everybody, including those who are accountable for raising issues, have the freedom and mechanisms to speak out.

¹⁹ www.bit.ly/IPARoutemapRequirements

The document acknowledges how hard this can be in a potentially divisive political and media culture that sensationalises both real and perceived failures. The NAO's report on lessons from major programmes makes a similar point, highlighting the need to embed a culture of transparency and honesty throughout an organisation and into the supply chain, preventing a 'good news' culture from developing that could undermine processes intended to transmit accurate information.

The Construction Playbook goes further, saying that critical success factors include developing a 'win together, fail together' partnership with all parties. Such a partnership includes allocating risk between the parties to those best able to manage it, and doing this with consideration to ensure it also drives the right behaviours with constructive challenge and diversity of thought. This risk apportionment needs to be kept under review and may need to change as a project progresses and evolves.

The IPA Routemap Organisational Design and Development module²⁰ highlights the strong link between organisation design and effective governance, with the selection of an appropriate delivery model being a key enabler of empowered decision-making.

Capabilities

Any project requires the right capabilities and necessary capacity from the organisations and individuals delivering it. The majority of the 'lessons learnt' and good practice documents have the most to say on the capabilities and behaviours of the teams and organisations delivering projects. The IPA, in its Principles for Project Success, suggests prioritising people and behaviour. The NAO, when it looked at HS2, suggested that the company needed to develop its capability to manage the programme as it progressed. The PAC, when it looked at the Government's management of major projects, suggested that a shortage of SROs and other suitably qualified project management experts was a reason for delivery issues.

The Organisational Design and Development module and the APM's Conditions for Project Success cite people and skills as key contributors to success as well as having capable sponsors. Having competent people working together, from the board all the way through the project, is vital. The UK Government has put a lot of effort into developing the capabilities of its SROs and other project leaders with programmes such as the Major Projects Leadership Academy and Orchestrating Major Projects (OMP).

²⁰ www.bit.ly/IPARoutemapOrgDev

Applying the Routemap's 10-Step process provides a structured approach to building the capabilities a project needs to succeed.

Behaviours

Having the right competencies and capacity at both individual and organisational levels is not enough to deliver successfully – people must work together effectively and in the right way to deliver these complex and often long-term projects. As indicated in the Capabilities section, people and the actions they take are crucial to project success. The IPA, in its Principles for Success guide, suggests prioritising people and their behaviour. It is important to agree on clear expectations on behaviours and to make the project a great place to work where everyone in the team can thrive, feel valued and grow.

Behaviour and culture is also a recurring theme in the IPA's Routemap modules. The APM, in its Conditions for Project Success, says that as well as being competent, project teams should engage in positive behaviours that encourage success. The NAO, in Lessons Learned from Major Programmes, emphasises the need for transparency and honesty in major projects as one of these behaviours ("We would like to add that this is not only with each other, but just as importantly with ourselves and [that we] are not wilfully blind to the problems in front of us," it says). The DfT, meanwhile, in its Lessons from Transport report, suggests that behaviour matters more than process and emphasises the need to invest in building relationships between leaders.

Data

The importance of consistent and accessible data cannot be overstated. Data needs to be turned into information and, eventually, into clear insights about a project's status. Many 'lessons learnt' reports identify where, in retrospect, the data has indicated issues but where this has not been appreciated, interpreted or acted upon at the right level within the governance framework.

The IPA's Routemap modules emphasise the importance of data in the development and delivery of projects. This includes embedding the systems and approaches at the front end of the project to maximise productivity. Many of the other reports on lessons

learnt, including the IPA's Transforming Infrastructure Performance, highlight the importance of data in terms of its integrity and provenance, and presenting it in a way that provides insights into the project to support good decision-making.

As well as data about the project, there is also data relating to the asset being created. The Construction Playbook acknowledges that the volume of data relating to construction is increasing, is often fragmented and is not easily accessible. It highlights the importance of building information modelling (BIM) and the use of digital twins to further improve decision-making to optimise eventual outcomes and infrastructure asset performance.

Using this Code: 'Comply or explain'

This Code applies to all infrastructure schemes that are seeking to adopt the Project 13 enterprise delivery model. It is, however, more broadly applicable to wider major project delivery, as the encompassed principles reflect good practice drawn from cross-sector governance codes, academic work and infrastructure lessons learnt analysis. The Code sets out a series of principles, under six themes (see graphic, facing page):

- The enterprise
- Mission and defined outcomes
- Behaviours and accountabilities
- Data informing decisions
- Right capabilities at the right level
- Organisation

The principles are expanded through a series of provisions under each heading. It is suggested that those assessing their governance arrangements against the Code consider and record evidenced findings relating to compliance against each of the provisions and, subsequently, a statement of compliance against each principle. The board will need to consider its project's positioning beyond this Code, referring to the IPA's Routemap Governance module to ensure effective governance arrangements in the wider context.

Where compliance is achieved, this can be evidenced. Where compliance has not been achieved, a 'comply or explain' approach should be used either to develop action to achieve compliance, or to provide an explanation for non-compliance. Where an explanation of non-compliance is applicable, the Chair and directors should satisfy themselves that the alternative approach is an equivalent or better way to meet the intent of the principle.

Infrastructure governance model



1. The enterprise

1.1 Principles

- A. The board defines the extent of the enterprise and the participants' roles within it, keeping this under review as the project progresses.
- B. The board defines its terms of reference and membership.
- C. The enterprise structure and its commercial arrangements are clearly defined, agreed and communicated.
- D. The stakeholders (outside of the enterprise) are defined alongside the related obligations and interface arrangements.
- E. The board continuously reviews the governance processes and commercial structure of the enterprise to ensure alignment and to support the efficient and effective execution of the project.



1.2 Provisions

1. The board develops, records and communicates a clear definition of who is encompassed within the enterprise, including:
 - a. **Owner** – The organisation that owns the infrastructure, promotes the investment in the project, and receives the completed facilities and puts them into operation.
 - b. **Integrator** – The organisation that plans and delivers the infrastructure project. It manages the supply chain, coordinates design and construction, commissions the completed facilities and hands them over to the owner.
 - c. **Advisor(s)** – An organisation that provides advice and professional services to the owner or integrator.
 - d. **Supplier(s)** – An organisation that supplies materials, components, specialist services, construction or labour to enable the delivery of the project.
2. The board defines and explicitly agrees its terms of reference and membership. The membership of the board may include the sponsor/SRO.
3. The board defines the governance structure and processes within the enterprise, including lines of accountabilities, sanctioning arrangements and sufficient limits of delegated authority to allow decision-making in support of successful project execution and attainment of the outcomes.
4. The board establishes, defines and implements the commercial arrangements within the enterprise to clearly define and align the delivery obligations, management provisions and outcome-based reward structure.
5. The board defines the enterprise processes, ensuring that these are integrated, where such processes are operated by multiple enterprise participants.
6. The board ensures it can demonstrate that sufficient expertise has been encompassed within the enterprise to inform the quality of decision-making against outcomes. This might typically include operations, maintenance and customer service capabilities.
7. The board identifies all stakeholders external to the enterprise, defining interface arrangements, accountabilities and mutual obligations.
8. The board maintains a systematic ongoing review of the suitability of enterprise arrangements, stakeholder provisions and processes as the project progresses.
9. The board implements three tiered²¹ assurance structures and arrangements to satisfy itself that enterprise arrangements perform sufficiently to support the successful execution of the project and the progressive attainment of the defined outcomes.

21 HM Treasury Assurance Frameworks – Three lines of defence: front line, oversight and independent assurance: www.bit.ly/HMTAssurance

2. Mission and defined outcomes

2.1 Principles

- A. The mission of the project is unambiguous and capable of being communicated within the enterprise and to all stakeholders.
- B. The board ensures that key decisions are taken at such a level as to ensure that the consequences of any such decision are assessed in relation to outcome criteria across the whole breadth of a value framework.
- C. The board demonstrates active review of the principal risks to achieving the defined outcomes, their apportionment and evidence accountability for mitigation.
- D. Performance against the value framework is actively tracked and demonstratively pursued by the governance process.
- E. The board ensures that commercial arrangements, performance reviews and rewards are structured to drive outcome performance.
- F. The board and sponsor ensure that the board's delegations are defined and sufficient to implement decisions in a timely manner in support of achieving the mission and optimising the outcomes.



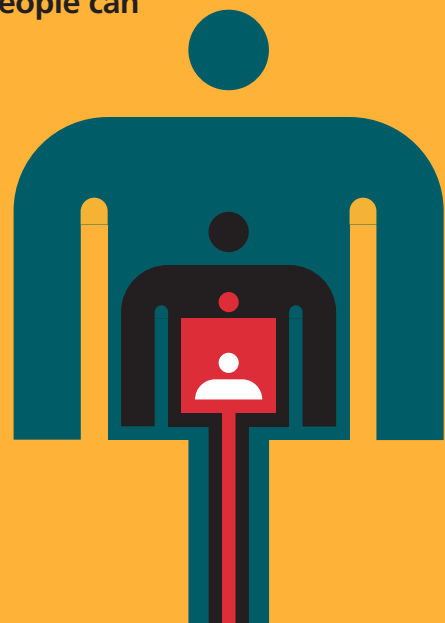
2.2 Provisions

1. The board establishes, defines, documents and adequately engages the enterprise and other stakeholders on the project's mission, values and strategy to achieve the outcomes. It satisfies itself that these are aligned across the enterprise and with key stakeholders.
2. A value framework is established to define clear quantitative and qualitative outcomes in relation to the project mission. The board reviews the value framework, both periodically and in circumstances of change, to confirm its relevance.
3. The value framework is defined sufficiently early to establish clear outcomes, to manage and reconcile complexity, to inform strategy, and to inform decision-making, requirements, benefits and delivery assessment.
4. The board ensures that the value framework sets targets for project legacies (e.g. social, environmental, data, capability and reputational).
5. The board establishes a systematic approach for progressively tracking performance against the defined outcomes.
6. The board establishes a structure of defined accountability and delegation to ensure that key decisions are made at an appropriate level such that any decisions encompass an informed and holistic optimisation of outcomes.
7. The board ensures that commercial arrangements, performance reviews and incentivisation are based on outcome attainment. The board seeks to identify and review misalignment in personal and commercial incentivisation, taking steps to address arrangements that, in practice, prove to be counterproductive.

3. Behaviours and accountabilities

3.1 Principles

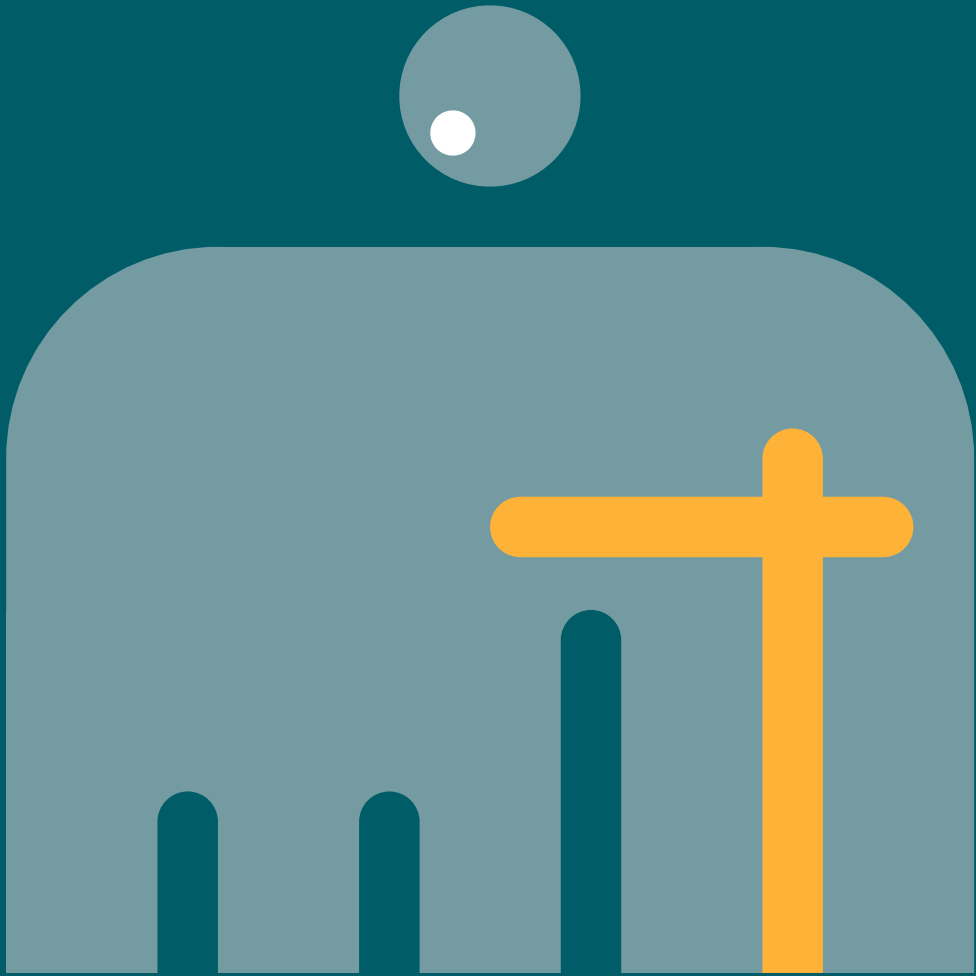
- A. The Chair ensures board members recognise and discharge their responsibility to create relationships built on constructive challenge and support, underpinned by respect and trust, to allow effective, transparent scrutiny of the enterprise.
- B. The board ensures that workforce policy and practices are consistent with the defined project values and support its reputation and sustainable success.
- C. The Chair leads the board and is responsible for its overall effectiveness in directing the enterprise. They demonstrate objective judgement and promote a culture of openness and debate. The Chair also facilitates constructive board relations and the effective contribution of all non-executive directors, ensuring directors receive sufficient, accurate and timely information.
- D. The board includes a balanced combination of executive and non-executive directors, such that no one individual or small group of individuals dominates decision-making. There is a clear division of responsibilities between the leadership of the board and the executive leadership of the enterprise.
- E. Non-executive directors have sufficient time to meet their board responsibilities. They provide constructive challenges, strategic guidance, offer specialist advice and hold management to account.
- F. Annual evaluation of the board considers its composition, diversity and how effectively members work together to achieve objectives. Individual evaluation should demonstrate whether each director continues to contribute effectively.
- G. The governance and culture create a psychologically safe environment where issues and risks can be raised early and people can contribute to robust discussions.
- H. Directors should act with integrity and lead by example to promote the project values. They are accountable for the veracity and sufficiency of information provided to stakeholders and the adequacy of data on which decisions are based.
- I. The board develops, implements and maintains a culture that is based on a definition of expected and consistent behaviours.



3.2 Provisions

1. The board systematically assesses and monitors the culture across the enterprise. Where it is not satisfied that policy, practices or behaviours throughout the enterprise are aligned with the project's purpose, values and strategy, it seeks assurance that management has taken corrective action. The project report should explain the board's activities and any action taken.
2. The Chair and board satisfy themselves that roles, responsibilities, accountabilities and authorities at the board level and throughout the organisation in relation to the delivery of outcomes, compliance and performance data are unequivocal. These are documented, published and acknowledged by the individual post-holders.
3. The Chair and board satisfy themselves and record that they have sufficient delegation and freedom of action to allow them to adequately govern the successful delivery of the project outcomes.
4. In addition to formal meetings, the Chair seeks regular engagement with major stakeholders to understand their views on governance and performance against the plans and strategy. The Chair ensures that the board as a whole has a clear understanding of the views of stakeholders.
5. There is a means for the workforce, all suppliers and others in the enterprise to raise concerns in confidence and, if they wish, anonymously. The board routinely reviews this and the reports arising from its operation. It ensures arrangements are in place for the proportionate and independent investigation of such matters and for follow-up action.
6. Where directors have concerns about the operation of the board, the management of the enterprise or its reputation that cannot be resolved, their concerns should be recorded in the board minutes. On resignation, a non-executive director should provide a written statement to the Chair, for circulation to the board, if they have any such concerns.
7. The Chair should be independent on appointment.
8. The Chair arranges for sufficient time for the board to meet, outside of formal board meetings, to discuss key strategic matters, explore innovation opportunities, develop more effective working relationships, pursue professional development and to understand and reconcile conflicting perspectives.
9. The Chair is accountable for initiating prompt and visible action to address the performance or behavioural deficiencies of any individual board member, seeking advice and support from other board members as necessary.

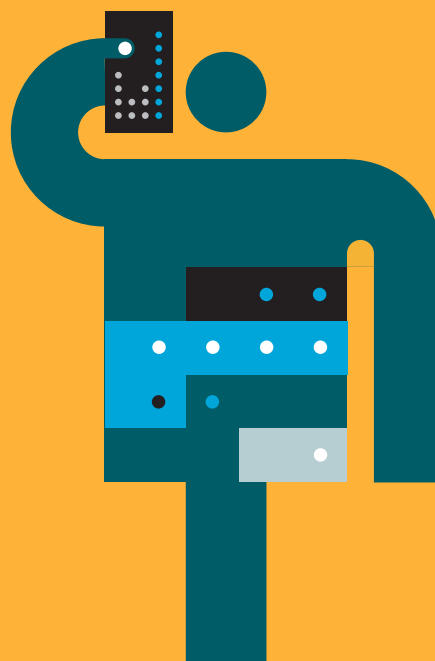
- 10.** The Chair ensures that all members of the board understand their respective accountabilities – in particular, that all directors understand their duty to act in the interests of the whole organisation and that non-executives understand that they carry the same stewardship accountability for the enterprise as executive directors, all directors being accountable for its overall performance.
- 11.** Enterprise directors invest time in workforce engagement, making time for dialogue at all levels to promote two-way communication and to ensure that they are directly informed, and that staff feel engaged. Enterprises promote best practices in workforce and supply-chain engagement at board level.
- 12.** The board should appoint one of the independent non-executive directors to be the senior independent director to provide a sounding board for the Chair and serve as an intermediary for the other directors and shareholders. Led by the senior independent director, the non-executive directors should meet without the Chair present at least annually to appraise the Chair's performance, and on other occasions as necessary.
- 13.** The board develops and implements a behavioural framework, based on the project's values, that adopts best practice and that is comprehensively utilised as a basis for performance review and reward. In particular, the fostered behaviours should enable an evidenced culture of welcoming internal and external constructive challenge, at board level and throughout the enterprise, as a platform for pursuing innovation, improving performance and underpinning the successful attainment of project outcomes.
- 14.** The Chair keeps board membership under review to underpin the quality of decision-making, ensuring access to expertise from enterprise participants, external best practices and refreshed perspectives to inform dialogue.
- 15.** A high-performing board rotates non-executive directors intermittently and in circumstances of change. It seeks to shift the perspective of the overview that non-executive directors provide to ensure variation and to access specific and informed expertise in circumstances of change or challenge.
- 16.** There is a formal and rigorous annual evaluation of the performance of the board, its committees, the Chair and individual directors. The Chair implements a regular, externally facilitated board evaluation.



4. Data informing decisions

4.1 Principles

- A. Data must relate to, and allow tracking of, performance against the defined outcome targets to ensure that governance and decisions optimise value.
- B. There shall be provenance and chain of custody through which the data is processed, and the ability of an organisation (or organisations) to apply robust governance around this process to ensure that the base data points are credible.
- C. The boards and governance assure the veracity and integrity of the data they use.
- D. Data provision is sufficiently integrated, transparent and timely to support good decision-making.



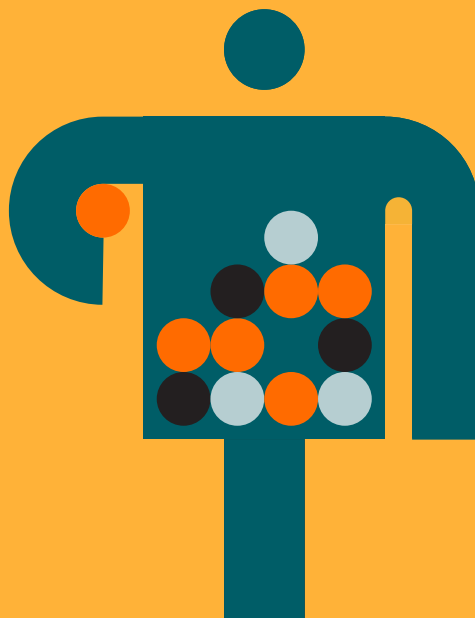
4.2 Provisions

1. The board develops and defines a data management approach that ensures clear accountability for the veracity of data.
2. The board ensures that sufficient challenge, cross-referencing and assurance is established to discharge its accountability for the veracity of project performance data.
3. Non-executive directors hold themselves accountable for testing the presented performance data and associated methodologies. This includes data on emerging risks and uncertainties. They can evidence the steps they have taken to reach into the organisation to challenge and probe the reliability and adequacy of performance data presented by executive colleagues.
4. Data provision enables progressive performance and performance assessment against the project outcomes defined in the value framework.
5. The board ensures the provision of data systems that allow sufficiently transparent and timely access to current and consistent performance data, across the enterprise, to support the quality of decision-making.
6. The board regularly assesses the suitability of the data it receives to support insight. Information that is complex, excessive or lacks transparency is likely to undermine the quality of decision-making and board action.
7. The board carries out a robust assessment of the enterprise's emerging and principal risks and uncertainties. The board confirms in its reports that it has completed this assessment, including a description of its principal risks and uncertainties, what procedures are in place to identify emerging risks and uncertainties, and an explanation of how these are being managed or mitigated.
8. The review of risks to achieving the defined outcomes should additionally encompass both risks that lie outside of the project's direct control and high-impact, low-probability risks. The review also encompasses consideration of safety, reputational, environmental, social and data management risk.
9. The board establishes subcommittees to provide it with an independent view of risk management and assurance.
10. The board monitors the project's risk management and internal control systems and, at least annually, carries out a review of their current and retrospective effectiveness and encompasses that review in its report. The monitoring and review covers all material controls, including financial, project and compliance.

5. Right capabilities at the right level

5.1 Principles

- A. Capabilities within the board and leadership of the project should evolve and change to reflect the emerging requirements of the delivery challenge, as well as to prevent groupthink.
- B. Governance is not just 'rules'-based but relies on the right capabilities, applying the 'principles' and quality of decision-making to optimise value.
- C. Independent non-executive directors on the project board should provide sufficient skills and experience, autonomy, diversity of thought and representation relative to the risks and complexities faced by the project.
- D. The project ensures there is a pipeline of talent to deliver it.
- E. The board ensures that remuneration policies and practices support the successful execution of the project and attainment of outcomes.
- F. The board members are suitably qualified and experienced to be able to understand the information presented to them and discharge their board accountabilities.



5.2 Provisions

1. The Chair leads a documented and formal review of the board, at a minimum annually, to ensure it encompasses and has appropriate capabilities, and that there is sufficient representation and an appropriate balance between executive and non-executive members. The review will consider whether there is sufficient diversity of perspectives underpinning decision-making and promoting best practices, as well as diversity that is representative of the employee or customer base.
2. The board ensures that, on appointment, and periodically thereafter, board competencies and capabilities are formally reviewed consistently across the enterprise to document capabilities as meeting the predetermined criteria needed for current and future phases.
3. The board demonstrates that arrangements are established for succession planning, both for board members and wider key enterprise leadership roles.
4. The project report explains the approach to investing in and developing the workforce.
5. The board establishes a remuneration committee of non-executive directors, with a minimum number of three, or, in the case of smaller enterprises, two members. In addition, the Chair of the board can only be a member if they were independent on appointment, and cannot chair the committee.
6. Remuneration policies and practices are designed to support strategy and promote the long-term sustainable success of the project by attracting and retaining appropriately skilled and experienced people. Executive remuneration is aligned to the purpose and values of the project, avoids siloed and conflicting behaviours, and is clearly linked to the successful attainment of the project outcomes.
7. The Chair is an independent non-executive director member of the board. The SRO and the project director/chief executive should be non-independent board members.
8. The board ensures that the enterprise avoids mechanical compliance and formulaic processes rather than informed and determined management action in pursuit of optimising eventual outcomes.

6. Organisation

6.1 Principles

- A. Governance enables high-performing, self-organising entities and creates the right environment for success.
- B. The board demonstrates an appropriate platform for integration across the organisation, encompassing integrated capability, data, processes and behaviours.
- C. Boards are directly accountable to the owner's board for optimising the whole value (outcomes) as well as the infrastructure delivery.
- D. The board establishes and continually reviews contractual arrangements to ensure they do not conflict with a collaborative focus on optimising outcomes, or impede the leveraging of integrated capability, integrated processes and integrated data systems.
- E. The board establishes, and thereafter reviews, contractual arrangements to ensure they allow collaborative focus on optimising outcomes through leveraged integrated capabilities, processes and data.



6.2 Provisions

1. The governance optimises the performance of the multi-entity, temporary organisations that may have different or even conflicting objectives.
2. The board demonstrates an alignment of commercial interests, including joint ownership of risks and rewards based on outcome performance, as a critical enabler to optimising decision-making and as a platform for transparent data.
3. Governance is formed of a robustly networked collection of accountable command-and-control nodes having widespread and easy access to information, interacting systematically, and having the broadest possible distribution of decision rights.
4. Governance generates self-organising subordinate entities, which adapt to suit the stages and emerging requirements of delivery.
5. The board demonstrates that the project ensures the systematic provision of capabilities, processes, data and behaviours to underpin integration and outcome focus across discrete project elements and systems and throughout the enterprise ecosystem.
6. Boards and governance arrangements reflect the specific circumstances of the project and its risks and are structured to enable the principles of governance in these circumstances rather than emulating standard models.
7. The board systematically pursues knowledge and insight to show that the organisational arrangements reflect and enable best practice.

The Governance Group

The Governance Group that worked to develop the Code is constituted as a part of the Infrastructure Client Group Project 13 Governance Development Group²²:

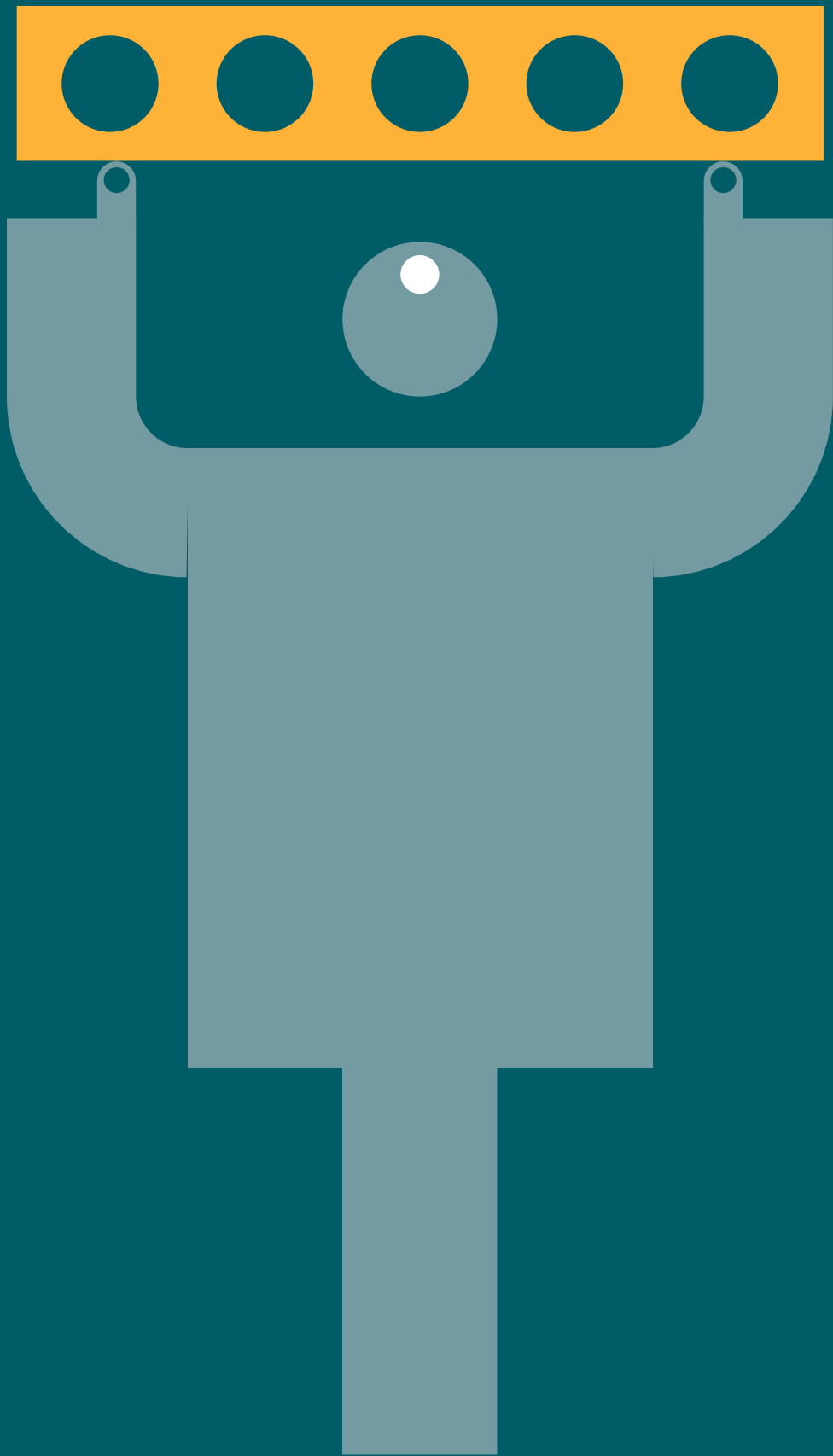
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Andrew Beard	Mace
Tom Brancati	KPMG
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Huw Jones	BAM Nuttall
Richard Palczynski	Arcadis (for and on behalf of Network Rail)
Adrian Savory	J Murphy and Sons

Sign up to the Project 13 Network²³ to join a vibrant knowledge-sharing global community for all those interested in delivering infrastructure differently and putting the Project 13 principles into practice.

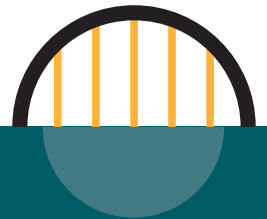
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²² www.project13.info/pillars/governance

²³ www.project13.info



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