



Infrastructure
and Projects
Authority

Project Routemap

Setting up projects for success

Procurement

UK Module



Interactive
document



Contents



Cover image

The Sellafield nuclear site is home to one of the most complex construction portfolios in the world. Sellafield Ltd procured four organisations to form a Programme and Project Partnership. They used behavioural assessments to ensure corporate level alignment to deliver £7 billion of major projects over a 20-year period.

Acknowledgements

Sellafield Ltd



Preface

Project Routemap is the Infrastructure and Projects Authority's (IPA) support tool for novel or complex major projects. It helps sponsors and clients understand the capabilities needed to set projects up for success, incorporating learning from other major projects and programmes.

The IPA is the centre of expertise for infrastructure and major projects, sitting at the heart of government and reporting to the Cabinet Office and HM Treasury in the UK.

Over the coming years there will be more investment in infrastructure and major projects than ever before, backed by both public and private sectors. This investment will be a catalyst to building back better and stronger. Infrastructure and major projects will play a critical role in fuelling economic growth and improving the lives of people right across the country.

With greater investment comes greater responsibility and we must ensure we have a strong delivery record that demonstrates real value. This means setting projects up for success from the very start, so that they come in on time and budget, and deliver on their promises - to the benefit of the citizens of the UK.

Although setting up projects for success can take more time at the start, this will be repaid many times over in the delivery phase. Projects that focus enough attention on the early stages are much more likely to achieve their intended outcomes later on and display world-class delivery standards.

That's why the IPA developed the Project Routemap ("Routemap") - a support tool that provides practical advice based on learning from other major projects and programmes.

There is no doubt that complex projects can test the limits of organisational capability, but if applied in the most crucial early stages of project development, Routemap will ensure that best practice and learning about the most common causes of project failure and principles for project success are incorporated. This will result in benefits ranging from selection of the most appropriate delivery model, to clearer governance arrangements, proper risk allocation and accelerated decision-making.

Routemap has been used by many of the UK's biggest, most complex and high-profile projects since its first publication in 2014 and more recently it has also been applied to projects internationally. However, the project delivery system and the way projects are delivered has evolved. That is why the UK Routemap handbook and accompanying modules have been updated to incorporate new and emerging best practice in project delivery and to align with standards, including the Government Functional Standard for Project Delivery and the UN Sustainable Development Goals.

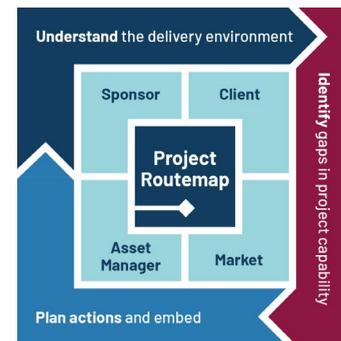
Building on its success with economic infrastructure, Routemap has also been expanded to cover social and defence-related infrastructure projects and includes guidance for application to other types of projects.

Applying Routemap to more of our projects will be another step towards realising our ambition of world-class delivery standards. Whatever the project, applying Routemap will give confidence to the people delivering them, those approving them, and those investing in them.

The IPA would like to thank all those organisations and individuals who have contributed to the development, of both the original, and the updated UK Routemap handbook and accompanying modules.

Nick Smallwood

Chief Executive Officer of the Infrastructure and Projects Authority and Head of Government's Project Delivery Function



Introduction: What are the Routemap modules?

The Routemap modules provide practical advice to help set up projects for success. The modules have been developed by the UK government in collaboration with industry and academia. They capture best practice and learning from common causes of project failure and success over the past decade from £300bn of capital programmes.

These modules sit alongside the Routemap handbook. The handbook explains how Routemap can be applied to identify gaps in project capability and build an action plan to close those gaps.

There are eight modules, one covering each of the following areas:



Requirements

Delivering strategic project outcomes and realising the benefits.



Governance

Establishing clear accountability and empowering effective decision-making.



Systems Integration

Making multiple systems work as one.



Organisational Design & Development

Organising the project team to deliver successfully.



Procurement

Understanding how the project will buy goods and services.



Risk Management

Managing uncertainties and opportunities.



Asset Management

Balancing costs and risks to maximise whole life benefits.



Delivery Planning

Readying the project for transition into delivery.

The best practice and learning contained in the modules reflect the collective experience of public and privately funded projects, from the infrastructure and defence sectors. However, most of the principles apply to all projects, including to digital and transformation projects.

These modules are aligned with the government's Project Delivery Capability Framework and help projects comply with the Government Functional Standard for Project Delivery. They also help projects to align with other recognised standards and guidance including the United Nations Sustainable Development Goals.

They are useful whether you are using the Routemap to undertake a Full Project Review or a Modular Deep Dive, as detailed in the Routemap handbook. They can also be a useful standalone reference to identify potential risks and improvements in project capability development, and relevant good practice from other projects.

The modules are not a complete guide to project development, nor a substitute for business case development. Instead, they provide considerations to challenge your thinking and to launch your project on the path to success. The project team will need to consider their project's individual characteristics and context and identify what will be most helpful to them.

Introduction: How do you use the Routemap modules?

This table summarises how different module sections support the three key stages of the Routemap methodology.

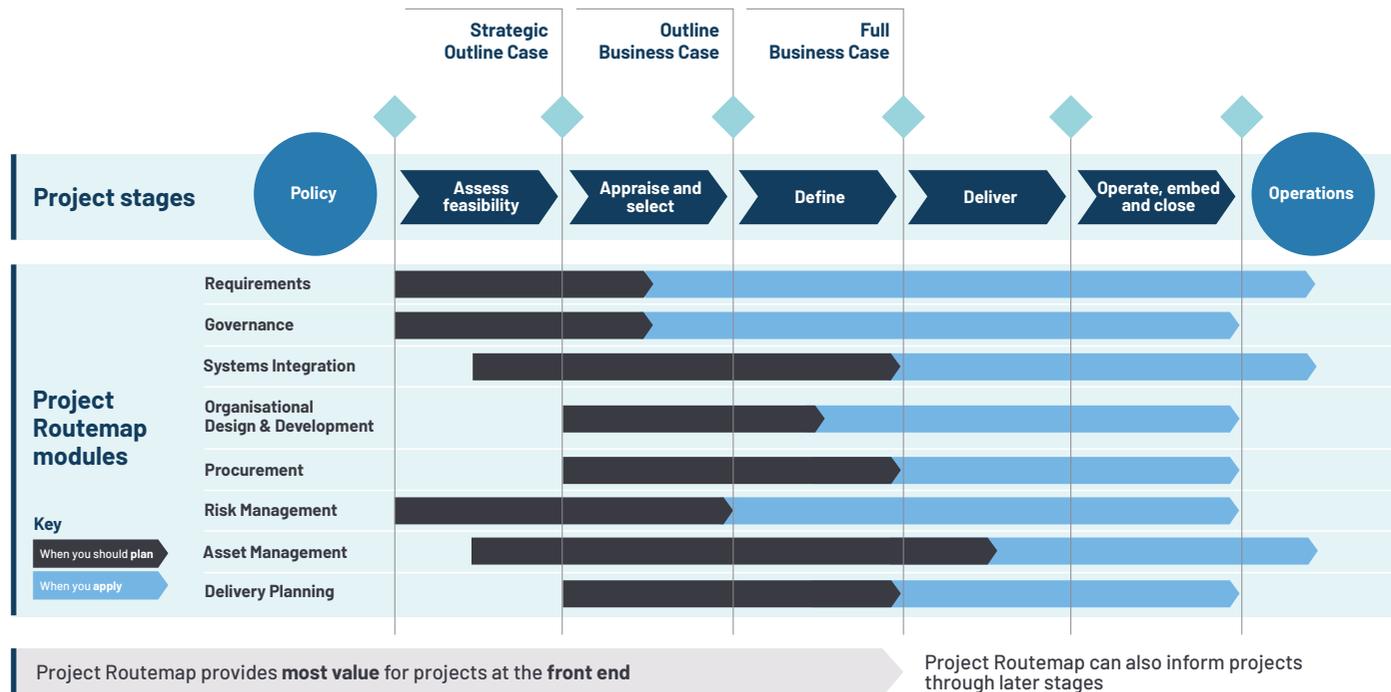
The modules are useful when applying the Full Project Review and Modular Deep Dive approaches, which are described in the Routemap handbook.

Routemap approach	Setup Determine the scope and timing of the Routemap, which can be project-wide or targeted to specific areas of capability	Diagnosis Gather information and identify where capabilities need to be enhanced	Action planning Collaborative development of practical solutions to enhance capability
 Full Project Review	Determine if there is value in using Routemap to support project-wide capability development.	Determine which modules may help.	Apply best practice and learning from the modules and any other major project examples.
 Modular Deep Dive	Determine if there is value in using specific Routemap modules to support development of a specific area of capability.	There is likely to be one module in particular that focusses on your selected area of capability. However, there may be value in consulting other interfacing modules too.	Apply best practice and learning from the modules and any other major project examples in the selected area of capability.
Module section			
Key project documents Documents that will help you understand the procurement arrangements for your project.	You may find it helpful to review these types of project documents, to define the areas of interest in the Routemap scope.	Cross-checking this document list against existing project documents may also help you to identify capability gaps.	You may find that developing or enhancing these types of documents will help to close capability gaps.
Typical findings Indicators that issues might arise during delivery.	If these indicators are apparent even before you start applying Routemap, this should inform the areas of interest in the Routemap scope.	You may find it helpful to review these when identifying issues and articulating your findings.	If your findings contain statements like these, this module could help strengthen capability.
Pillars of effective procurement Hallmarks of successful project set up.	Comparing your project with these characteristics of good practice may help you to identify areas of interest in the Routemap scope.	<i>Not applicable to this stage</i>	Comparing your project with these characteristics of good practice may help you set goals for your action plan.
Considerations Detailed list of questions to understand root causes and suggest improvements.	<i>Not applicable to this stage</i>	This section lists a series of questions that can help you to test the effectiveness of existing arrangements.	Working through these questions can help you understand the root causes of the findings and develop solutions.
Good practice examples and suggested reading Context to support your wider understanding.	<i>Not applicable to this stage</i>	<i>Not applicable to this stage</i>	You may find these good practice examples and suggested reading useful in developing actions to address capability gaps.

Introduction: How do the modules map to the project life cycle?

This diagram maps the Routemap modules to the stages of a project life cycle.

It shows when each of the modules should be used to support planning during project set up. It also suggests the stages when the modules' principles are expected to have been applied.



Cross-cutting themes projects can't ignore

Six cross-cutting themes emerged from our engagement with major projects and industry which have informed the updated Routemap modules. These place complex demands on project teams, and if overlooked during set up, can create issues during the later stages of the project life cycle.

These themes include the need for focus on behaviours and culture, consideration of wider economic, environmental, and social value and the increasing use of digital systems and tools to enable a systems-focused approach.

Planning ahead for the right skills, experience and capacity to address these themes is key to success.

To help you navigate these themes, we have developed a series of prompts. You can use these prompts to check whether your project is set up to meet the challenges ahead.



Benefits and outcomes focus

adopting a whole life perspective whilst managing the project

- Have you got a clear vision of the target outcomes, which is aligned across the sponsor, client, asset manager and market?
- Have the project outcomes been effectively communicated to key stakeholders and the supply chain?
- Has the project set realistic and transparent targets?
- Are you able to measure the realisation of benefits throughout the whole life cycle? Including any potential early releases?
- Have you considered the disbenefits and how to minimise them?



Economic, environmental and social value

taking in a wider view of the project's impact

- Have you considered how the project will generate economic, environmental, and social value, both through its intended outcomes and/or as a by-product of delivery? Has this been hardwired into the business case, with a clear link to the UN Sustainable Development Goals?
- Is your project aspiring to leave a "net positive" and climate resilient impact on the natural environment?
- How are you maximising benefits and minimising risk and disbenefits for project affected communities and contributing to levelling up?
- Is there clear accountability for the economic, environmental, and social benefits and outcomes?



People and skills

planning ahead for the right skills, experience and capacity to deliver the project

- Have you undertaken activity-based resource planning to ensure you have the people with the right skills, knowledge, experience and behaviours at the right time to deliver the project?
- Are these plans reviewed on an ongoing basis? And do they incorporate skills development and succession planning to ensure continuity in key roles and to meet evolving needs?
- Have you considered the time commitment of your project leaders to ensure they have the right capacity to deliver the project?
- If using delivery partners or third parties, do they have the capacity and expertise to support the project as required?



Digital and technology

embedding systems and approaches at the front end to maximise project productivity

- Have digital and modern methods been considered at the earliest point in the life cycle to maximise their impact on benefits?
- How has the project assessed and addressed digital capability within the sponsor, client, asset manager and market?
- Has the project considered how information, data and knowledge will be shared across the project including with the supply chain?
- What consideration has been given to potential changes in technology that may influence benefits realisation?



Behaviour and culture

realising project success with a capable, diverse and integrated team

- Is there a plan for how desired behaviours and values will be cascaded and embedded through the sponsor, client, asset manager organisations and the supply chain?
- How are the desired behaviours and culture promoted in the project?
- Does the project have a culture that empowers constructive challenge and diversity of thought?
- How is the project planning to build relationships and invest in creating the right environment to realise project outcomes?



Transitions

planning for change and developing the required capability before progressing to the next life cycle stage

- Does the project have a clear plan for how they will transition from one life cycle stage to the next?
- Does the plan set out the changes needed to organisational and governance arrangements?
- Does the project have the necessary capability to transition to the new organisational and governance arrangements for the next life cycle stage? Including the change management capability required to embed the changes?
- Is the project clear on how the relevant documents and people will carry knowledge and learning across life cycle stage boundaries?

Procurement, and why it's important

"We need to drive industry reform through our buying actions, including continuous improvement in building and workplace safety, cost, speed and quality of delivery, greater sharing of better data, investment in training the future workforce through upskilling and apprenticeships, and adoption of the UK BIM Framework"

The construction playbook – Cabinet Office 2020

Why procurement matters

Procurement is the dynamic process that identifies and sources the best value goods and services for your project. It brings together multiple organisations to provide the capability to deliver project outcomes and benefits. Consequently, it is crucial that the procurement strategy is developed in parallel with, and as an integral part of, the project's delivery strategy. This means procurement capability should be integrated within the project team rather than being seen as separate function.

To get the most from procurement, clients need to allow enough time for meaningful market engagement. This is an opportunity to communicate the project's outcomes and benefits, to understand the market's risk appetite and to identify any key capability or capacity constraints. Projects often fail, or do not deliver value for money when they try to allocate risks to parties not capable or empowered to manage them. Client organisations must themselves build and retain the capability to manage the risks most critical to success. They must also strike an appropriate balance between transferring risk to the market and creating an environment that leverages supply chain capability and facilitates innovation. Packaging strategies need to recognise this through effectively allocating risk and defining the interfaces between contracts.

Procurement is one of the biggest levers for embedding economic, environment and social value into projects, and as such, clients must consider how this value, along with funders' ESG criteria are cascaded into contracts and evaluated during tender and performance management and reporting. Contracts should include appropriate risk allocation and incentivisation mechanisms to drive supplier performance against these requirements, as well as reflecting the requirements and compliance with UK procurement policy. These mechanisms must be stress tested to identify unintended consequences, for example, limiting supplier innovation.

Clients will fail to attract market interest if they do not balance risk and reward, or make the cost of bidding disproportionate to the contract value. The tender process should be considered as a time to facilitate knowledge transfer, cultivate strategic relationships, develop ways of working and understand areas for capability development. Prior to contract award, client readiness (for example, people, training, processes, systems) should be assessed to confirm that they are set up to collaborate with and manage the supply chain during delivery.

Clients should place significant importance on the relationships they create with their supply chains, both at strategic and project levels. This means aligning cultures and behaviours to foster collaboration and a mutual focus on outcomes, including delivering economic, environmental and social value. As part of a continuous engagement strategy, this will drive sustainable, resilient and effective relationships unlocking additional value and innovation beyond the life of the original contract.

This module can help to assess whether existing or proposed procurement arrangements are suitable for the scale or the complexity of your project.

What are the key project documents?

If you are seeking to find out more or to review the existing procurement arrangements on your project, the typical documents and reports set out below may contain information that will help.

- Procurement strategy
- Commercial strategy
- Invitation to tender and bid selection criteria
- Contracts and third-party agreements, including framework agreements
- Contract management plan
- Supplier relationship management plan
- Regulatory or statutory requirements
- Business case, in particular the strategic and commercial cases
- Delivery strategy, including client model
- Risk management plan
- Funding arrangements
- Asset management strategy (NBP) - Sustainability strategy
- Sponsor's requirements (Brief)
- Benefits register and realisation plan
- Resourcing or capability plan
- Stakeholder map and engagement plan
- Environmental impact assessment (EIA)
- Equality impact assessment (EqIA)

Not all projects will have all of these documents, particularly in the earliest stages of development.



Typical findings

● Primary module
● Other relevant modules

Typical findings relating to procurement

This list describes situations that might arise and would indicate that the approach to developing project procurement needs improvement. Other relevant modules may also help you close identified capability gaps.

There is a disjointed relationship between the sponsor, client, asset manager and market with no clear understanding of risk allocation and no incentive for collaborative working.

A new client model (for example, establishing a fully integrated team) is being proposed, which the client/supply chain organisations do not have previous experience of applying successfully.

The client model is not aligned with the proposed procurement strategy. For example, adoption of a thin client model with significant retained obligations.

The requirements are poorly articulated or conflicting, so the purpose of the project and/or what it needs to deliver is confusing.

The client does not understand the capacity, capability nor the market appetite to deliver the project.

The current supply chain structure is overly complex resulting in inefficiencies and failure of suppliers to work together to meet client needs.

Inadequate time has been allowed for the tender process, and tender documentation issued to the market is incomplete. This risks rushed solutions and poor-quality bids leading to problems downstream during delivery.

The client over-prescribes how the supply chain should do the work, which limits opportunities for the supply chain to innovate or add value.

The tender process and contract performance indicators are disproportionate to the size and complexity of the project, potentially reducing the pool of bidders and stifling competition and innovation.

Elements of the contracting model (risk allocation, incentivisation) have not been fully stress tested to identify potential unintended consequences, for example, limiting innovation or social value.

The evaluation criteria (technical, behavioural, ESG) are not structured in a manner to differentiate between suppliers. This causes price to become the determining factor obscuring the original intent of a balanced tender process.

The asset manager is not engaged in the development of asset information requirements, meaning they are not effectively built into the tender documentation and contract model. This results in issues handing over the asset and effective transition into operations and maintenance.

Relevant modules

Requirements	Governance	Systems Integration	Organisational Design & Development	Procurement	Risk Management	Asset Management	Delivery Planning
	●		●	●	●		
			●	●	●		●
	●		●	●			●
●	●			●		●	
	●		●	●			●
		●		●	●		
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●		●		●		●	

Pillars of effective procurement

The six pillars below summarise the characteristics of effective procurement and should be addressed in your procurement strategy.

Pillar 1: Understanding the outcomes

1

- Define your project's business case outcomes and benefits, including the wider economic, environmental and social impacts that result as a by-product of delivery. Devise a procurement strategy that drives these outcomes and benefits.
- Design the procurement strategy as an integral part of the wider project delivery strategy, and make sure it aligns with existing organisational commercial and risk strategies and any ESG criteria (if applicable).
- Understand the project's current capability to implement the procurement strategy. Consider if there is a need to engage specialist support.

Pillar 2: Engaging the market

2

- Undertake desktop market analysis exercises to understand constraints and capacity challenges, including other projects that may be competing for the same goods or services.
- Engage the market progressively as the procurement strategy is developed to:
 - understand their appetite, health, capability, and capacity to deliver the project outcomes
 - test key components such as risk allocation, incentivisation and level of effort required to complete the tender
 - learn about their drivers, concerns and emerging technologies

Pillar 3: Packaging the works

3

- Break the scope into practical and deliverable packages, informed by market engagement, the risk approach, and the client model and current level of capability. Clearly define interfaces between suppliers and requirements for multi-contract collaboration.
- Test the packaging strategy with the market progressively to ensure sizing and scope is attractive and will generate competition. For programmes or portfolios, standardise specifications and utilise longer-term contracts with pipeline commitments of spend to give the market certainty and make it commercially viable to invest in innovation.
- Assess if there would be benefit from adopting a category management approach by grouping spend for similar activities or products to enable efficiencies.

Pillar 4: Selecting the contracting model

4

- Determine the desired degree of integration between the client and supply chain. This will inform your contracting model, tender process and risk allocation.
- Choose the contract model for allocating risk between the client and the market, communicating how it responds to market feedback. Stress test the model including incentivisation mechanisms to avoid unintended consequences.
- Ensure the model aligns with each party's risk appetite, their ability to manage risks and the client model. Clearly define roles and responsibilities.

Pillar 5: Defining and implementing a successful tender process

5

- Consider all available routes to market including existing frameworks and new procurements. Allow enough time for potential suppliers to prepare high quality bids, targeting early engagement with them where appropriate to develop potential solutions.
- Ensure the route aligns with the chosen packaging strategy and contracting model, and is compliant with regulations. Design the tender process to maximise knowledge transfer, establish ways of working and develop capability to enable an efficient mobilisation.
- Develop and test the evaluation criteria against target outcomes, focussing on overall value rather than solely cost. Assess the desired behaviours and cultural alignment. Evaluation criteria should reflect any relevant ESG criteria.

Pillar 6: Managing performance

6

- Develop a plan to build the capability needed to manage your obligations and responsibilities effectively within the contract.
- Quantify and measure success including how the procurement strategy contributes to the overall outcomes.
- Establish a plan for supplier performance management that drives and incentivises the desired behaviour and outcomes. Capture and apply lessons learned throughout the life of the project.
- Ensure that any relevant ESG criteria are tracked and reported on.

These six pillars underpin effective project procurement. If one pillar is missing or out of balance, project procurement will likely be ineffective or inefficient. The pillars are expanded in the considerations section of this module.

The procurement approach might need to evolve during the project, so you should revisit the considerations at major transition points or approval points, or as plans change.

Procurement arrangements should evolve as:

- more information becomes available to inform the capabilities required to deliver the project
- the project team, procured suppliers and their processes develop and embed
- the project progresses through its life cycle, from design and planning through implementation to operations

Considerations

Module pillars

- 12 **Pillar 1 Understanding the outcomes**
Requirements, outcomes and benefits
Capability
- 14 **Pillar 2 Engaging the market**
Market relationship
Market engagement
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Risk allocation approach
Packaging strategy
Interfaces between supply chain partners
- 19 **Pillar 4 Selecting the contracting model**
Contracting approaches
Testing the contracting strategy
Planning for delivery
- 23 **Pillar 5 Defining and implementing a successful tender process**
Routes to market
Managing the tender
Evaluation process
- 26 **Pillar 6 Managing performance**
Transitioning into delivery
Evaluating supplier performance
Lessons learned and feedback

The considerations questions help you understand the root causes of the capability gaps and suggest improvements. You may not need to review all the considerations, just use the most relevant ones for your project.

Project Routemap: Name of module	
Considerations:	
Considerations	What may help
<p>Sub-Heading 1</p> <ul style="list-style-type: none"> ■ Oppono culer esslin in vis hus Imultusus consule rimlus acrelis enterit. Catum averum artis esul hi, adhulta maciesill tantrisque con vit. ■ Vilissu morte caec malo, conetela vides Caste meris conesim isallic upecontl, consulem ium imanum actursu piententilln sulius pimiliq uonostimum opos, quo alicia rem auctantemque poris. ■ Oppono culer esslin in vis hus Imultusus consule rimlus acrelis enterit. Catum averum artis torurb itabem. Ahabis cul hos et culintemum destior besillam ia? Aperibu stius, vivillisu morte caec malo. 	
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<p>Sub-Heading 3</p> <ul style="list-style-type: none"> ■ Oppono culer esslin in vis hus Imultusus consule rimlus acrelis enterit. Catum averum artis esul hi, adhulta maciesill tantrisque con vit. ■ Vilissu morte caec malo, conetela vides Caste meris conesim isallic upecontl, consulem ium imanum actursu piententilln sulius pimiliq uonostimum opos, quo alicia rem auctantemque poris. ■ Oppono culer esslin in vis hus Imultusus consule rimlus acrelis enterit. Catum averum artis torurb itabem. Ahabis cul hos et culintemum destior besillam ia? Aperibu stius, vivillisu morte caec malo. o, conetela vides Caste meris conesim isallic upecontl, consulem ium imanum actursu piententilln sulius pimiliq uonostimum opos, quo alicia rem auctantemque poris. ■ Oppono culer esslin in vis hus Imultusus consule rimlus acrelis enterit. Catum averum artis torurb itabem. Ahabis cul hos et culintemum destior besillam ia? Aperibu stius, vivillisu morte caec malo. 	
<p>Sub-Heading 4</p> <ul style="list-style-type: none"> ■ Oppono culer esslin in vis hus Imultusus consule rimlus acrelis enterit. Catum averum artis esul hi, adhulta maciesill tantrisque con vit. ■ Vilissu morte caec malo, conetela vides Caste meris conesim isallic upecontl, consulem ium imanum actursu piententilln sulius pimiliq uonostimum opos, quo alicia rem auctantemque poris. ■ Oppono culer esslin in vis hus Imultusus consule rimlus acrelis enterit. Catum averum artis torurb itabem. Ahabis cul hos et culintemum destior besillam ia? Aperibu stius, vivillisu morte caec malo. 	

Considerations

Each pillar is expanded into a number of consideration questions. These questions will help you:

- to review and validate existing procurement arrangements
- to target areas for improvement
- to test the design of new procurement arrangements

What may help

Signposts other related material which you might find helpful. These include other relevant modules with related content, key project documents, good practice examples and suggested further reading.

Routemap uses four primary roles to describe the key areas of responsibility in the early stages of project development. These are sponsor, client, asset manager and market. Before reading through the detailed considerations, you should familiarise yourself with these definitions in the glossary and consider which organisation is fulfilling which role for your project. Sometimes an organisation can fulfil more than one of these roles, for example both the sponsor and client roles. Also, where a project is still at an early stage, a role might not yet be filled by any organisation, for example the market role.

Considerations:

Pillar 1 Understanding the outcomes

Considerations

Requirements, outcomes and benefits

- Are the desired outcomes and project requirements clear, concise and measurable? Do these include outcomes and requirements relating to the economy, environment and society?
- Is there a balanced scorecard (or equivalent) to enable outcomes and requirements to be prioritised and communicated to the market? Does this use standard terminology that is easy to understand?
- Is it clear what responsibility and liability the supply chain will have for the ongoing operation of the asset? How have the asset manager's requirements been accounted for in determining these responsibilities?
- In a portfolio environment, have the requirements from individual projects and programmes been harmonised and rationalised to accelerate the development and use of platform approaches and standard products by the supply chain?
- Is there a clear understanding of when the goods or services are required? Does the proposed procurement strategy meet this requirement?
- What are the corporate requirements or expected standards in relation to procurement activities, including those related to realising whole life economic, environmental and social benefits?
- Is the corporate risk strategy clear and understood? How will it influence procurement activity?
- Is there an understanding of how the project's risks will be managed as part of procurement to ensure the project's intended outcomes and benefits are realised?
- What is the impact of the project funding, financing, regulation and assurance on the procurement options? For example, are there any associated obligations? Does the procurement strategy and the commercial case of the business case consider these impacts?
- How has legal advice been sought to ensure procurement complies with the latest regulations, including economic, environmental and social standards? For example, relevant government procurement policy notices, including 05/19 Tackling Modern Slavery, 05/21 Human Rights, 06/20 Social Value and 06/21 Carbon. Has this advice accounted for the possibility of regulatory changes during the delivery of the project?

What may help



Procurement strategy, benefits register and realisation plan, business case (strategic and commercial), asset management strategy and sponsor's requirements

Example 2

Suggested reading 1, 3, 4, 30 and 31

Considerations:

Pillar 1 Understanding the outcomes

Considerations

Capability

- Has the capability of the client and market been assessed to inform the procurement strategy? For example, using the Routemap client and market capability assessments or the Government Commercial Function People Standards.
- Has the procurement strategy been developed as an integral part of the delivery strategy? Does it align with the client model?
- Does the client team have the capability and capacity to execute the procurement strategy? For example, to fulfil their contractual obligations.
- Has the client undertaken a procurement of similar scale and complexity in the past?
- Is there a long-term strategy in place that considers the balance of building the required procurement capability in-house versus buying it in?
- Would it be useful to consult independent subject matter experts, to act as advisors or provide assurance on the procurement process?
- Is there an understanding of the type and level of specialist skills required and whether these are readily available within the market?
- Does the client have the capability to define and evaluate the market based on economic, environmental and social metrics? How does the market perceive the client's commitment to achieving sustainability goals?

What may help



[Delivery strategy and regulatory or statutory requirements](#)

[Suggested reading 2 and 5](#)

Considerations:

Pillar 2 Engaging the market

Considerations

Market relationship

- Does the client (the procuring authority) have experience of, and understand, the current market for the goods and services it needs?
- In order to understand the market's ability to deliver the desired outcomes, has a market analysis (a desktop study) been undertaken ahead of engaging the market? Does this include an assessment of:
 - market health, for instance financial stability and resilience of supply chains
 - market capability, such as the people, processes and systems required for the project
 - market capacity, for example the ability of potential suppliers to take on the project considering other competing projects
- Has the client developed an approach to assess and monitor the financial stability and capacity of critical suppliers both pre-contract and during delivery?
- Does the client understand how these factors might change over the project life cycle? For example, capacity due to changes in legislation.
- Has the client developed a supply chain map of potential suppliers?
- Does the client understand how and where the market can most add value to the project? For example, using small and medium sized enterprises (SMEs) to provide insight into modern methods of construction and other innovative technologies.
- How does the market perceive the client and the client's maturity level?
- Does the client have, or wish to procure, a long-term strategic relationship with the supply chain? For example, professional services frameworks.
- Is there a clear understanding of the enablers required for a strategic relationship with the market? For example, the corporate behaviours, culture and values of market organisations.

What may help

Contracts and third-party agreements, supplier relationship management plan and procurement strategy

Examples 3, 4 and 6

Suggested reading 1, 6 and 29

Considerations:

Pillar 2 Engaging the market

Considerations

Market engagement

- Has the client established its approach to market engagement?
 - Have a variety of market engagement methods been considered? For example, meetings with the market or issuing requests for information.
 - Has the client considered what market engagement approaches similar projects have successfully adopted?
 - Does the proposed market engagement approach encourage the suggestion of novel or innovative solutions at the earliest stage of the project life cycle?
 - Has the client considered when it would be most beneficial to commence engagement?
- Are there legislative or statutory provisions that the client needs to meet before taking the proposal to market engagement stage?
- Have the project's contracting and packaging strategies been developed sufficiently to enable testing with the marketplace?
- Prior to setting targets for your project, has the supply chain been engaged to ensure that they possess the required level of capability? For example, targets relating to the economy, environment or society, or to the use of modern methods of construction.
- Has the client engaged the market about their capability concerning any relevant ESG criteria, including:
 - Their past track record of delivering against ESG criteria
 - Their ability to decarbonise their own operations
 - Their approach to reporting
- Has the client allowed sufficient time in the schedule to enable meaningful market capability development through engagement? For example, to allow time for joint ventures or consortia to form.
- Has the client thought about how its market engagement activity may affect existing, incumbent relationships?
- Does market engagement demonstrate the client's commitment to transparency and fair treatment of bidders?
- Does market engagement explore whether potential suppliers can offer different approaches that the client has not previously considered? For example, taking advantage of emerging technologies and innovation.
- Is the client intending to engage with a range of small and medium sized enterprises to ensure the resilience of the market for the future?
- Has the client thought about how it will engage the sub-tier (tier 2+) supply chain, especially critical or resource constrained suppliers and/or small niche suppliers?
- If there are any areas of expertise missing or in short supply in the market, how this will be addressed? For example, incentivising skill development.
- Has the client considered the long-term benefits of investing in developing the market's capability? For example, a wider pool of capable suppliers for future projects.
- Has the client considered any feedback from the market and adapted its approach to reflect this?

What may help

Stakeholder map and engagement plan, supplier relationship management plan and regulatory or statutory requirements

Example 5

Suggested reading 1 and 7

Considerations:

Pillar 2 Engaging the market

Considerations

Market appetite

- Does the client understand the appetite of the market to meet its demand? Does the market engagement response provide confidence?
- Are any other external or internal projects procuring services on a similar timeline that may use the same supply chain? What impact could this have on market appetite or its capacity to provide goods or services?
- Does the procurement strategy consider especially critical or resource constrained suppliers and/or small to medium sized enterprise supply chain members and test their capacity and appetite?
- Can any further steps be taken to identify, manage and mitigate supply chain capacity risks? For example, reviewing existing commitments and investing in supply chain training to address skills gaps.
- If market appetite is lower than expected, does the client know why?
- Having found out the reasons, how far is the client willing to go to increase market appetite and de-risk the project? For example, allowing a longer procurement schedule to enable joint ventures and consortia to form.

What may help

[Procurement strategy and business case \(commercial\)](#)

[Examples 5 and 6](#)

[Suggested reading 6 and 8](#)

Considerations:

Pillar 3 Packaging the works

Considerations

Risk allocation approach

- Is the allocation of risk between the client and supply chain organisations clearly defined?
- Are risks allocated to the parties best able to manage them?
- Has the client reviewed their own capability and capacity to manage the risks they will be responsible for managing?
- Has the client considered the capacity and the willingness (risk appetite) of the market when deciding how risks will be allocated?
- Does the market demonstrate that it understands the proposed allocation of risk? Have potential suppliers demonstrated that they have the appropriate behaviours and experience to manage the risks they have been allocated?
- Is risk and reward allocation clear and equitably balanced? Will it suitably incentivise the right behaviours, including those related to delivering economic, environmental and social objectives?
- Has the potential for misalignment between risk appetite and capability between the sponsor, funders, the client and the market been tested?
- Has a robust environmental impact assessment (EIA) and equality impact assessment (EqIA) been conducted to identify relevant opportunities and risks?
 - Are there associated mitigation and monitoring measures in response to the findings of the EIA?
 - Are they part of the key procurement documents and have the risks identified been clearly and appropriately allocated?
 - If there are significant contractual changes through the project life cycle will these assessments be revised?

What may help



Risk management plan, procurement strategy, EIA and EqIA

Examples 7 and 8

Suggested further reading 9, 10 and 11

Considerations:

Pillar 3 Packaging the works

Considerations

Packaging strategy

- Has the client tested the packaging strategy to ensure it captures all of the project requirements and clearly defines the interfaces between packages?
- Has the packaging strategy been informed by feedback from market engagement?
- Are the work packages sized appropriately for the client's risk appetite and management capability?
- Have the use of categories or clusters been properly considered? For example, using a work breakdown structure to group similar or compatible works as a single package for tender.
- Has the client taken the timing and availability of funding into account when it structured the work packages?
- Is there a process and enough time allowed for the packaging strategy to be iterated and retested with the market? How is this controlled?
- Is there an open, two-way dialogue with the suppliers throughout development of the packaging strategy? This should take advantage of the supplier's expertise and foster a culture of open and collaborative engagement from the start of the project's life cycle.
- Does the market have the skills and capability required for different works packages, so suppliers can price themselves competitively and the client has confidence in their ability to perform?
- Does the packaging strategy allow for specialist small and medium sized enterprises to support delivery effectively?
- In portfolio environments, does the client understand the level of dependency on critical suppliers across all packages both at tier 1 and sub-tier levels?
- Do the economic conditions have an impact on the packaging strategy? For example, the supply of labour in the project's location.
- Is there a visible programme of future work that could support a more strategic relationship with suppliers? Is there a plan to leverage this visible demand pipeline to create efficiencies throughout the supply chain? For example, through using category management principles to group spend for similar activities or products.
- Is the programme or portfolio of sufficient scale and longevity to drive the desired value from category management against its up-front set up cost?
- Does the use of category management facilitate collaboration and innovation to drive efficiencies and influence the market?
- Have the asset manager and sponsor been consulted in the development of the packaging strategy to ensure that their requirements have been incorporated in proposed contract documentation and specifications? For example, use of local labour force by the supplier.
- Are the packages of work structured so that they can be easily commissioned at handover into operation? Has the asset manager been fully consulted on the testing and commissioning strategy and progressive assurance approach?
- Would there be revenue benefits from the early transfer of assets into operation? For example, a phased handover of sections of the site as completed rather than waiting till fully completed. If so, does the packaging strategy take this into account?

What may help



Business case (commercial), project delivery plan and funding arrangements

[Examples 5 and 9](#)

Considerations:

Pillar 3 Packaging the works

Considerations

Interfaces between supply chain partners

- Has the client defined the scope boundaries and the risks associated with interfaces and interdependencies between packages?
- Has the client considered the management approach for both the soft (non-contractual) and hard (contractual) interfaces created by the packaging strategy?
- Has the client scoped and sized the packages so that it can manage the interfaces? Does the client have the necessary capacity and capability to ensure that contractual obligations can be effectively discharged?
- Is the project organisation appropriately structured to manage the technical, commercial, operational and stakeholder interfaces that the packaging strategy will create?
- Have approaches such as alliancing or partnering arrangements been considered to support the effective management of interfaces, by creating an open culture which encourages collaborative risk management?
- How will the handover of packages be managed between client and supplier or supplier to supplier?
- Are relevant economic, environmental and social standards integrated into the management of interfaces? Is it clear who is responsible for ensuring compliance?

What may help



Organisational design strategy and business case (commercial)

Examples 4, 10 and 11

Suggested reading 12 and 13

Considerations:

Pillar 4 Selecting the contracting model

Considerations

Contracting approaches

- Has the client determined the most appropriate contract model, or combination of contracting models, to deliver the project's outcomes? For example, a combination of fixed price and cost reimbursement dependent upon certainty of scope, size and complexity.
- Is the form of contract as close to industry standard as possible? Does the market understand it? Is there consistency of terms across the supply chain? For example, use of 'boilerplate' terms and conditions.
- Has the client considered how contracting principles should be cascaded into lower tiers of the supply chain? For example, similar principles of incentivisation for key tier two suppliers?
- Do the contracts incorporate a balanced scorecard (or equivalent) with clear and measurable targets showing how the supplier will contribute to the overall project outcome? Are there appropriate key performance indicators?
- Do the contracts establish the levels of control required by the governance framework?
- Has a mapping exercise been undertaken between the timescales required by the sponsor organisations and the proposed contract milestones to assure alignment? For example, to manage change control.
- Are incentives and collaboration tools used to encourage behaviours that will realise the project's outcomes and benefits? Have they been tested for unintended consequences?
- Does the client want a transactional or integrated and collaborative relationship with the supply chain? Does the contracting model support the desired approach?
- What is the proposed extent and duration of the desired relationship? Is this reflected in the proposed contracting model? In asset-based organisations, can firm commitments be made to the market to encourage investment in technology, people and innovation?
- What are the provisions for change, contract variation and contract termination?
- Have the contracts been structured to support an exchange of data to drive collaboration?
 - Are the contracts clear who owns each element of project design? For example, physical and digital assets throughout the project's life cycle.
 - Are there specified tools or systems that would enable digital design information to be shared and exchanged between packages to support systems integration?
 - Have provisions been included in the contract that would ensure standardisation of the digital asset data produced? Have they been checked with the asset manager?
- Is there an opportunity for early supply chain involvement to contribute to design or ways of working?

What may help

Contracts and third-party agreements, contract management plan and asset management strategy

Examples 7, 8 and 10

Suggested reading 11, 13 and 14

Considerations:

Pillar 4 Selecting the contracting model

Considerations

Testing the contracting strategy

- Has the client adopted this contracting approach before? If so, what did they learn and how has this been incorporated?
- Have the contracts been designed to be profitable and offer a fair return (benchmarked against industry performance)? Has the range of returns based upon varying degrees of performance been stress tested?
- Does the contracting strategy:
 - reflect the sponsor and client priorities as defined in the balanced scorecard?
 - align with the client and delivery model?
 - effectively cascade all requirements including those related to economic, environmental and social impacts through the supply chain?
 - reflect the client's and market's attitudes to risk?
 - reflect the leadership behaviours required from the supply chain?
 - complement the packaging strategy? Do they both have market buy-in?
 - cover all physical, digital and contractual interfaces? Is terminology consistent across the supply chain?
- Is the client set up to effectively administer the proposed contracting strategy? Including their digital systems, for example a robust contract management and document management system.
- Is the contracting strategy deliverable within the project's budget constraints?
- Is there a mechanism in place to drive fair payment practices throughout the supply chain?

What may help



[Business case \(commercial\) and procurement strategy](#)

[Examples 2 and 11](#)

[Suggested reading 14 and 15](#)

Considerations:

Pillar 4 Selecting the contracting model

Considerations

Planning for delivery

- Has the client selected a team to manage the procurement with relevant specialist expertise? Are they integrated with the delivery team to ensure alignment?
- Has the client benchmarked the size and scale of team required to manage the contract in the delivery stage?
- Is it clear how all parties will report on and monitor the project, and more specifically the contract performance?
 - Is reporting aligned with the project's governance, performance and payment mechanisms and any risk sharing?
 - How will the client monitor the supplier's economic, environmental and social value practices throughout the project life cycle?
 - How will the desired behaviours within the supply chain be incentivised, maintained and monitored?
- Has the client considered how to assure testing, commissioning and handover? For example, timely production of operation and maintenance manuals and digital assets.
- Have the relationship exit strategies been considered together with all associated liabilities? For example, compensation payments for termination.
- What are the remedies or penalties for non-performance or non-compliance with required standards?
- What are the project's mechanisms for dispute resolution? For example, escalation, mediation and contract termination.

What may help



[Project delivery plan and contract management plan](#)

[Suggested reading 9, 10 and 16](#)

Considerations:

Pillar 5 Defining and implementing a successful tender process

Considerations

Routes to market

- Has the client considered all available routes to market? For example, via existing frameworks or direct contracts, as well as initiating a new procurement exercise.
- If initiating a new procurement, has the client determined the approach for both pre-qualification and tender evaluation? Will there be open competition or will an approved supplier list be considered?
- Have standard forms of pre-qualification been considered? For example, use of a standard selection questionnaire.
- Do the pre-qualification criteria align with the strategic intent of the procurement? For example, inclusion of criteria to assess social value and past performance delivering sustainable outcomes.
- Does the proposed route to market for both pre-qualification and invitation to tender:
 - meet all of the legal, corporate and regulatory obligations?
 - enable the client to optimally allocate the risks with the market?
 - factor in market feedback and the decisions on packaging and contracting?
 - encourage and enable innovation from the supply chain?
 - consider behavioural and cultural alignment as well as technical experience?
- Has the client considered the level of capability and capacity required when selecting the proposed route? Does the client have the requisite capability and capacity available?
- Has enough time been allowed to implement the optimal route to market including time for negotiation post-tender? Are there any constraints on timing? For example, completion within the annual funding cycle.
- What is the policy and approach to managing unsolicited bids?

What may help

Procurement strategy, business case, (commercial) and regulatory or statutory requirements

Example 1

Suggested reading 1, 4 and 24

Considerations:

Pillar 5 Defining and implementing a successful tender process

Considerations

Managing the tender

- Does the tender notification comply with applicable legislation? For example, use of the UK's Find a Tender (FTS) platform.
- Has all the bid documentation been developed in accordance with the tender notification?
- Does the bid documentation need to be legally assured? For example, when there have been changes to the project's scope between the tender notification and the invitation to tender.
- Is there a process for identifying and managing potential conflicts of interest? Does the process apply to all those involved in the bidding and procurement teams?
- Is the procurement team adequately resourced with input from all relevant areas of the sponsor, client and asset manager organisations to ensure accurate and timely responses to queries? For example, the engineering team responding to technical queries.
- How will information be shared with potential suppliers during the tender process? For example, through an e-tendering platform.
- How will the project make use of digital sourcing tools to manage the tender? Such as tracking correspondence, feedback and updates to documentation.
- Is the tender process auditable with provision for updates during and after the tender process? For example, ensuring that final versions of project documents are incorporated into the contract on the award date.
- Does the engagement with potential suppliers comply with legislation, regulations and internal governance procedures? For example, recording interactions to ensure a fair and unbiased selection.
- Are there sufficient time and resources available for potential suppliers to develop their capability to meet requirements, with allowances for clarifications and sessions to develop their knowledge of the project? For instance, offering meetings with the client to address technical queries from bidders consistently.
- How will upfront risk sharing be encouraged between the client and bidders? For example, clients sharing identified risks and requesting feedback from bidders on how they would manage the risks.
- Does the tender process allow the client and potential suppliers to test the behavioural and cultural alignment? Are there plans to use a variety of techniques such as mock integrated team workshops or leadership interviews?

What may help

[Procurement strategy, invitation to tender, bid selection criteria and contracts](#)

[Example 3](#)

[Suggested reading 1 and 2](#)

Considerations:

Pillar 5 Defining and implementing a successful tender process

Considerations

Evaluation process

- Do the evaluation criteria reflect the business case (for example, incorporating social value) and the required capability, culture and behaviours? Where a behavioural component has been included, have relevant specialists been involved in defining the criteria?
- Has the client stress tested the evaluation model, including the criteria and their relative weighting? Is it appropriate and clearly understood by all stakeholders?
- Does the market understand the evaluation process?
 - Have briefings been initiated ahead of the release to the market?
 - Have the briefings articulated the client outcomes and how best to demonstrate capability against these outcomes through the process? For example, reinforcing the key components of the business case, such as ability to move passengers quickly through a station.
- Does the evaluation process comply with legislation, regulations and internal governance procedures? Has the documentation and approach been assured by legal professionals?
- Is the length of process appropriate for the size and complexity of the contract? For example, is the likely bid expenditure for the market proportionate to the size of the contract?
- Do the evaluation criteria:
 - treat all bidders fairly? Have they been published in advance demonstrating the project's commitment to transparency and non-discrimination?
 - consider the capability to deliver all of the outcomes and benefits being targeted?
 - explicitly evaluate the proposed social value benefits commensurate with the scope and scale of contract? For example, by applying UK government Procurement Policy Note 20, which requires the application of the social value model and that social value criteria have a minimum 10% weighting.
 - consider organisations and individuals with successful track records of compliance with economic, environmental and social standards (such as ISO 20400:2017)?
 - assess the proposed leadership of the supply chain?
 - reflect expected standards of behaviour, by corporate staff, workers, subcontractors and partners?
 - include compatibility of data systems? For example, BIM capabilities.
 - take into account carbon reduction plans? For example, in line with Procurement Policy Notice 06/21.
- Is the evaluation panel suitably diverse, qualified and experienced to make judgements on the content of tenders?
- Has there been a structured process to train all evaluators on the basis and evaluation methodology and criteria of the procurement and have all potential conflicts been removed?
- Would it be useful to have a third-party expert panel, to act as advisor or as a compliance unit? For example, economic, environmental and social advisors.
- Has the client considered how to take advantage of artificial intelligence to support evaluation? For example, automating compliance checking.
- Is there a clear process for evaluation and award? How does it deal with non-compliant or unsolicited bids?
- Will the evaluation provide adequate feedback to unsuccessful parties?
- What is the process for settling legal disputes if the award is challenged?

What may help

[Invitation to tender and bid selection criteria](#)

[Examples 2 and 3](#)

[Suggested reading 8, 17, 18 and 30](#)

Considerations:

Pillar 6 Managing performance

Considerations

Transitioning into delivery

- Is there a clear handover plan from the procurement team to the delivery team? For example, training on particular elements of the contractual arrangements or briefings on how bid commitments have been captured within the contract?
- Is there an agreed contract management plan to ensure value for money is not compromised post contract award? Does it include mechanisms to ensure compliance with any relevant ESG criteria?
- Are there plans for mobilising the supply chain post contract award? For example, a clear on-boarding strategy to integrate them into the project organisation.
- Are the desired ways of working defined? How will these be developed and improved during the life cycle of the project?
- Is the client appropriately resourced to manage the contract? Does the client periodically monitor and update the resourcing plan to ensure the right level of competence and capacity exists or will exist, taking action to address any gaps? For example, supporting investment in specific skills.

Evaluating supplier performance

- What is the approach to ongoing client-supplier relationship management, including the related governance?
- How will the supply chain's performance be benchmarked, assured and fed back to them throughout the life of the project? What are the audit rights of the authority with regards to the main and sub-contractors?
- Is there a mechanism to obtain external data to benchmark performance and benefits delivered? For example, those related to productivity, innovation and net zero.
- How much of the monitoring of contractual key performance indicators is done on a self-reporting basis? Are there procedures in place to check their factual accuracy?
- Is there an overall structure and approach to undertake regular reviews of performance as part of a structured supplier relationship management strategy? For example, to consider further opportunities for collaboration and innovation. Does the performance management framework drive the desired kind of behaviour and outcomes?
- How does the contract address performance issues? For example, escalation and corrective action.

Lessons learned and feedback

- How and when will the procurement process capture and feedback lessons learned to benefit future procurements? For example, after full business case approval. Has enough time been allowed?
- Have mechanisms been established to measure the success of the procurement exercise? For example, how environmental or social targets were cascaded into the contracts, such as a commitment to a defined number of apprentices.
- How will data produced during procurement be captured, stored and interpreted to inform benchmarking exercises for future projects?
- How will the client organisation communicate lessons from the project, within its own organisation, market and broader industry? How will the client organisation make improvements for future procurements?

What may help



Project delivery plan, resourcing plan and contract management plan

Example 10

Suggested reading 1, 3, 16, 30 and 31



Supplier relationship management plan, delivery strategy, and sustainability strategy

Examples 6 and 11

Suggested reading 18 and 19



Suggested reading 15 and 20

Good practice examples

Good practice examples

It is important to assess how applicable each example is to your specific project, and tailor it as appropriate. This table shows which of the six pillars of good practice are characterised by each example.

Example 1

A model for effective procurement

Example 2

Project outcome profile: A Department for Business, Energy and Industrial Strategy case study

Example 3

Using behavioural assessments in evaluation: A Sellafield Ltd case study

Example 4

Deciding the extent of private sector participation

Example 5

Developing capability to drive sustainable innovation: A Mayor of London case study

Example 6

Aligning drivers to unlock greater value

Example 7

Using risk allocation to inform the contracting model

Example 8

Selecting the appropriate contracting model based on risk and complexity of requirements

Example 9

Developing the optimum packaging strategy

Example 10

Using alliancing in delivery: An Anglian Water case study

Example 11

Project 13 commercial principles for a collaborative enterprise

Pillar

Pillar 1: Understanding the requirements

1

Pillar 2: Engaging the market

2

Pillar 3: Packaging the works

3

Pillar 4: Selecting the contracting model

4

Pillar 5: Defining and implementing a successful tender process

5

Pillar 6: Managing performance

6

This good practice example is applicable to all the pillars

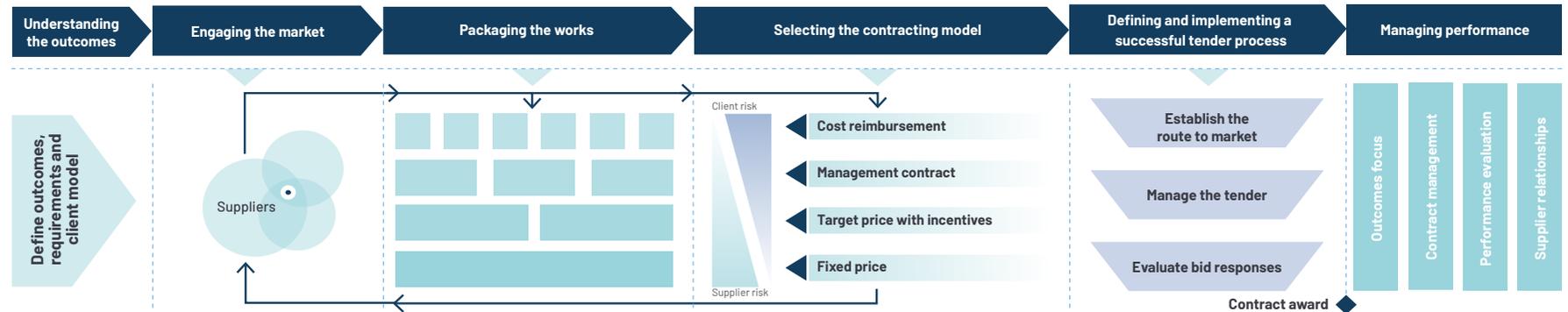
This good practice example is applicable to all the pillars					
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Good practice examples

Example 1

A model for effective procurement

The diagram below provides an overview of the stages of procurement, highlighting some of the key activities you will need to undertake.



To develop your procurement strategy, you must have clarity on the outcomes you are seeking to deliver. Translating and grouping these outcomes into work packages requires an understanding of the market (your existing relationships and potential new suppliers), your organisation's risk appetite (corporate policies and governance) and that of potential suppliers (through market sounding exercises).

You will then need to hone your proposed packaging structure and contracting model (see tables below) through market engagement. The optimum solution will be informed by your desired risk allocation, the complexity of requirements and the market's appetite, capability and capacity to fulfill the works.

Once there is a sufficient level of certainty, you can define and implement your tender process. This starts with selecting an appropriate route to market to procure the works (see tables below). Whichever route you choose, it is important to allow for time for appropriate dialogue and negotiation. Meaningful engagement ensures the market properly understands the evaluation criteria and can help to mitigate potential claims, which may delay final contract award.

Before contract award and mobilisation of the supplier, you should review your capability and readiness to manage the contract going forward. Maintaining a continual focus on outcomes, effective performance management regimes and collaborative contract management will ensure successful delivery of the work procured.



Good practice examples

Example 1

A model for effective procurement

Contracting models

A procurement strategy may be implemented through a range of alternative contracting models. These models are characterised by different approaches to contracting, incentivisation, design responsibility and governance. The table below shows some indicative contracting models. For a commonly used contract suite, please refer to the New Engineering Contract 4 (Suggested Reading 11).

Most client risk				Most supplier risk
Cost reimbursement	Management contract	Target price with incentivisation	Fixed price	Public-private partnership
Suppliers are reimbursed for all of their allowed costs plus additional payment to allow for a profit.	A management contractor is engaged by the client to manage the whole process of procuring and providing the works. The contractor has direct contractual links with all other suppliers. They are paid a fee on top of the work cost for the services provided.	The works are carried out by the suppliers to an agreed target price. Client and suppliers may share efficiencies and penalties through pain/gain mechanisms. Additional incentivisation can be included through key performance indicators against a balanced scorecard.	The works are carried out by suppliers based on tendered prices at contract award. The suppliers largely bear the risk of carrying out the work at the agreed price.	A client typically transfers liabilities for the majority of whole life cycle obligations (design, build, operations and maintenance) to a supplier over 25 years or longer. The supplier arranges the financing of their work, which is repaid to them through availability and performance based payment mechanisms.



Route to market

The term 'route to market' is used in this module to describe the process by which the client selects the preferred supplier. This table below describes, at high level, the alternative routes to market available. Please refer to Suggested Reading 24 for more detail.

Route to market	Definition
Single stage	A more traditional route. To be effective, the client needs to have absolute clarity on requirements. This is suitable for less complex procurements or procurements with unique attributes.
Multi stage	Suitable where there is a lack of definition on what is required. An initial filtering stage is needed to determine whether suppliers are capable. A subsequent stage determines the delivery and prices elements. Unless carefully structured, this route may increase the cost of bidding for both the client and supply chain. This approach provides the opportunity for the client to work with the supply chain to define the scope and requirements.
Framework	Suitable where there is a lack of definition on what is required. An initial filtering stage is needed to determine whether the entity is fit to supply. A subsequent stage determines the delivery and price elements. Unless carefully structured, this route may increase the cost of bidding for both the supply chain and the client. This approach provides the opportunity for the client to work with the supply chain to define the scope and requirements. It also lends itself to long-term relationships where repeat work is required but actual composition of projects is as yet unknown.

Good practice examples

Example 2

Project outcome profile: A Department for Business, Energy and Industrial Strategy case study

This example provides a form of balanced scorecard for defining and communicating the desired outcomes of a project. Such tools should be used to inform contractual documentation, design transparent tender evaluation criteria and form the baseline for post-project completion evaluation (Suggested Reading 1 and 18).

“Appropriate specifications and performance measures are the foundation of a good contract. With the right KPIs (metrics) in place, it should follow that contracts are designed to incentivise delivery of the things that matter, minimise perverse or unintended incentives and promote good relationships.”

The construction playbook – Cabinet Office 2020

The IPA's project outcome profile (Suggested Reading 22) supports government projects and programmes to develop stronger business cases in line with the Green Book guidance (Suggested Reading 19) by:

Step 1 Establishing how the project will support the delivery of government's priority outcomes.

Identify the outcomes that the project is seeking to achieve and determine how these align to government's strategic objectives, described in terms of priority outcomes established as part of the Public Value Framework (Suggested Reading 23).

Step 2 Using consistent metrics to document a project contribution to those priority outcomes.

Develop or select up to three metrics and define the specific contribution that the project or programme will make to each.

The Social Housing Decarbonisation Fund (SHDF) is a new Department for Business, Energy & Industrial Strategy (BEIS) change programme, to improve the energy performance of social housing through targeted investment and collaborative engagement with landlords and other government departments. Over a nine year spend period, SHDF aims to reduce the carbon emissions from social housing, reduce the number of tenants in fuel poverty, and lower fuel bills. It will make an important contribution to a large proportion of the social housing stock by 2030, as a significant stepping stone to achieving the government's ambition of net zero by 2050. It will also build capacity in social housing landlords and the supply chain to continue the journey to net zero after completion, with less input from government.

The project outcome profile tool (see next page) has been used to support the SHDF programme in its initiation phase during the development of the Strategic Outline Business Case, in particular for benefits mapping.

Use of this tool enables effective communication with stakeholders including the supply chain, of how the programme's objectives are aligned with the government's priority outcomes and how it will monitor, and ultimately measure, its success. In this example, it also highlights links with other government departments, such as the Department for Levelling Up, Housing and Communities (DLUHC), supporting greater alignment of departmental activities.



Good practice examples

Example 2

Project outcome profile: A Department for Business, Energy and Industrial Strategy case study

Themes	Environment - We live sustainably, reducing our carbon emissions		Health - We are improving physical and mental health		Economy - We have strong economic growth and improving productivity			
Departmental outcomes	Department for Business, Energy & Industrial Strategy (BEIS): Reduce UK greenhouse gas emissions to net zero by 2050		Department for Levelling Up, Housing and Communities (DLUHC): More, better quality, safer, greener and more affordable homes			BEIS: Back business by making the UK the best place in the world to start and grow a business	BEIS: Support increased productivity through unleashing innovation and new knowledge throughout the country	
Programme outcomes	Reduction of carbon dioxide emissions due to social housing	Build social housing landlords' capacity and capability to decarbonise their stock by 2050	Reduction in fuel poverty in social housing	Improve the health, comfort and wellbeing of social housing tenants in the homes treated	No increase in fuel bills due to SHDF programme	Development of the green economy and associated jobs	Increase the retrofit supply chain capability and capacity	Development of the retrofit innovation and installation value-for-money in accordance with qualitative measures
Example metrics	MtCO ₂ e (million tonnes carbon dioxide equivalent) Non-Traded carbon savings	Self-reported levels of confidence and capability amongst social housing landlords Number of applications for funding versus stock which requires funding	Number of social homes improved to EER (Energy Efficiency Ratio) C by SHDF	Self-reported broader mental and physical health outcomes (from satisfaction survey)	Number of homes seeing no increase in fuel bills for equivalent home warmth	Number of jobs supported/created	Number of Trustmark and Microgeneration Certification Scheme	Average time for retrofitting (across each measure)
	Pillar 1: Understanding the requirements 1	Pillar 2: Engaging the market 2	Pillar 3: Packaging the works 3	Pillar 4: Selecting the contracting model 4	Pillar 5: Choosing the route to market 5	Pillar 6: Managing performance 6		

Good practice examples

Example 3

Using behavioural assessments in evaluation: A Sellafield Ltd case study

A robust evaluation of behavioural and cultural fit should be considered before embarking on a long-term strategic partnership. Capability gaps should be identified as part of market engagement and can be addressed through training and additional procurement, but behavioural alignment must be present from the start for a partnership to succeed. This alignment can be tested and developed as part of the tender process. A good cultural fit is a critical enabler for collaborative working and effective problem solving, leading to better and faster delivery (Suggested Reading 1).

This example describes how Sellafield Ltd developed a behavioural assessment methodology to support the procurement of four Project and Programme Partner organisations. This ensured that Sellafield Ltd had a clear understanding of the behaviours they wanted from prospective partners and could carry out transparent evaluation of bidders during procurement.

In pursuit of its mission to create a clean and safe environment for future generations, the Sellafield nuclear site is home to one of the most complex portfolios of construction projects in the world, stretching over many decades. The Project and Programme Partner model created an opportunity to achieve a step change in project delivery by bringing together the best of industry in a collaborative approach. Four partner organisations (KBR, Jacobs, Morgan Sindall Infrastructure Ltd and Doosan Babcock) were procured to work alongside Sellafield Ltd to deliver £7bn worth of projects over a 20-year period.

The longevity and high-risk nature of the works meant that it was critical that the capability procured embodied the behaviours essential to the success of the partnership model. A central part of the procurement process was the development of a Project and Programme Partner behavioural model, which comprised 30% of the overall scoring for the procurement. The model was developed, and through engagement, was refined to 25 desired behavioural characteristics, each aligned to one of five themes. A methodology to assess these behaviours was developed and agreed with key assurance bodies, including Sellafield Ltd's senior leadership team, to ensure compliance requirements were met.

The behavioural assessment was central to the procurement, to which there were no appeals or non-compliances raised. Post contract award, Sellafield Ltd and the four partners further strengthened their focus on behaviours by developing a Relationship Management Plan to actively drive the desired culture through delivery. In 2019, Sellafield Ltd, with the support of its partners, gained accreditation in ISO44001 Collaborative Business Relationship Management systems (Suggested Reading 13). The Institute for Collaborative Working also presented Sellafield Ltd with the Collaborative Award for the Supply Chain category in 2020.



Good practice examples

Example 3

Using behavioural assessments in evaluation: A Sellafield Ltd case study

Step 1. An in-depth review of reports, policies and standards of desired behaviours on major projects underpinned Sellafield Ltd's development of their behavioural procurement approach.

Examples of industry best practice

- Association for Project Management (APM) Competency Framework
- Infrastructure Client Group Alliancing Code of Practice
- ISO 44001 – Collaborative Business Relationships systems

Corporate policies and project documents

- Blueprint for Project Delivery at Sellafield
- Sellafield Values/ Behavioural Competencies
- Sellafield Ltd and Project and Programme Partner Outline Business Case

Workshops with internal and external stakeholders

- Project and Programme Partner Lead Team 1-2-1 interviews and group workshops
- Consultation with industry suppliers on how to prepare bids to assess behaviours
- Determining the optimum supplier behavioural assessment methodology

Step 2. Sellafield Ltd collated their desired behaviours and carried out two stages of refinement to develop their Project and Programme Partner procurement behavioural model.

Stage 1 – Long-list of behavioural characteristics identified



Stage 2 – Alignment to critical APM competencies to refine the list further and check against a recognised framework

- Ethics, compliance and professionalism
- Team management
- Conflict management
- Leadership
- Solution development
- Risk, opportunity and issue management
- Quality management
- Stakeholder and communications management



Stage 3 – 25 behavioural characteristics were selected against which bidders would be assessed. These behaviours were clustered around the following themes:

- People
- Leadership
- Creating environments for success
- Outcome focus
- Collaboration
- Examples added of how behaviours would be positively and negatively demonstrated
- Most appropriate assessment method identified against potential procurement stages

Step 3. The methodology for assessing the behavioural characteristics was then created to support supplier evaluation and used for the procurement of the four partners.

The overall evaluation consisted of five components. The effectiveness of each component in supporting the evaluation of different behaviours, at different stages of the procurement process, is shown in the table below.

- Pre-qualification – questionnaire to satisfy minimum supplier requirements to be considered by Sellafield Ltd
- Technical questions – How the suppliers would provide their technical services supported by examples of their experience.
- Collaborative questions – specific questions relating to how suppliers would work with others and Sellafield Ltd
- Collaborative case studies – examples where suppliers have exhibited behaviours required
- Leadership interviews – interviews between Sellafield Ltd and suppliers' executive leadership to ensure that there was long-term behaviour alignment

Example behaviours	Supplier assessment methods				
	Pre-qualification questionnaire	Technical questions	Collaborative questions	Collaborative case studies	Leadership interviews
Giving respect	Red	Yellow	Green	Yellow	Yellow
Being direct and positive	Red	Yellow	Green	Yellow	Yellow
Adding value	Green	Yellow	Yellow	Green	Red
Working collaboratively	Green	Yellow	Yellow	Green	Red
Taking personal responsibility	Red	Yellow	Yellow	Green	Red
Learning	Red	Yellow	Yellow	Green	Red
....	Red	Yellow	Yellow	Green	Red
Effectiveness of assessment method	Not effective for testing this behaviour, refer to alternative method.	Partially effective for this behaviour, use as a support.	Partially effective for this behaviour, use as a support.	Very effective for this behaviour, use for evaluation.	Very effective for this behaviour, use for evaluation.



Good practice examples

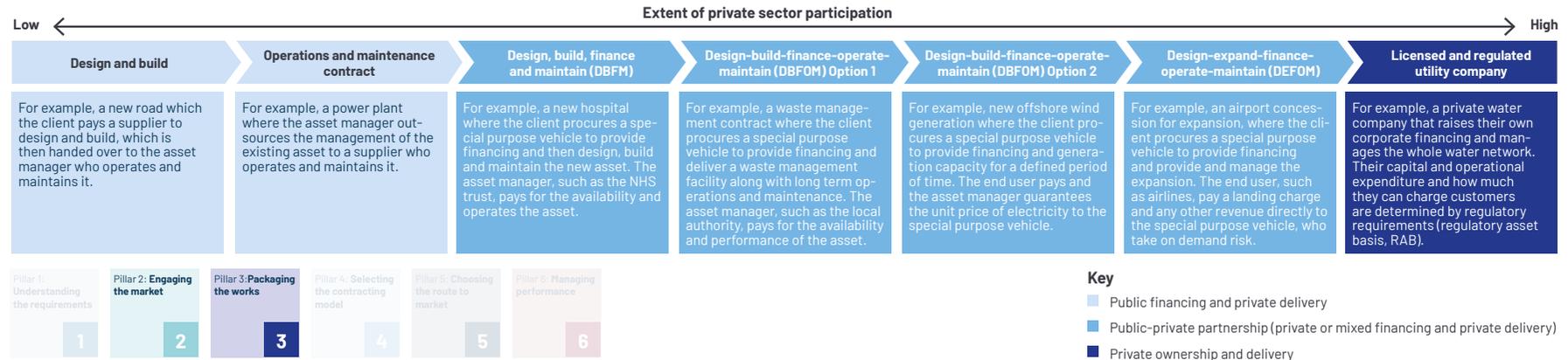
Example 4 Deciding the extent of private sector participation

Clients can draw on private sector expertise through public-private partnerships (PPPs) to help deliver major infrastructure projects. There is a recognition that private sector involvement can drive innovation, efficiencies and provide additional financing solutions. A PPP typically involves a long-term contract that may last for more than 20 years after the procurement phase has ended. Given the long-term nature of these contracts, combined with their size and complexity, there is potential for significant impact on the delivery if they are not appropriately managed (Suggested Reading 16).

This example shows some options for PPPs, which can extend across different stages of the project life cycle. The extent of private sector participation should be considered in the context of:

- the client's approach to risk allocation, which will impact a supplier's ability to obtain affordable financing if transferred risk is deemed too high or uncertain
- how the client intends to structure the payment mechanism, which requires performance (for example, on-time running of train services) and/or availability (for example, hours open) standards to be clear and reasonable
- the outcomes to be delivered and how they are to be measured, which will inform the management approach
- any existing and future interdependencies (for example, a greenfield standalone asset versus operating a highly integrated asset)

The above list is not exhaustive. For further information, please refer to Suggested Reading 9 and 16. When developing your procurement strategy, you should also check that the extent of private sector involvement is aligned with your organisation's policies, including the commercial and risk management strategies.



Good practice examples

Example 5

Developing capability to drive sustainable innovation: A Mayor of London case study

Early market engagement with potential suppliers can help drive greater levels of innovation but requires capability from the client to manage this engagement. The Mayor of London's Retrofit Accelerator - Homes programme (jointly funded by the Mayor of London and European Regional Development Fund) has been designed to assist social housing providers (the clients) in working with suppliers to develop interventions to decarbonise their estates. The programme supports the Mayor of London's ambition to have a zero-carbon city by 2030 (Suggested Reading 25).

Currently, 28 London boroughs have declared a climate emergency and presently there is no proven, economic solution to sufficiently decarbonise London's housing stock, nor a supply chain with the capacity and capability to meet this challenge. The Retrofit Accelerator - Homes programme aims to demonstrate that with diverse aged housing stock, deep whole-house retrofit can be used to deliver warm, desirable homes - and in doing so lay the foundations for a future sustainable market scale up.

The Retrofit Accelerator - Homes programme brings together the Mayor of London, four suppliers and nine social housing providers, using the Innovation Partnership procurement route under the Public Contracts Regulations 2015 (Suggested Reading 4) to aggregate demand, build scale and stimulate a new supply market able to scale up and industrialise a ground-breaking net zero home retrofit solution. The aim is to drive innovation throughout the supply chain, foster cost reduction to the point where net zero retrofit is self-financing from the value of income and savings delivered by the retrofit, and therefore be deliverable at scale across the UK. This approach to retrofit aims to use offsite manufactured components, wall and roof cassettes with integrated solar photovoltaics (PV), an energy module including renewable heating, and monitoring and controls systems so that real life building performance is monitored and verified over time and can be performance assured by the supplier.

The Innovations Partnership procurement route is tailored for programmes and projects, requiring research and development to bring a new product or service to market. It provides a means for public sector bodies to engage with private enterprises where open competitive tendering is not possible because the required product or service can be specified but is not available in the market.

To develop the market's capability, a model was created to both engage and drive value from the supply chain, which:

- pairs public bodies in the form of housing providers (landlords) with suppliers (niche contractors) through competitive tender exercises to form Innovation Partnership agreements
- sets out a four stage development process, culminating in a conditional contract framework that comes into effect if the whole retrofit development process is successful. Each development stage ends in a pass/fail decision point and is carefully assessed based on clear predefined target outcomes to incentivise delivery at that stage
- provides a collaboration hub for suppliers and housing providers to share ideas, innovative practices and discuss common issues.

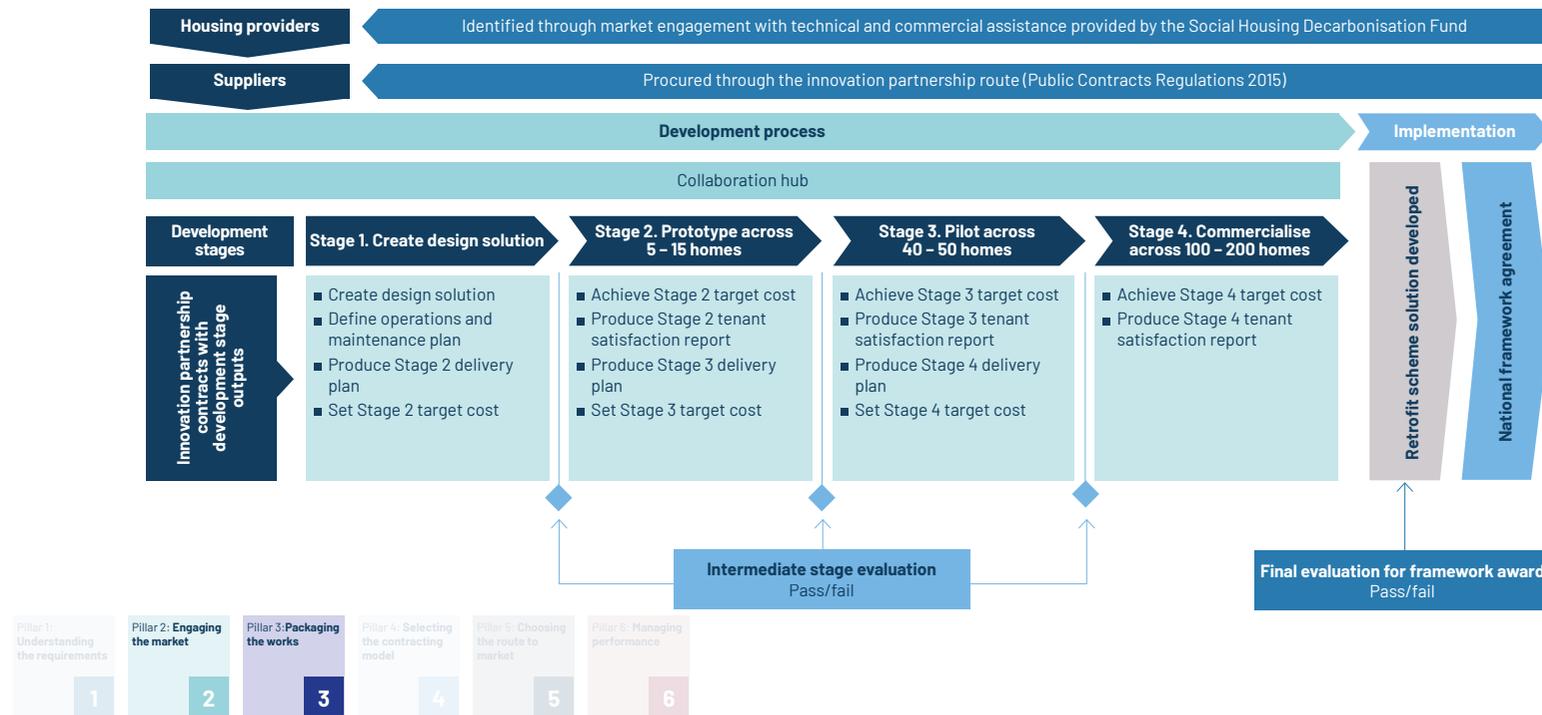
The Mayor of London's Retrofit Accelerator - Homes programme developed capability within social housing providers so that they could engage the market effectively. The providers could then work with suppliers to design and implement solutions, improving the market's capability to deliver whole-house retrofit solutions to meet decarbonisation aspirations. Established in London and backed by the Department for Business, Energy and Industrial Strategy's Social Housing Decarbonisation Fund Demonstrator, the model is set to be rolled out nationwide.



Good practice examples

Example 5

Developing capability to drive sustainable innovation: A Mayor of London case study



Good practice examples

Example 6

Aligning drivers to unlock greater value

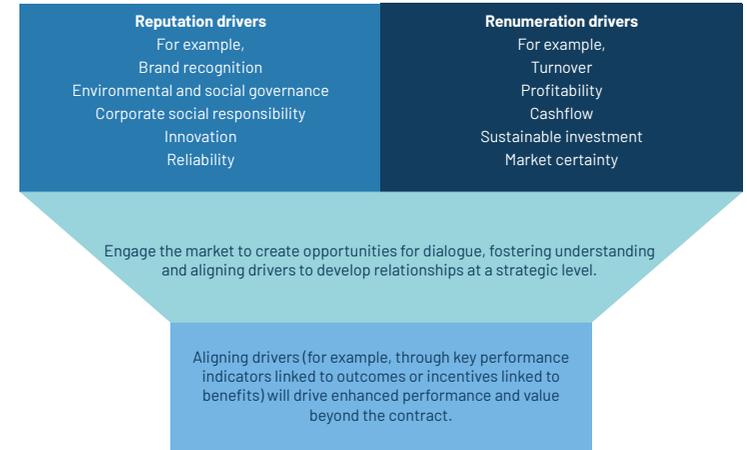
Clients need to consider how they will work with suppliers throughout the life cycle of projects and programmes to achieve their desired outcomes and benefits (Suggested Reading 1). Market engagement is an opportune time to assess suppliers' appetite, capability and capacity to deliver a project's requirements. These three facets will be influenced by a supplier's 'drivers' and clients should compare them against their own to examine whether there is potential for a successful partnership.

In the most effective relationships, the client and supplier reputation and remuneration drivers are aligned and will lead to the consistent delivery of benefits.

- Reputation is usually a driver for both the client and the supply chain. An example of how reputations can be damaged by failure is the Volkswagen emissions scandal, which significantly affected trust in the brand and testing regimes. Conversely, successful delivery of a major programme will enhance the reputation of the client and the supply chain, for instance the reception of the London 2012 Olympic Games.
- Remuneration, often the most overt driver of client and supplier behaviour, will be critical to the viability of both the project and the supply chain. Lack of supplier profitability can see investment withdrawn and market appetite diminish to the detriment of all stakeholders. Communicating procurement pipelines can provide visibility of where clients will target spend and allow suppliers to prepare for upcoming opportunities (Suggested Reading 6).

Maintaining alignment is a continuous part of supplier relationship management, as organisational drivers may change throughout a project's life cycle. Misalignment could impact the quality of work produced, behaviours and ways of working. Taking this approach will assist clients in building longer-term strategic relationships, which in practice means:

- value creation beyond that originally contracted
- collaborative behaviours and working, with open information sharing
- commitment to innovation including adoption of new technology
- joint strategy development, objectives and planning
- sustainable risk allocation



Good practice examples

Example 7

Using risk allocation to inform the contracting model

To devise the optimal contracting model, the allocation of risk should be informed by the client's risk appetite, the market engagement response and the level of capability, both of the client and the supply chain. This example provides a method for capturing key stakeholders' attitudes to risk and shows how this informs the final contracting and procurement model.

You must assess the risks involved in key aspects of delivery and work out whether it's more economical for the sponsor, client or supplier to manage them. These decisions need to be aligned to the client model that you are using for delivery and the risk management capability in each organisation. For example, 'price certainty' can be bought by paying the supplier to accept the risk by agreeing a fixed product price for the duration of the project. For complex large scale major projects, the ability to fully transfer risk is limited. Therefore, it is critical to consider the capability you, as the client, need to manage risk across your supply chain in an integrated way.

It is good practice to construct a risk allocation matrix to inform these decisions, as set out on the right. Alongside other criteria, this can also help you to select an appropriate contracting and procurement model. It may also be helpful to refer to guidance on risk allocation in the HM Treasury's business case development guidance (Suggested Reading 12) and within Global Infrastructure Hub's risk allocation tool (Suggested Reading 9).

Example risk allocation table	Potential allocations		
	Sponsor/ Asset manager	Client	Supply chain
Policy risk			
Sponsor requirements	✓		
Planning and consents		✓	
Design		✓	
Construction (to cost and time)			✓
Availability and performance	✓		
Commissioning			✓
Procurement risks		✓	
Technology and obsolescence	✓		
Funding (or financing)	✓		
Legislation and regulation	✓	✓	✓
...			

The preferred risk allocation will then need to be considered in relation to other criteria to determine the preferred contracting model. Other criteria could be supplier innovation, capacity for variations and separation of design and management.

For long term asset organisations who procure frameworks, it is common to provide all of the contract types to enable the most appropriate selection based upon the relative scale or complexities of projects within the portfolio.

		Example decision criteria		
Contracting model	Procurement model	Degree of collaboration	Market maturity	Incentivisation
Fixed price	Design and build	Scoring based on client model and the degree of client integration sought	Scoring based on perceived market maturity and ability to accept risks given the complexity of the project	Scoring based on stress testing the models for supplier incentivisation
Fixed price	Traditional			
Target price with incentives	Design and build			
Target price with incentives	Traditional			
...



Good practice examples

Example 8

Selecting the appropriate contracting model based on risk and complexity of requirements

The selection of an appropriate contracting model should be informed by the consideration of a range of different criteria, including:

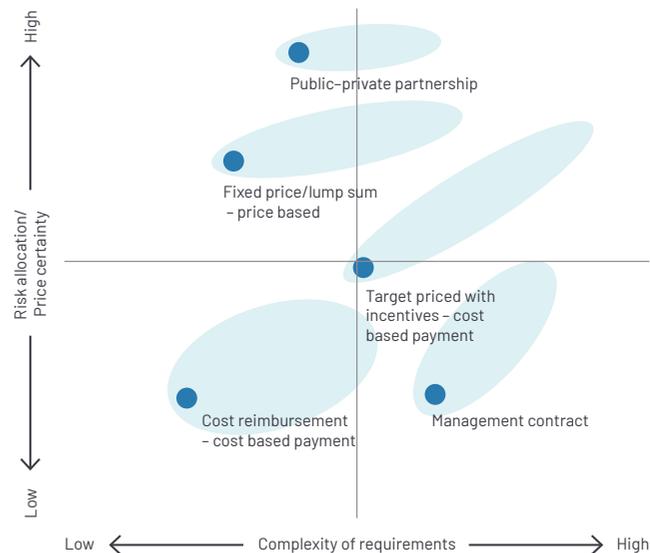
- risk allocation
- complexity of requirements
- capability of the client/market to utilise the contracts effectively
- incentivisation of collaboration
- ease of early engagement
- resources required for contract management

Balancing and weighting these criteria is essential to selecting the optimal model. One approach is to map the different contracting models against pairs of criteria, for example, risk allocation and complexity of requirements as shown in the diagram on the right. This allows you to compare how well each of the contracting models meet your criteria.

Contracting models are not fixed, they may be tailored using specific clauses, options and incentives. For example, a target price contract could address complexity of requirements through early supplier/contractor involvement and allocate more risk to the supply chain through adjustment of pain/gain mechanisms.

If there are a number of possible contracting models that could work, then the level of adaptation required to meet the situation should be examined. This will lead to clearer contractual language, reduce ambiguity, improve collaboration and mitigate the potential for claims and disputes.

By using visual mapping, potential contracting models can be narrowed down to not just the broad contracting model (such as fixed price), but to more specific options (such as NEC4 option A with additional Z clauses, Suggested Reading 11). This exercise should be supplemented with stress testing of the models to understand if they meet the criteria as expected.



Good practice examples

Example 9 Developing the optimum packaging strategy

For many projects, the decision on how to package the works is critical and complex. The optimal packaging strategy needs to balance potentially conflicting construction, commercial and market issues.

Mapping these competing objectives in a simple matrix can be a useful way to ensure the packaging strategy takes into account some of these broader considerations, which often get lost in the drive to optimise the commercial arrangements.

The outcome of this matrix can be used along with the feedback from market engagement to determine the optimal packaging strategy for your project.

Work Breakdown Structure (WBS) ...or similar functional breakdown of activities	Construction/engineering							Commercial			Market			Implications for packaging strategy
	Geography or asset types?	Scope for building off-site?	Interdependency/complexity?	Whole life impact?	Safety impact?	Optimum design transfer?	Outcome based specification?	Procurement model?	Contract value?	Impacts on risk allocation?	Impacts on market appetite?	Market maturity/capability?	Depth of supply chain?	
Employers design	
Surveys & investigations	
Civil engineering	
Mechanical, electrical and plumbing systems	Asset	High >25%	High	High	None	Concept design	Yes	Design and build	£100k	Revise allocated risks	Creates market appetite	High	1st and 2nd tier	Specify standard components as a single package. Subject to resilience checks and competitive tender, award to one supplier to maximise value for money.
Building and fit-out	
Systems integration	
Etc...	

Geography vs asset classes	Would this package be business-wide, regional or based on asset type?
Scope for build off-site	Is there a low, medium or high likelihood that this package can be built off site?
Interdependency/Integration/Complexity	Does this package have a low, medium or high integration requirement with other packages and as such what is the level of complexity?
Whole life consideration	What is the impact on whole life outcomes?
Safety specific considerations	In delivery of the package are there any unusual safety considerations?
Design ownership and transfer	Who will own the design and will there be a transfer - if so when will this happen?
Outcome based specification	As a discrete package could it be specified in output terms (for example, "passengers per hour" approach)?

Optimum procurement model	Notwithstanding package size and integration what would the optimal procurement strategy be?
Size/volume (€m)	Package value - what would be the optimum size for the market based on risk and capacity?
Risk allocation	Who is best placed to manage the risk? How will it impact resourcing?
Likely market appetite	Is there likely to be market interest and sufficient competition?
Market capacity	Is there good capacity in the market to deliver the scope or very few suppliers/organisations with the capability?
Sub-tier model	Will sub-tier suppliers be procured directly by the client or through a 1st tier?



Good practice examples

Example 9

Developing the optimum packaging strategy

The outcome of the above mapping exercise might suggest potential benefits, in either grouping work packages, or breaking them down further. For example, high-levels of interdependency between work packages or differing levels of market appetite might lead you to group work packages to reduce risks to delivery and help stimulate market competition. The packaging strategy will also need to effectively dovetail with your proposed client model and capability of your organisation. This is particularly important to mitigate interface risks between packages.

If your chosen packaging strategy involves multiple packages, then you may consider using a clustering model to make the procurement process more efficient. If there are common components or commodities, then a common components strategy may drive efficiencies from a standardised approach.

Clustering	Common components
<p>Using clustering or categories enables standard sets of contract solutions (see contracting model). Clustering or categorisation can provide consistency in the tendering process, allowing bidders to become familiar with documents, risk allocation, pricing requirements and the criteria used in assessing capacity and capability. It is important to cluster or categorise similar elements of work, design or service at a sufficiently high level, to allow effective communication with the target markets.</p>	<p>There are economic and delivery advantages to considering common components and commodities. It is important to consider this standardisation early in the development of the procurement strategy.</p> <p>When packaging common components it is important to balance the advantages of efficiencies gained and the risks of relying on a small number of suppliers. Effective financial due diligence is required to evaluate the stability of suppliers, and should be part of an organisation's risk management process.</p>
<p>The key considerations when grouping scope into clusters or categories are:</p> <ul style="list-style-type: none"> ■ the technical aspects of delivery, including methodology and technologies ■ the timing of the delivery ■ the physical location of the work or service ■ the economic, environmental and social benefits ■ that the market exists, is recognisable and able to provide healthy competition ■ the capacity and resource are available in the supply chain to deliver the required quantity and quality 	<p>Some of the benefits of a common component strategy, as a sub-set of the overall packaging strategy, include:</p> <ul style="list-style-type: none"> ■ having a co-ordinated approach to certain components ■ potential for consistent design ■ improved quality ■ reduced cost and need for testing ■ controlled capacity and delivery



Good practice examples

Example 10

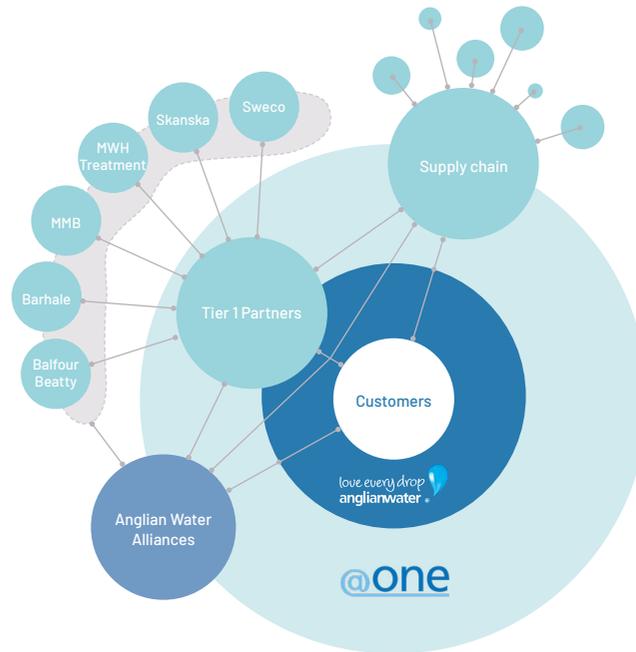
Using alliancing in delivery: An Anglian Water case study

One of the most effective ways of delivering outcomes is to create a contracting environment that promotes collaboration and reduces waste (Suggested Reading 1). This example shows how an alliancing model can be used to encourage a common culture, values and behaviours that facilitate a long-term focus on the delivery of outcomes and realisation benefits.

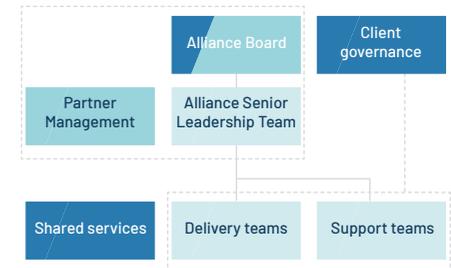
Anglian Water delivers capital investment through five-year Asset Management Periods using an alliance of partners (@one Alliance), incentivised to outperform targets and share best practice. In addition to harnessing the areas of specialism required (such as digital transformation, health and safety or inclusion), the alignment of partner culture, values and behaviours was an important part of the partner selection process.

This mix of common values and areas of individual specialism allowed each partner to both contribute and learn simultaneously, working to deliver a common goal with which everyone was in agreement. This model extended into the lower tiers of the supply chain through long-term frameworks, transparency of pricing and early engagement. An environment has now been created where 80% of work is completed by framework or contracted suppliers, all sharing the same values. Long-term engagement with the supply chain has created an ecosystem of trust and collaboration.

This streamlined way of working has enabled @one Alliance to consistently outperform its targets since its inception in 2004, meaning greater value and less disruption for customers. There have also been industry-leading carbon reduction savings against challenging targets, which support Anglian's journey to reach net zero carbon by 2030.



Alliance collaborative leadership structure



Good practice examples

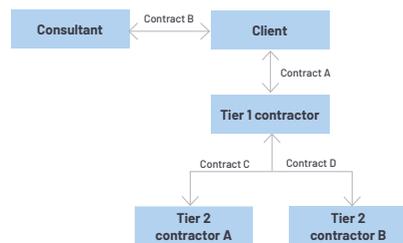
Example 11

Project 13 commercial principles for a collaborative enterprise

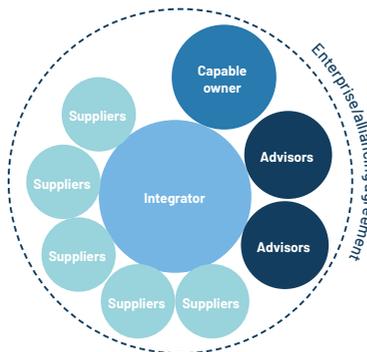
This example presents Project 13, which is an alternative delivery model for major projects. It is an initiative from the Infrastructure Client Group that builds on existing best practice from across the industry brought together in one model (Suggested Reading 26). It promotes the movement from transactional short term relationships models to long term collaborative enterprise delivery models that ensure infrastructure improvement remains focused on delivering better outcomes to end users.

You should consider the scale and complexity of your programme and if an enterprise model, such as Project 13 is suitable for your project.

Traditional transactional contract relationships



Project 13 enterprise



The Project 13 Commercial Handbook (Suggested Reading 27) provides guidance on six principles to create the right commercial environment for the enterprise model. These principles are also good practice for more traditional contracting models.

Alignment	Performance measures are aligned to delivery of outcomes to the end user. This ensures all partners work collectively in the best interests of the end user rather than introducing commercial tension across contracts.
Reward	Reward mechanisms in the enterprise structure are based on value added in exceeding the outcomes, not competed lowest cost for a component. This way each party shares the interface risk between organisations and it also ensures reward is linked to a quality performance rather than volume of work.
Risk	Risks that the owner or investor are accountable for are not transferred to the supply chain, instead all parties in the enterprise are given incentives and potential reward based on their ability to mitigate the risks.
Engagement	The enterprise comes together at a much earlier stage in the asset life cycle; shortly after the need has been identified the owner will engage the Integrator. This allows for pooling knowledge, expertise and application of innovative solutions in solving the problem.
Scale	The enterprise model yields the greatest benefits when applied across asset networks not just small-scale individual projects or to deliver component parts of programmes
Time	The relationships between organisations last over a longer time period, incentivising investment in skills and tailoring of supply-chain business models. This combined with asset network level scope will improve productivity through changes to ways of working; enabling innovations that require long-term commitment for payback such as delivery methods like offsite construction.

The most significant benefits of using an enterprise model are:

- ✓ Enterprises are brought together and incentivised to deliver outcomes for the ultimate customer
- ✓ Enterprises are made up of integrated and collaborative delivery teams, drawing on the capability of participating organisations
- ✓ Enterprises include an ecosystem of partners and suppliers, with more integrated relationships providing the opportunity for early engagement
- ✓ Reward in an enterprise is based on value added to the overall outcomes, not on time or volume
- ✓ Risk allocation is aligned with capability, it is not transferred through tiers of the supply chain

Suggested further reading

Reference	Use
<p>1 Guidance The construction playbook – Cabinet Office 2020</p>	<p>Key policies and guidance for how public works projects and programmes are assessed, procured and delivered.</p>
<p>2 Standard Government functional standard GovS 008: commercial – Government Commercial Function 2021</p>	<p>This standard forms part of a suite of functional standards that set expectations for management within government and provide guidance for the wider public sector. It is supported by the Commercial Continuous Improvement Framework, accessible via the same link.</p>
<p>3 Policy Paper Procurement policy note 06/20: taking account of social value in the award of central government contracts– Cabinet Office 2020</p>	<p>This note sets out how to take account of social value in the award of central government contracts by using the social value model.</p>
<p>4 Legislation The public contracts regulations 2015 – HM Government 2015</p>	<p>The Public Contracts Regulations 2015 set out legal requirements for all public sector procurement in England, Wales and Northern Ireland.</p>
<p>5 Standard People standards for the commercial profession Version 3.0 – Cabinet Office 2016</p>	<p>This document sets out the standards expected from commercial professionals in government. It lists requirements for each of the different professional levels.</p>
<p>6 Policy paper National infrastructure and construction pipeline - Infrastructure and Projects Authority 2021</p>	<p>A forward-looking pipeline of planned projects and programmes in economic and social infrastructure.</p>
<p>7 Report Green paper: transforming public procurement – Cabinet Office 2020</p>	<p>A set of proposals with the intention to speed up and simplify public procurement in the UK following Brexit.</p>
<p>8 Standard ISO 20400 Sustainable procurement – International Organization for Standardization 2017</p>	<p>This standard is intended to help organisations practise sustainable procurement and thereby improve the sustainability performance of the market and reduce risk.</p>
<p>9 Guidance PPP risk allocation tool 2019 edition – Global Infrastructure Hub 2020</p>	<p>This tool has been designed to assist both the public and private sector in appropriately allocating risks across a variety of infrastructure projects.</p>
<p>10 Standard The orange book: management of risk – HM Treasury & Government Finance Function 2020</p>	<p>This guidance establishes the concept of risk management and provides a basic introduction to its concepts, development and implementation of risk management processes in government organisations.</p>

Suggested further reading

Reference	Use
11 Guidance NEC4: Establishing a procurement and contract strategy - Institution of Civil Engineers 2017	A brief guide to the New Engineering Contract and strategic choices between contracts and options within each contract.
12 Guidance Guide to developing the project business case - HM Treasury 2018	A practical step by step guide to the development of business cases, using the five case model.
13 Standard ISO 44001 Collaborative business relationships management systems - International Organization for Standardization 2017	Identifies requirements for the effective identification, development and management of collaborative business relationships within or between organisations.
14 Guidance Should cost modelling: development guidance - Cabinet Office 2021	A series of practical tools and templates to support the development of Should Cost Models and to help reinforce good practice approaches.
15 Guidance Best practice in benchmarking - Infrastructure and Projects Authority 2021	This document outlines the IPA's recommended methodology for cost and performance benchmarking. It introduces the concept and includes a step-by-step guide to undertaking, or commissioning, a benchmarking exercise.
16 Guidance PPP contract management tool - Global Infrastructure Hub and Turner & Townsend 2018	The reference tool is intended to be user-friendly and interactive, providing guidance to global public sector teams responsible for contract management of public private partnerships from financial close to handback.
17 Standard Common assessment standards - Build UK 2021	This standard comprises an industry-agreed question set based on existing pre-qualification questionnaires, including PAS 91, and corresponding assessment standards.
18 Guidance Procuring for growth balanced scorecard - Crown Commercial Services 2016	This note explains how government buyers should adopt a balanced scorecard approach for certain types of procurements.
19 Guidance The green book: appraisal and evaluation in central government - HM Treasury 2020	This guidance issued by HM Treasury outlines how to appraise policies, programmes and projects. It also provides advice on the design and use of monitoring and evaluation before, during and after implementation.
20 Guidance Evaluating the performance of private financing and traditional procurement - National Infrastructure Commission 2019	This study provides recommendations on how to further improve investment appraisals and risk management frameworks.

Suggested further reading

Reference	Use
21 Policy Paper Procurement policy note 05/21: national procurement policy statement – Cabinet Office 2021	Sets out information and guidance for contracting authorities which are required to have in regard to national strategic priorities for public procurement.
22 Guidance Guide to completing the project/programme outcome profile – Infrastructure and Projects Authority 2021	Supplementary guidance to the Green Book on establishing a clear ‘golden thread’ from government priorities to the development of strategies and business cases for programmes and projects.
23 Guidance Public value framework and supplementary guidance – HM Treasury 2019	A practical tool for understanding how public money is used to generate outcomes.
24 Guidance The sourcing and consultancy playbooks – HM Treasury 2021	Key policies and guidance for making sourcing decisions for the delivery of public services, including specific guidance on sourcing consultancy services.
25 Report Retrofit accelerator: Homes – Greater London Authority 2020	This retrofit accelerator for homes aims to transform the way London retrofits its ageing and energy-inefficient housing to create warm, affordable and ultra-low carbon homes.
26 Guidance Project 13 framework – Infrastructure Client Group and Institution of Civil Engineers 2020	The principles of a commercial approach that defines the roles, capabilities, and responsibilities of the key stakeholders in Project 13’s new enterprise model.
27 Guidance Project 13 commercial handbook – Infrastructure Client Group and Institution of Civil Engineers 2018	This handbook outlines the six key commercial principles which are critical to creating the right commercial environment for the model.
28 Guidance Principles for project success – Infrastructure and Projects Authority 2020	A quick guide for practitioners on things to get right for any project to succeed.
29 Guidance Category management in procurement and supply management – Chartered Institute of Procurement & Supply 2020	This guidance provides a summary of the good practice and implications on the successful use of category management.
30 Policy Paper Procurement policy note 06/21: taking account of carbon reduction plans in the procurement of major government contracts – Cabinet Office 2021	Sets out procurement requirements for carbon reduction plans as part of suppliers’ bids for government contracts.

Suggested further reading

Reference

- 31 **Policy Paper**
[Procurement policy note 05/19: Tackling Modern Slavery in Government Supply-Chains - Cabinet Office 2019](#)

Use

This note and associated guidance sets out the measures organisations should take to reduce the risk of modern slavery.

Glossary

Accountability

The accountable person is the individual who is ultimately answerable for an activity or decision. This includes 'yes' or 'no' authority and veto power. Only one accountable person can be held to account. An accountable person has to be accountable to someone for something. Accountability cannot be delegated or shared.

The responsible person is the individual who actually undertakes the task: in other words, they manage the action/implementation. Responsibility can be shared. The degree of responsibility is determined by the individual with the accountability.

Asset

Anything tangible or intangible that is owned or controlled with the expectation of present or future benefit.

Asset manager

In the context of Routemap, the asset manager is the organisation (or parts of) responsible for day-to-day operations and maintenance of the asset. The asset manager may be a part of the sponsor or client organisations, or a separate entity. Similarly, the operator and maintainer of the assets may be separate entities.

Assurance

A general term for the confidence that can be derived from objective information over the successful conduct of activities, the efficient and effective design and operation of internal control, compliance with internal and external requirements, and the production of insightful and credible information to support decision-making.

Benefits

In the context of project delivery, benefit is the measurable value or other positive impact resulting from an outcome perceived as an advantage by one or more stakeholders, and which contributes towards one or more objectives.

Capability

In the context of Routemap, capability describes the ability of the sponsor, client, asset manager and market to organise for effective and efficient delivery. It refers to all or part of an organisation, and not the individual.

Category management

Category management is a strategic approach to procurement where organisations segment their spend into areas which contain similar or related products enabling focus opportunities for consolidation and efficiency.

Client

In the context of Routemap, the client is the organisation that is responsible for undertaking the work to fulfil the sponsor's requirements. The client translates the requirements from the sponsor and manages the delivery. The client selects the most appropriate suppliers. In some contexts, the sponsor and client could be from the same organisation.

Client model

The client model refers to how the client structures and resources the project. The model will set out how delivery, transition and operational activities will be split between the client, advisors/partners and supply chain (in-house versus external) to ensure a successful outcome and realisation of the sponsor's goals.

Complexity

In the context of Routemap, project complexity is a measure of the inherent difficulty of delivering a project. This is assessed on factors such as the stability of the wider delivery environment, the level of innovation required, and the number of stakeholders involved.

Contracting model

The contracting model refers to how risk is allocated between the client and suppliers. It should align with each parties' risk appetite, their ability to manage risks and the delivery model.

Delivery model

The delivery model is the form of structural and commercial arrangements to be deployed to meet the sponsor's requirements. The selected model should be the best option from those available, taking into account the capabilities and constraints of the project. For example, the creation of an arm's-length body like High Speed 2 or the formation of a special purpose vehicle as has been used to deliver Thames Tideway Tunnel.

Delivery strategy

The delivery strategy describes how the selected delivery model will be implemented and how it will need to change over time.

Glossary

Environmental, economic and social value

The impact a project has on the environment, economy, and society. This may be global or localised, and may result both from meeting the project's objectives (for example, improved transport links) and from by-products of delivery (for example, job creation). It relates to reducing negative impacts as well as increasing positive impacts, and it is important that value delivered against one category is not at the expense of another (for example, delivering economic development but at significant cost to local biodiversity).

Environmental, social and governance (ESG) criteria

These are key criteria for sustainability reporting, in response to widespread investor and consumer demand. They are also increasingly used to inform investment decision making.

Governance

Governance defines relationships and the distribution of rights and responsibilities among those who work with and in the organisation. It determines the rules and procedures through which the organisation's objectives are set and provides the means of attaining those objectives and monitoring performance.

Market

In the context of Routemap, the market comprises organisations which integrate and compete to deliver goods or services to one or more clients. This includes

- the players, for example, sellers/buyers/partner
- the rules, for example, regulation, legislation
- processes, for example, procurement, delivery
- structure, for example, relationships between buyers, sellers, partners

Outcomes

The result of change, normally affecting real-world behaviour or circumstances. Outcomes are desired when a change is conceived. Outcomes are achieved as a result of the activities undertaken to effect the change; they are the manifestation of part or all of the new state conceived in the target operating model.

Outputs

A specialist product (the tangible or intangible artefact) that is produced, constructed or created as a result of a planned activity and handed over to users.

Requirements

Requirements are the project stakeholders' wants and needs, clearly defined and with acceptance criteria.

Risk

The effect of uncertainty on objectives. Risk is usually expressed in terms of causes, potential events, and their consequences.

- a cause is an element which alone or in combination has the potential to give rise to risk
- an event is an occurrence or change of a set of circumstances and can be something that is expected which does not happen or something that is not expected which does happen.
- the consequences are the outcomes of an event affecting objectives, which can be certain or uncertain, can have positive or negative direct or indirect effects on objectives, can be expressed qualitatively or quantitatively.

Risk appetite

The nature and extent of risks that an organisation is willing to take.

Route to market

The route to market is the approach selected to invite an offer or offers from the supply market. Example routes to market include using existing framework agreements, open competition, restricted competition, direct award and changes to an existing contract.

Sponsor

In the context of Routemap, the sponsor is an organisation that secures the funding, owns the business case and is responsible for specifying the requirements to the client. In some contexts, the sponsor and client could be the same organisations.

Stakeholders

Any individual, group or organisation that can affect or be affected by, or perceive itself to be affected by an initiative (programme, project, activity or risk).

Sustainability

This means making the necessary decisions now to stimulate economic growth, maximise wellbeing and protect the environment, without affecting the ability of future generations to do the same.

Glossary

Target operating model

The target operating model refers to how the asset or change will be funded, owned, operated and maintained once the project has closed.

Transition points

Points at which a project moves from one stage to another. For example, from design to construction.

Value for money

Value for money is a balanced judgment based on the whole life benefit cost ratio, which brings together social costs and benefits, together with significant unquantified deliverables, and unmonetised risks and uncertainties.

UN Sustainable Development Goals (SDGs):

Adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. The 17 SDGs are integrated and recognise that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability.

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