

# CONSTRUCTION SECTOR ACCORD

## Rapid Mobilisation Playbook

A guide to support the acceleration of construction projects

July 2020



**Disclaimer**

The information presented in this playbook is intended for general use only. It should not be construed as legal advice, and should be read in conjunction with any relevant policy, legislation and regulations. While every effort has been made to ensure the accuracy, currency and completeness of this playbook, Ministry of Business, Innovation and Employment (MBIE) cannot accept any liability for the accuracy, currency or completeness of material contained herein. MBIE cannot be held responsible for, and makes no warranties as to: the suitability of the information in this playbook for your specific circumstances; or any actions taken by third parties as a result of you relying on information contained in this playbook.

Released July 2020, version 1.0

ISBN 978-1-99-001939-5 (online)

New Zealand Government

**New Zealand Government Procurement**

PO Box 1473 | Wellington 6140 | New Zealand

[www.procurement.govt.nz](http://www.procurement.govt.nz) | [procurement@mbie.govt.nz](mailto:procurement@mbie.govt.nz)



Unless otherwise indicated for specific items or collections of content, this work is licenced under the Creative Commons Attribution 4.0 International License. In essence, you are free to copy, distribute and adapt the material, as long as you attribute it to Ministry of Business, Innovation and Employment and abide by the other terms of the licence.

The permission to reproduce material in this work does not extend to any material that is identified as being protected by copyright owned by a third party. This includes material on websites you may access via links from, or footnotes to, this work. We cannot grant permission to reproduce such material: you must obtain permission directly from the copyright owner(s).

Please note that this licence does not apply to any logos, emblems, trademarks, photography and imagery in this work. These specific items may not be re-used without express permission. If you wish to reproduce any images in this work, please contact us at:

[info@mbie.govt.nz](mailto:info@mbie.govt.nz).

# Contents

<b>Introduction and overview .....</b>	<b>1</b>
Purpose .....	1
Playbook users .....	1
Procurement Rules and Guidelines .....	2
Developing the Playbook .....	3
Guide to the Playbook structure .....	3
<b>Stage 1: Capability and readiness due diligence .....</b>	<b>4</b>
<b>Stage 2: Prepare a mobilisation plan .....</b>	<b>5</b>
<b>Stage 3: Timeframes to mobilise rapidly .....</b>	<b>6</b>
Adopt a rapid mindset .....	6
Other factors that can impact timeframes .....	6
Example rapid mobilisation timeframes .....	9
<b>Stage 4: Establish project governance, team and assurance .....</b>	<b>10</b>
Get governance right .....	10
Good governance principles .....	11
Governance and team roles .....	11
Typical governance and supporting team structures .....	12
Assurance and reporting .....	13
Funder stage gates and reviews .....	13
Project controls during the mobilisation phase .....	13
<b>Stage 5: Clarify project outcomes, risk and brief .....</b>	<b>14</b>
Reaffirm and clarify your project outcomes .....	14
Reaffirm or identify broader outcomes .....	14
Clarify the risk allocation .....	15
Prepare clear project and supplier briefs .....	16
<b>Stage 6: Select delivery model .....</b>	<b>17</b>
Develop your procurement strategy .....	17
Types of delivery models .....	17
<b>Stage 7: Tender or allocate work .....</b>	<b>20</b>
Tips to go faster .....	20
Partnering between client and supplier .....	22
<b>Stage 8: Prepare contract .....</b>	<b>23</b>
Guiding principles of contract .....	23
Standard terms .....	23
Contract management .....	23
<b>Appendix A. Typical mobilisation milestones .....</b>	<b>24</b>
<b>Appendix B. Rapid mobilisation timeframes for a horizontal sector project .....</b>	<b>26</b>
<b>Appendix C. Rapid mobilisation timeframes for a vertical sector project .....</b>	<b>30</b>
<b>Appendix D. Typical governance requirements for project complexity and scale .....</b>	<b>35</b>
<b>Appendix E. Example Governance Structures .....</b>	<b>36</b>
<b>Appendix F. Example risk allocation table .....</b>	<b>38</b>
<b>Appendix G. Project brief horizontal exemplar .....</b>	<b>39</b>
<b>Appendix H. Project brief vertical exemplar .....</b>	<b>41</b>
<b>Appendix I. Delivery model descriptions &amp; conditions of use .....</b>	<b>43</b>
<b>Appendix J. Payment Models .....</b>	<b>46</b>

# Introduction and overview

## Purpose

The purpose of this Rapid Mobilisation Playbook (the Playbook) is to help you, as the project owner, to run your projects in a fast, meaningful and safe way.

It identifies areas where you can save time to get projects to the start line faster, and how to ensure your project is set up for success. It's key that you and your team adopt an urgent mindset. You may need to challenge the way things are usually done and ask whether they could be done better and more quickly. It's important the senior leaders in your organisation are supportive and share the rapid mindset.

Based on agency and industry experience and feedback, this playbook has been designed to help you move in a way that is:

- **Fast** — removing barriers to get to the construction start line quickly
- **Meaningful** — protecting jobs, supporting affected workers to transition into the sector, supporting skills development, retaining existing skills and building new skills in the sector, investing wisely for the future and supporting the goals of the [Construction Sector Accord](#)
- **Safe** — protecting workers' safety, safeguarding public funds, and enabling healthy markets in the medium and longer term.

This Playbook has been developed to support economic and social recovery from COVID-19, in a way that also supports the Construction Sector Accord's goals to transform the construction sector for the better.

Construction and infrastructure projects have the potential to create jobs, develop skills, unlock businesses' potential, support communities, enhance our built environment and help set New Zealand up for a sustainable and more inclusive future.

## Playbook users

This Rapid Mobilisation Playbook has been prepared to help bring small to medium size projects to the construction start line. It can be used by:

- Project owners — the team responsible for mobilising the project
- Senior leaders in governance and decision making roles
- Internal and external funders

The Playbook can be used by any government entity undertaking construction or infrastructure projects during this time of economic and social recovery. It can also be an effective blueprint for private sector projects — where although Government Procurement Rules might not apply, the Playbook reflects good practice in due diligence, project delivery, and the achievement of economic, social and environmental outcomes.

This is a guide, rather than a manual. Every project and project owner is different and has unique needs and considerations. Final decisions will rely on expert judgement and you should also be guided by suitably qualified and experienced people.

If you haven't done a project of a similar type or scale before, or you aren't comfortable pursuing rapid timeframes, ask for help or get external assistance to identify and actively manage risks. Contact the Ministry of Business, Innovation and Employment, New Zealand Government Procurement ([NZGP](#)) group. For larger projects it is a requirement ([Procurement Rule 64](#)) for public service agencies to consult with [Infracom](#).

This Playbook will support projects that already have a completed business case.

## **The Construction Sector Accord**

The Construction Sector Accord was established to help lift industry performance and resolve long-standing issues in the industry, and a Transformation Plan was underway when Covid-19 hit. The upcoming wave of government investment in construction has the potential to fast-forward transformation and more quickly embed Accord values and behaviours in the sector.

Long, costly procurement processes, combative relationships, the inappropriate transfer of risk, significant output of carbon and other unsustainable practices, narrow profit margins — these issues already affecting the sector could be exacerbated if fast-tracked government projects are not managed carefully in the coming year.

This Playbook sets a baseline/standard for how projects should be delivered in this new environment. It will continue to be updated with new learnings from the Accord and its partners.

The Accord sets out four [Guiding Principles](#), that participants in a construction project are encouraged to apply:

1. Build trusting relationships
2. Be bold
3. Value your people
4. Act with collective responsibility

## **Partnering between client and supplier**

These Guiding Principles are supported by the Accord's [Contract Partnering Agreement](#), which sets out how parties should work together and put the Accord principles into practice. The principles and outcomes in the agreement are:

- Be fair and transparent on the value and allocation of risk
- Set and implement payment terms with empathy and respect
- Foster careers, job security, diversity, and better outcomes for Māori
- Prioritise health, safety and wellbeing, including mental health
- Prioritise environmental sustainability, through sustainable construction practices and sustainable buildings and infrastructure.

The recommended actions in the agreement are aligned with the steps and recommendations in this Playbook. You are encouraged to adopt the principles in the agreement and should consider using the agreement template with your suppliers and contractors.

## **Procurement Rules and Guidelines**

This Playbook aligns with both the [Government Procurement Rules](#) (the Rules) and the [construction procurement guidelines](#) (the Guidelines), and follows general good practice.

However, it places emphasis on moving in a fast, meaningful and safe manner. You will see throughout this Playbook that there are many references to other content such as the Guidelines, which provide more in-depth guidance around specific phases of the construction procurement process.

This Playbook provides practical guidance on how long the stages in the mobilisation process should take, the best practice governance arrangements that you should put in place to protect your process, which procurement and delivery models to consider (in line with the Guidelines), and when, why, and what the trade-offs and risk/management implications are.

Agencies subject to the Government Procurement Rules must follow the Rules. [Contact NZGP](#) for help in understanding the Rules and how they can be applied to have a positive impact on your project.



## Developing the Playbook

During the COVID-19 lockdown, the Accord created a forum of industry and government leaders to identify the barriers that needed to be removed to fast-track projects once the industry could fully restart. The Forum developed a report identifying existing examples of rapid mobilisation in New Zealand, and it concluded existing frameworks such as the Procurement Rules did not need to change in order to rapidly mobilise construction projects.

However, it did identify that project owners need support — including information on good practice and how to best speed up, and on how to choose the right delivery models, procurement strategies and forms of contract for the size and complexity of the project. Project owners also need help to work out whether they have the capability to deliver the project in front of them. This Playbook is designed to help with all of these things.

This resource is the result of a collaborative project involving the Construction Sector Accord, New Zealand Government Procurement, and individuals and organisations from across the sector. Engineering, design and advisory company Aurecon Ltd led the development of the content to support the sector through this challenging time.

## Guide to the Playbook structure






The Playbook is organised around the major stages of a project's mobilisation phase:

- **Stage 1: Capability and readiness due diligence** - Assess your agency's readiness and capability to rapidly mobilise the project and provide your funders (internal or external) with the information they need to make their funding decision.
- **Stage 2: Prepare a mobilisation plan** – Create a plan outlining each step required to reach your rapid mobilisation goal.
- **Stage 3: Timeframes to mobilise rapidly** - Use the indicative timeframes and guidance in this Playbook to create a rapid mobilisation timeline for your project. Carefully consider your ability to meet timeframes and whether you can realistically meet your overall programme target.
- **Stage 4: Establish project governance, team and assurance** – Set your project up to succeed by starting out with clear, fit-for-purpose governance that supports rapid mobilisation and helps you move in a fast, meaningful and safe way. Ensure you have the right team to support your project.
- **Stage 5: Clarify project outcomes, risk and brief** – Establish clearly articulated project outcomes and risk allocations. This will support effective decision making throughout the mobilisation phase.
- **Stage 6: Select delivery model** – Develop a procurement strategy and a delivery model that meet your project requirements and your agency's experience and capability.
- **Stage 7: Tender or allocate work** – Tender or allocate work in a fast, meaningful and safe way. You are likely to need to allocate professional services and construction packages at different stages in your mobilisation.
- **Stage 8: Prepare contract** – Select and prepare a contract and payment model that suits your project.

A range of supporting tools and websites is provided at each stage in this Playbook. You just use the mobilisation phase checklist provided on the [Playbook webpage](#) to track where you are in the process.

You should use the section of the Playbook that is most relevant to your current project stage.

# Stage 1: Capability and readiness due diligence

	<b>Purpose:</b> Assess your agency's readiness and capability to rapidly mobilise the project and provide your funders (internal or external) with the information that they need to make their funding decision.
	<b>People you will need to engage:</b> Your procurement and delivery teams, your senior leaders and funders.
	<b>Challenges you may face:</b> You and your agency must be honest about your level of readiness and capability, as decisions made now will affect successes and challenges later in the project. This is a good opportunity to reflect on what help you may need and to find out what help is available.
	<b>Time it may take you to complete this activity:</b> Within 1 week.
	<b>Tip for senior leaders:</b> Create or enable an organisational culture of urgency, challenge your current approach and collaborate with partners, including contractors. Enable your project team to deliver efficiently and ensure they are supported with sufficient in-house or external resources.

Prepare supporting information and an assessment of readiness and capability for your funders. If the project is internally funded (partially or fully), you should still do a due diligence assessment of your readiness and capability.

You can use the one-page project summary template available on the [Playbook webpage](#) to provide a snapshot of the project for your funders to assist their assessment and preparation of a funding agreement (if required).

To assess your capability, you should consider whether you have successfully run a project of this nature before, as well as whether your organisation has the track record to deliver the project. You should honestly consider whether you have the necessary internal resources (skilled and experienced personnel) to be able to mobilise rapidly.





Be honest as you assess your capability — if you haven't done a project of this size before, if you haven't been through a rapid mobilisation process before, or if you need more capability and experience in your team – then ask for help and advice. This will be key to your success.

Further guidance on this stage is available in the construction procurement guidelines.

[Due diligence for construction procurement](#)

[Matching capability to complexity](#)

## Stage 2: Prepare a mobilisation plan





	<b>Purpose:</b> Create a plan outlining each step required to reach your rapid mobilisation goal.
	<b>People you will need to engage:</b> Your procurement and project delivery teams, your senior leaders, and external advisors if needed.
	<b>Challenges you may face:</b> You will need to gather information to support your planning. The plan may need to be updated as your information improves.
	<b>Time it may take you to complete this activity:</b> Within 1 week.
	<b>Tips for senior leaders:</b> Understand how the programme and controls in the mobilisation plan link into your governance, decision making processes, and timing.

The mobilisation plan is prepared early on and summarises how you will successfully reach the project start date. It includes:

- **Steps** and milestones required to get to the start line. If your project is in procurement or in construction you may have already reached some milestones.  
A table of typical mobilisations milestones is available in [Appendix A](#). Not all milestones apply to all projects.
- A **programme** based on the milestones and showing expected timing and dates for each step. The programme should identify opportunities to go faster by shortening steps or by running some in parallel. It is important to consider the associated risks of taking these opportunities. For example, rushing design may lead to construction drawings that are not fit for purpose, which could result in contract variations or contractor disputes.
- **Assumptions and constraints** that might affect your milestones and threaten your start date and outcomes.
- **Resources required** to get underway, and whether you have these internally or need external input. Consider leveraging or developing existing staff, through shadowing or mentoring.
- **Mobilisation phase controls** covering reporting requirements and timings. These focus on mobilisation milestones and are not as comprehensive as project controls in the delivery phase, which have a greater financial and contractual focus.
- Streamlined internal **decision making and approvals pathways**. These are designed to ensure a smooth path to rapid mobilisation that is not delayed at decision points.



## Stage 3: Timeframes to mobilise rapidly

	<b>Purpose:</b> Create a rapid mobilisation timeline for your project. Carefully consider your ability to meet timeframes and whether you can realistically meet your overall programme target.
	<b>People you will need to engage:</b> Your agency's senior leadership, your project team, external stakeholders, and iwi. You may need external assistance to support you.
	<b>Challenges you may face:</b> Every project is different, and you need to allow for possible variation in the timeframes depending on the characteristics of your project. Be prepared to challenge your business as usual approaches and timeframes.
	<b>Tips for senior leaders:</b> Timeframes are dependent on internal approvals which can delay the project overall. As a senior leader, be aware of what and when decisions are required and be prepared to provide quick responses or feedback to the project team.

The timeframes provided in this Playbook indicate what can be achieved for each mobilisation stage of fast moving horizontal and vertical projects. The comments and guidance provide tips on how to achieve the timeframes and on what can slow you down.

Example timeframes for small/medium horizontal and vertical projects are in [Appendix B](#) and [Appendix C](#).

If you are subject to the Government Procurement Rules you should follow the minimum time periods set out in [Rules 30 – 34](#).

Review the timeframes as part of preparing your mobilisation plan and realistically assess whether you can achieve mobilisation within your overall target timeframe.

### Adopt a rapid mindset

To achieve the timeframes in your plan your team will need a rapid mobilisation mindset with a shared sense of urgency. Everyone must be focused and clearly understand your timeframes and the mobilisation plan. Team members should be willing to challenge business as usual processes to ask how you can go faster, but should also be aware of the potential risks in doing so.

Your plan should include getting senior leaders to prioritise approval processes for your project. Many project stages are likely to be dependent on internal approvals and, in business-as-usual projects, delayed approvals often affect the overall project timeline.

It is important to have agreement and buy-in from senior decision makers to ensure that they will be available and willing to give quick approvals, and for you to be prepared at each approval stage with the information that approvers need.

### Other factors that can impact timeframes

#### Readiness and resourcing

Time requirements for many stages can be affected by several factors:

- how ready the project is – how much pre-work has been done, for example in design or consenting, or more broadly in setting up supplier panels
- how complex the project is – whether it includes bespoke design, requires consultation, or contains unknowns or uncertainties
- how much resource your team has available in-house or externally – team resource is particularly important if you plan to run stages in parallel and you should be aware of the risk if you don't have sufficient resource available.

## Parallel working and early contractor engagement

Some stages can be done in parallel with other stages to save time, while others must be run in sequence (such as the tendering process). Statutory processes – such as consenting – can't be hastened and may dictate some project timings. Opportunities to run parts of the process earlier or in parallel are shown below.

An important example of parallel working is early contractor engagement (also known as early contractor involvement or ECI), where contractors are engaged earlier in the project so they can provide input into its design and preparation. This is a more collaborative approach and requires a partnering mindset on both sides.

Early contractor engagement can shorten the mobilisation phase by reducing the number of sequential stages (such as cost estimates or contractor procurement) and the delivery phase – for example by pre-preparing management plans in parallel with design and consenting processes and by providing a design that is better tailored to suit the builder. Early engagement can also result in more efficient management of the time contractors need to supply information during the procurement process. It may be possible to use a shorter, one-step process to select the contractor.

However, it is important that the commercial and behavioural aspects of early contractor engagement are managed well. The terms of the contractor's early input – including remuneration – must be clearly stated. Separable portions can be used as a tool to manage performance for subsequent stages. ECI can be more expensive to manage and can cause delays if agreement cannot be reached before the construction stage.

If you haven't used early contractor engagement before you should seek advice from someone who has. Further [guidance on ECI](#) is available in the construction procurement guidelines.

## Helping design go faster

Design timeframes are very dependent on design complexity, the extent of end-user consultation, and approval gates. To fast-track a project through the design stage, you could allow the design team to keep working through the approval gates while you review the deliverables. This approach requires you to accept the risk of possible design rework if your review causes changes, however this should be balanced against the opportunity to move at pace.

Breaking the consenting, design and tendering processes into stages can also speed up the project. For example, you could get part way through your design and then complete an early works and foundations consent and tender package. This could allow you to get a contractor on site to progress the works while the design is being completed.

Design time can be shortened if standard or existing designs are available and fit-for-purpose, especially where they are owned by government and transferable between organisations.

## Engagement with stakeholders and key external parties

Stakeholder engagement is an important part of many projects. You should identify the stakeholder groups that are most critical to the project's success and that most effectively represent the community in which the project will be delivered. Then engage with those groups early and explain the plan and importance of moving quickly. Resources to assist the Crown to effectively and meaningfully engage with Māori are [provided by Te Arawhiti](#). Often, the engagement process is made smoother if your senior leaders are available to stakeholders early in the process.

Many agencies prefer to lead the engagement process themselves (rather than outsource) because it gives them greater control and allows direct interactions with senior leaders. It also helps to have experienced design consultants involved in the process and you should choose your consultants based on their understanding of stakeholder engagement as well as the design needs.

Another way to make the process run smoothly is to ensure that your people know there will be stakeholder engagement and are prepared for it.

Engaging with the market before the tender process begins means tenderers can plan their resources and prepare for the tender in advance. However, your engagement must be done fairly so that no potential suppliers are given preferential access to information or other unfair advantage.

It can also be very helpful for council staff if you inform them of your upcoming consent application and explore pre-application meetings and other possible ways the process can be streamlined.

## **Collaborating with other organisations**

You should explore opportunities to draw on learnings, expertise and advice from other agencies that have completed similar processes. Use existing designs or design components and consider cooperative approaches to projects within a similar geographic area. This can lead to delivery efficiencies and help you overcome resource constraints or capability shortages within your organisation. Collaboration is also a good way to build capability across organisations over the longer term.

## Example rapid mobilisation timeframes

This chart at Figure 1 provides an example of how typical mobilisation stages can run earlier or in parallel if a rapid mindset is adopted (as indicated by the hatching). Some stages will vary depending on complexity and readiness (indicated by ranges). An example of early contractor engagement is included, to show what might be possible. This is an example only and early engagement might affect the design and consenting pathways.

Detail and guidance on each stages timeframes are given in [Appendix B](#). Example timeframes for vertical project are available in [Appendix C](#).

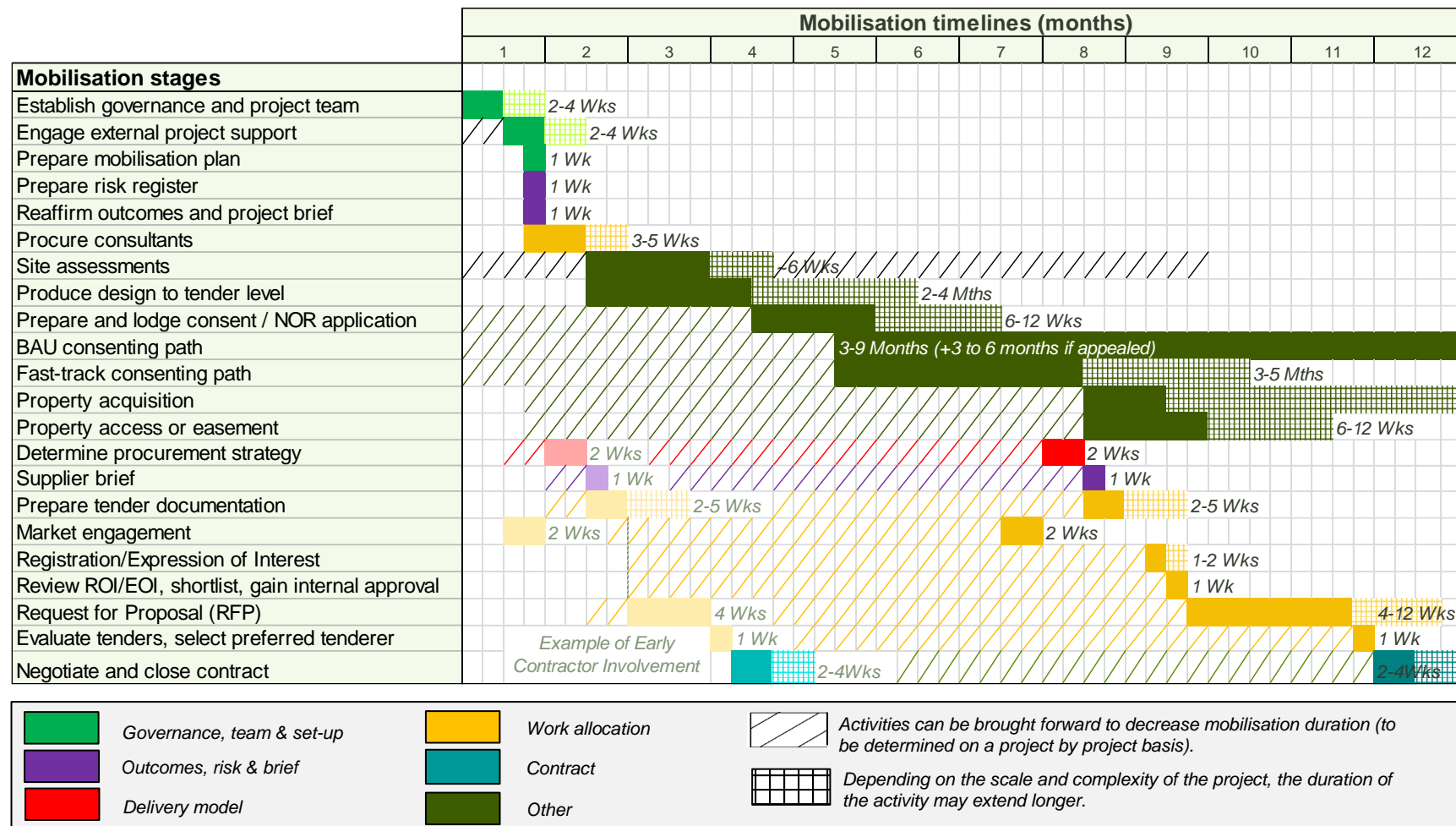







Figure 1 - Example Mobilisation timeframes - Gantt chart

## Stage 4: Establish project governance, team and assurance

	<b>Purpose:</b> Set your project up to succeed by starting out with clear, fit-for-purpose governance that supports rapid mobilisation and helps you move in a fast, meaningful and safe way. Ensure you have the right team to support your project.
	People you will need to engage: Your senior leadership, managers (if you need to bring their staff into your team), external advisors and external resources as needed.
	<b>Challenges you may face:</b> Busy senior leaders must prioritise your project. Engage with them as early as possible.
	<b>Time it may take you to complete this activity:</b> 2 – 4 weeks depending on whether team resources are available internally and the readiness of senior management to support your project.
	<p><b>Tips for senior leaders:</b> Good governance is essential to success. Establish a clear governance process that meets the specific needs of the project. Involve the Chief Executive and Chief Financial Officer in the governance processes.</p> <p>Ensure that the governance team understands the key elements of the rapid mobilisation and their roles in helping the project to go fast.</p> <p>Appoint a dedicated, experienced project owner who you will hold responsible for mobilising the project. This person must have experience in delivering complex projects.</p>

Good governance is critical to project success regardless of scale – especially for rapid mobilisations. Your project's success will depend on your ability to facilitate and provide good governance, assurance and reporting, particularly when project mobilisation is being accelerated. Going fast can introduce additional risks, and these must be managed through governance oversight.

The governance arrangements of the mobilisation phase will often transition into the delivery (construction) phase. However, for large and complex projects you may need to revisit governance for the delivery phase.

### Get governance right

The Infrastructure Commission has published [guidance on governance for major projects](#) which identifies governance as a key enabler for successful projects. The report also includes useful examples and lessons learnt that can also apply to smaller projects.

One of the main causes of governance issues in infrastructure projects is insufficient understanding of project governance and accountability. This leads to:

- lack of organisational commitment to appropriate project governance
- confusion between project and organisational decision-making structures, hindering project success
- governance groups being used as mechanisms for stakeholder engagement, rather than for effective decision making, and
- a lack of accountability by a senior responsible officer with sufficient time to dedicate to the role.

Good project governance relies on:

- clearly communicated expectations
- strong leadership and governance skills
- a good understanding of the investment business case and project success criteria
- effective stakeholder engagement

- the team having the necessary skills and expertise relevant to the project
- transparency in reporting and assurance processes
- good risk management, and
- good control over conflicts of interest.

## Good governance principles

The principles of good governance apply to all projects and should be taken into account when developing your governance structure:

- The governance structure should be in line with your project's complexity, and appropriate levels of authority and accountability, so that key decisions can be made without introducing inefficiencies.
- Effective accountability requires clear, unambiguous delineation of roles and responsibilities, and clarity on the interaction and relationships between each of the project roles.
- Appropriate internal and external monitoring systems should be in place with regular reporting processes to promote transparency in the decision making and on the overall status of your project
- Use [stage gates](#) to consider the status of the project objectively.
- For complex projects, you should engage a group of independent experts to provide advice and insight to support you in making informed and risk-based decisions.
- Behaviour matters more than process – people in governance roles need to act decisively, invest in relationships, challenge objectivity of delivery confidence, and apply lessons.

Quality and fit-for-purpose governance structures are best achieved by co-developing the structures with people who will use and rely on them.

Guidance on [construction project governance](#) is also available in the construction procurement guidelines.

## Governance and team roles

Governance and team structures and roles should be established early in the mobilisation phase. The number and types of roles you need will depend on the complexity of your project. Small, low complexity projects do not need to be burdened by complex governance structures. The governance you employ should be fit-for-purpose to manage the added risks of going fast.

Governance roles need minimum and agreed key responsibilities to ensure accountability and transparency. Your governance structure must clearly show who has decision rights and who has approval authority at each mobilisation milestone.

A responsible, accountable, supporting, consulted and informed (RASCI) matrix approach is a useful way to establish role clarity and to test that all required roles are provided. This should make it very clear who:

- is Accountable for achieving the mobilisation goals (the sponsor, or senior responsible officer). This role will connect through the funding agreement to the funder and should be a senior executive.
- is Responsible for performing the mobilisation tasks (project owner or project manager);
- will provide Support (such as internal team or consultants); and
- will be **C**onsulted and **I**nformed

The table below summarises typical project governance and project team roles and responsibilities. Depending on the scale and complexity of your project, similar key roles and responsibilities should be considered when forming your team.



Role	Key Responsibilities
<b>Project sponsor / project owner</b>	<ul style="list-style-type: none"> <li>Provides leadership, ensures the delivery of the business case objectives</li> <li>Is the person accountable for the project's success</li> <li>Ensures appropriate project assurance processes</li> <li>Link between the project governance and the strategic level decision-making groups (such as council, or board of directors)</li> <li>Escalation point for issues and/or decisions that are outside of the steering committee or project director / manager responsibilities<sup>1</sup></li> <li>Not involved on a day-to-day basis</li> </ul>
<b>Steering committee chair</b>	<ul style="list-style-type: none"> <li>Normally will be the project sponsor, but when delegated there must be clarity in the delegation of authority and delimiting the responsibilities,</li> </ul>
<b>Steering committee / project governance board</b>	<ul style="list-style-type: none"> <li>Provide strategic direction, monitor project performance and make key decisions and recommendations to the project sponsor/steering committee chair</li> <li>Ensures the successful delivery of the project by making sure that appropriate project management practices are in place</li> <li>Remove obstructions to ensure that the objectives and timeframes can be met</li> <li>Members require robust construction related expertise but should include a variety of skillsets and backgrounds (technical, legal, financial, quality etc)</li> </ul>
<b>Project director / project manager</b>	<ul style="list-style-type: none"> <li>Leads and manages the project team on a day-to-day basis reporting to steering committee / project governance board</li> <li>Delivers input to project governance reporting and gives updates at request of project sponsor/owner</li> <li>Responsible for completing the activities required for delivering the project objectives against the approved project scope.</li> <li>Manages and controls progress and budget, and decides on the structure, resources and skills necessary to deliver the project within the agreed budget, schedule and quality</li> <li>Responsible for managing key relationships</li> </ul>
<b>Stakeholder advisory group</b>	<ul style="list-style-type: none"> <li>Liaise with the different stakeholder groups identified</li> <li>Provide input to the project governance board and/or the project director/manager</li> <li>Establish and manage communication processes between the project and the stakeholders' groups</li> <li>Can be internal or external</li> </ul>
<b>Consultants (technical support)</b>	<ul style="list-style-type: none"> <li>Provide expert support and input: technical, contractual, environmental, etc.</li> <li>Can be engaged at different levels: steering committee, project director/manager, etc.</li> </ul>
<b>Independent reviewer / probity auditor</b>	<ul style="list-style-type: none"> <li>Provides independent project monitoring and assurance</li> <li>External body</li> </ul>

The governance structure and roles for your project should be based on your assessment of the complexities and risks the project could face.

Accelerated projects typically require a greater level of governance oversight. For accelerated projects of low-medium complexity it may be appropriate to have a streamlined governance structure combined with more regular reporting and oversight.

## Typical governance and supporting team structures

Examples of typical governance and supporting team organisational structures are shown in the organisational charts at [Appendix E](#). The core structure is common across projects. However, complex

<sup>1</sup> <https://www.pmi.org/learning/library/importance-of-project-sponsorship-9946>

projects require increased governance attention and capability and greater interaction with external stakeholders and technical support. Low complexity projects can be successfully delivered with a simplified structure and reporting lines, but good governance principles still apply.

As the project owner, you should select an outline structure based on the complexity and needs of your project and tailor the roles accordingly.

Expert external advice and assistance is available from NZGP or the NZ Infrastructure Commission (Infracom). This provides you with access to people with experience in major project delivery and accelerated project delivery.

A project team and governance template can be found on the [Playbook webpage](#).

## Assurance and reporting

Project governance is supported and enabled by clear and timely reporting. Regular reporting (eg monthly) to the governance group will ensure they have sufficient visibility of project status and risks to perform their function. Reports should be concise and focus on the issues and be supported by verbal updates. A standard reporting template can assist.

If your project is externally funded, streamlined and efficient reporting to the funder will be required at stage gate milestones and at review points during project delivery.

Reporting should be concise and use pro-forma templates.

## Funder stage gates and reviews

Stage gates provide you with assurance that the project is meeting the requirements of your funding agreement. Reporting should reflect this requirement without imposing a reporting or approval burden on either party.

Reporting requirements are based on the key conditions of your funding agreement. This agreement should clearly spell out reporting requirements and identify that stage gates are hold points for approval to proceed for funds to be released.

To keep it simple, you should familiarise yourself with two stage gates located at critical mobilisation milestones:

- stage gate 1: prior to initiating the work allocation / tender process, and
- stage gate 2: prior to contract execution






During the delivery phase an external funder may reserve the right to review progress against the project programme. Metrics should be identified, such as earned value or task progress, to enable early identification of potential issues. It is important that the funder is able to review progress early so that if issues are found there is the greatest opportunity to remedy them.

## Project controls during the mobilisation phase

Controls at the mobilisation phase are simpler than for the delivery phase, because fewer financial and contract controls are required. The following controls are recommended:

- Quality management plan for required standards, and design and documentation review stages.
- Risk management plan – focused on risk register update requirements – and risk management and mitigation, including dependencies.
- Issues management including a register of issues.
- Project tolerance triggers for reporting to internal and central governance on scope, budget, programme and risk changes.

## Stage 5: Clarify project outcomes, risk and brief

	<b>Purpose: Establish clearly articulated project outcomes and risk allocations. This will support effective decision making throughout the mobilisation phase.</b>
	<b>People you will need to engage:</b> Ensure you understand the outcomes that your agency seeks to achieve through the project (refer to the business case or investment case).
	<b>Challenges you may face:</b> Make sure you talk to the right people to get a clear and well-defined definition of what the project is trying to achieve. The ultimate outcome is not always the same as what the project is building (such as an asset).
	<b>Time it may take you to complete this activity:</b> 1 week
	<b>Tips for senior leaders:</b> Make sure your team is clear on what it is trying to achieve with the project. Clarity here will flow through to clarity for tenderers and in the contract.

### Reaffirm and clarify your project outcomes

The project outcomes should be reaffirmed and clarified from the business case. This is an important step for project success.

Take a disciplined approach to ensuring that you and your project sponsor (and governance) are clear on what you want to achieve from the project. These desired outcomes will underpin the project brief and scope of work to be taken through procurement and contracted for. You must ensure that the desired outcomes and the project brief are achievable within your available budget.

The project outcomes should take into account stakeholders' concerns and needs. You should be clear on who the stakeholders are, including those affected by the project as well as the project's beneficiaries and customers; the level of engagement and consultation required, and how stakeholders will be engaged and consulted with to provide input to the outcomes selection.

### Reaffirm or identify broader outcomes

Broader outcomes are the economic, social, cultural and environmental outcomes that can be achieved through the project.

Achieving broader outcomes isn't just about what is procured, but how it is procured, who it is procured from, as well as how it is delivered.

You should identify broader outcomes that you might be able to achieve, such as:

- **Jobs created through the project** – rapid mobilisation helps get people into jobs sooner, throughout the construction process. You might seek an outcome around creating jobs in a particular location or trade during the project. Specifying this in the procurement process gives bidders the opportunity to demonstrate how they will create jobs through this project.
- **Skills and training** – this may be a minimum number of apprentices to be employed on the project or career development opportunities for workers, with a focus on Māori and Pasifika and young people. By building in skills as an outcome, you can give back to the sector by helping its future development. Having an objective to increase skills can help motivate suppliers to invest in workers throughout the supply chain. It also provides opportunities for people to grow as individuals across the sector.
- **Building size and capability in small and medium sized businesses, including regional businesses** – you should consider how your project could support smaller businesses and help them to grow. You could remove barriers to participation in your project for smaller businesses, or

you could encourage your contractors to bring in smaller suppliers who can then develop their business capability for the longer term.

- **Health and wellbeing of the workforce** – as the project owner you have the responsibility and an opportunity to support the safety and wellbeing of workers throughout the delivery of the project. We want workers to get home safely and be able to contribute to their communities. This culture of safety and security can be enabled from the top of the supply chain.
- **Environmental outcomes such as waste reduction, water conservation and reuse, and emissions reductions during construction** - you can reduce waste and impact on the environment through your supply chain objectives and project delivery, as well as in how you plan for and then design your asset. Specify methods that reduce waste and impact on the environment, for example by reducing the amount of carbon being produced. Less waste often means lower costs.

Broader outcomes can have a long-term focus so you may need to encourage contractors to invest at the outset and over time. You can enable this by providing certainty of work (tied to performance) and partnering with educational and community-based providers or government programmes.

Broader outcomes sometimes result in additional cost to the project, and if this occurs the case for investing in these outcomes should be addressed in the business case.

You can encourage growth in jobs and use of smaller businesses by the way you procure goods and services, as well as by working with prime contractors to embed your desired outcomes in their supply chains.

You should also make sure that worker health and safety is a key outcome of the way projects are run, both with primary providers and throughout the supply chain. Employment New Zealand provide guidance on [practical steps to identify and mitigate labour rights issues in your supply chain](#).

By focusing on reducing waste or emissions you can reduce the amount you spend on materials and also save through effectiveness of effort.

Guidance material on [broader outcomes](#) is available from NZGP, [Infracom](#) and others.

### **Beacon Project: Watercare – partnering for carbon reduction**

New Zealand's largest water and wastewater company Watercare is working with its construction partners to build better infrastructure using their innovative 'Enterprise Model'. The model has a combined focus on reducing carbon emissions and construction costs whilst also improving health and safety and wellbeing.

You can read more about the Beacon project on the [Construction Accord website](#)

## **Clarify the risk allocation**

Clarity of risk allocation is essential to successful procurement, contracting and project delivery. The golden rule is that risks should be allocated to the party who is best able to manage them:

- Risks within control of the contractor should be transferred to the contractor.
- Risks may be better retained by you where it is unreasonable or too costly for the contractor to accept the risk.
- Some risks will not fall clearly into either of these categories and should be shared between the parties.
- Where risks are shared it is important that both parties understand what the sharing means and how the risks will be handled in practice.

In many cases, the allocation of risk to the contractor relies on them having access to sufficient information to assess the risk, plan to manage or mitigate the risk, and to price for the risk. To support this, important activities for risk assessment and information gathering include site investigations and tender design development.

The proposed risk allocation should be clearly signalled to tenderers from the start of the work allocation or tender process. The agreed allocation will be incorporated into the contract. Legal expertise (in-house or external) should be engaged to review and prepare contracts that reflect the risk allocation. However, your legal advisors may favour ensuring that the 'other' party is allocated the majority of the risk, therefore they should be instructed to ensure that risks are allocated fairly in the contract.

Different delivery and contracting models can have different risk allocations. The allocation depends on how the model allows the risk to be managed and mitigated, including the level of flexibility and control over certain risk related items (such as design) that the model grants to the contractor.

An example of a risk allocation table is provided in [Appendix F](#). The allocation in this table is purely indicative and your risk allocation should be tailored to your particular project and delivery model. [Risk management guidance](#) is available in the construction procurement guidelines.

## **Prepare clear project and supplier briefs**

Project outcomes, including broader outcomes and risk allocation, should be clearly articulated in your project brief document.



This will form the basis of your tender material and supplier brief (contract requirements) once the tender design is available. This will provide clarity to the market on what you are seeking, enable more accurate and comprehensive tender pricing, and set the project up for clear allocation of risk and responsibility.

A benefit of clear project and supplier briefs is avoiding ambiguity about your expectations of suppliers, about who is responsible for doing what, and who holds each risk. Often, contract variations and disputes during delivery arise because these things weren't made clear at the procurement and contracting stage.

Early engagement of the design team (internal design expertise or professional services support) will help to define a set of user requirements or staging of works or early works.

The [Playbook webpage](#) contains a project brief template and examples of briefs in both horizontal and vertical infrastructure projects are available at [Appendix G](#) and [Appendix H](#).

## Stage 6: Select delivery model

	<b>Purpose: Develop a procurement strategy and a delivery model that meet your project requirements and your agency's experience and capability.</b>
	<b>People you will need to engage:</b> Your internal procurement team, external advisors and internal approvers.
	<b>Challenges you may face:</b> There may be existing delivery model preferences within your agency. Carefully consider which model suits your capability and experience.
	<b>Time it may take you to complete this activity:</b> 2 weeks
	<b>Tips for senior leaders:</b> Make sure you understand the chosen delivery model, why it was chosen, what the risks are, and how it complements the procurement strategy.

### Develop your procurement strategy

The procurement strategy determines the process for considering and deciding the most appropriate delivery model and approach to market for a specific project. The procurement strategy should be documented, clearly demonstrating how you have evaluated the available options and arrived at a best-fit solution.

#### Guidance on developing your construction procurement strategy.

In developing your procurement strategy, you need to consider which delivery model is most appropriate. Summaries of typical delivery models and when they are appropriate are set out below. Further guidance is available on each model in the construction procurement guidelines.

### Types of delivery models

The range of delivery model options includes:

- Traditional (build-only)
- Design and build / construct
- Direct managed
- Management contracting
- Early contractor involvement<sup>2</sup>
- Alliance

Not all delivery models suit every project or agency<sup>3</sup>. The tables below indicate the range of project values that each delivery model typically suits and the breadth of activities that are contracted under each model.

When selecting a delivery model, you should carefully consider the nature and risk profile of your project, its scale and complexity, and your agency's experience with particular models.

Summary descriptions of each delivery model and when they are suited to being used are available in [Appendix I.](#)

<sup>2</sup> ECI is a timing of engagement rather than a delivery model, however, can be merged with a delivery model to engage a contractor early if required.

<sup>3</sup> Public Private Partnership (PPP) is not included in this Playbook because this delivery model is suited to large scale projects and requires significant expertise and lead time to procure. It is shown in the delivery model tables to illustrate this. Further information on PPP is available from [Infracom.](#)




## Delivery model appropriateness for use based on project value


Figure 2 represents a matrix showing the type of delivery model(s) which should be considered for projects of increasing capital cost.

Figure 2 - delivery model appropriateness based on value

		Project value (\$m)								
		<5	5-10	10-20	20-30	30-50	50-100	100-200	200-500	>500
Delivery model	Traditional (build only)									
	Design and build									
	Direct managed									
	Management contracting									
	Early Contractor Involvement <sup>2</sup> (ECI)									
	Alliance									

### KEY:

 Delivery model can be considered for the represented project value.

 Delivery model should not be considered for the represented project value.

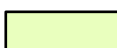
### Delivery model breadth of coverage across project stages

Figure 3 sets out key accountabilities in each stage of the project – project owner, shared or contractor. Depending where the project is in its lifecycle some options are unlikely to be appropriate for the project.

Figure 3 - delivery model breadth of coverage across stages

		Project stage						
		Investment case	Funding acquisition	Property acquisition	Concept design	Detailed design	Consent/RMA/ approvals	Build
Delivery model	Traditional (build only)							
	Design and build							
	Direct managed							
	Management contracting							
	Early Contractor Involvement (ECI)							
	Alliance							

#### KEY



Accountability lies with the Contractor








Accountability shared between Project Owner & 3<sup>rd</sup> Party Provider



Accountability lies with the Project Owner

## Stage 7: Tender or allocate work

	<b>Purpose:</b> Tender or allocate work in a fast, meaningful, and safe way. You are likely to need to allocate professional services and delivery (construction) packages at different stages in your mobilisation.
	<b>People you will need to engage:</b> You should engage your market (suppliers) early in the process and throughout; talk to your internal procurement team and ask for external assistance if you need it.
	<b>Challenges you may face:</b> You may face a tension between engaging a supplier quickly with some remaining loosely defined terms; and taking more time to engage on more defined terms.
	<b>Time it may take you to complete this activity:</b> 1 – 6 weeks for professional services, depending on how much price certainty you request; 2 – 4 months for delivery depending on complexity and scale
	<p><b>Tips for senior leaders:</b> Make sure your team engages with the market early and sufficiently to gauge interest, ensure tenderers are prepared, and that market feedback has been taken into consideration.</p> <p>Ensure you understand your role in the decision making process.</p> <p>Challenge your team on their traditional tender process.</p>

Guidance on [how to source your suppliers](#) is available from the Government Procurement website.

A range of [templates](#) are available to assist you at each stage of the tendering process.

Refer to the [rapid mobilisation timeframes](#) table for additional guidance.

### Tips to go faster

The following tips will help you run your tender processes in a fast, meaningful and safe way.

#### Tip 1: Streamline your internal decision making

Streamlined internal decision making processes are key to achieving faster mobilisation timelines.

Streamlined decision making includes ensuring there is clarity on who the decision makers are, as well as ensuring decision makers are kept well informed on when they can expect decision requests and the required turn-around time.

Successful rapid mobilisation requires decision makers to prioritise rapid projects and adopt a mindset of urgency.

When decision makers know their place in a process and the impact their decisions have, it helps the process run smoothly and results in meaningful decisions.

#### Tip 2: Communicate with your market

Effective tendering requires strong market engagement. This also helps your processes go faster.

To speed up the tender process you should engage and communicate with suppliers early – well before a tender process begins. This allows you to signal the upcoming work to potential tenderers who are then prepared for a quick tender process when it begins.

You should also use your market engagement to test the market's appetite and availability for the work, and to share your thinking and collect feedback about the proposed risk allocation and delivery model.

If you have a supplier panel already in place your communications may be as simple as phone calls to panel members to check their interest and capacity.

### Tip 3: Streamline your tender requirements

Too often tender documents seek information either because they can or because that is what has always been done – rather than because the information adds value or is critical to help make the procurement decision and form a contract. Not only does this impact on time and effort required by both suppliers and decision makers, but it also creates barriers to suppliers engaging with the procurement.

It is better to simply strip back a product, service or process to focus only on what is most important to the end customer and remove any activity that does not add value.

Focusing on what is critical and removing everything else helps process efficiency, quality and user satisfaction. This same lens can be applied to procurement processes and tender requirements.

Things to think about with respect to your tender requirements are:

- Will the information you have requested be used to make a decision? You should only ask questions of tenderers that are relevant to your decision making — anything that is not used is wasted.
- When were your standard requirements last reviewed or updated? Are they fit for purpose, particularly for rapid mobilisation?
- Is everything you are asking for needed now? Some information can be deferred to later in the process (eg requested once the preferred bidder is selected, saving time and money during the tender stage), some information you may already have (for example, if suppliers are pre-qualified then you do not need to request qualification information again), and some information may not be required at all.
- Have you asked tenderers for their thoughts about your requirements? Suppliers regularly reply to tenders and know who does things well/not so well in their sector. They may share excellent reference examples with you, and say what takes them time, what adds cost or doesn't add value.
- Do any of your peer organisations have standardised examples they could share?
- Do you impose page limits or provide pro-forma submission templates? This minimises work by the respondent and can shorten the time needed for evaluation.
- Do your tender requirements match the delivery model you have chosen?
- Do your requirements create unnecessary barriers to entry for this opportunity? If you want good responses from suppliers then removing barriers helps them provide this information in a meaningful manner.

A clear and well defined **project brief** will help you decide what you absolutely need to request in the tender. A good project brief helps you go faster at this stage.

If you ask for lots of information in the tender, not only will it take longer and be harder for suppliers to respond, but your evaluation panel will have more information to review – all of this adds time. The way you design your tender process can help **increase access for New Zealand businesses**.

### Tip 4: Design your tender and evaluation process to run smoothly

The tender and evaluation process can result in delays if shortcuts or missteps are taken. For example, delays can result from poorly submitted tender documentation, unworkable evaluation processes, and supplier challenges to process or probity issues.

Using an interactive tender process, either through briefings or Q&A, gives clarity to tenderers and removes ambiguity about your requirements. This can lead to better tender submissions that are easier to evaluate and quicker to contract.

Take care when developing your evaluation weightings (such as price vs non price) and criteria relevant to the project requirements (your **project brief**) and investment case. As a general rule you should incorporate quality-based assessments and avoid lowest-price approaches as these often result in poorer outcomes.

Splitting out price and commercial responses from the technical responses can help create clarity in assessment and support clear decision making. Ensure that your evaluation criteria relate to the outcomes you are seeking to achieve, this is a great time to build in you broader outcomes to the decision making process such as the skills and jobs being generated by the suppliers.

Plan your evaluation process ahead of time, including things like securing time in evaluators' calendars for them to review the proposals and attend moderation sessions. This is critical for streamlining decision making.

You should involve suitably experienced and qualified procurement people and evaluators in your process.

### **Tip 5: Use rapid appointment processes if available**

Pre-qualification methods such as pre-qualified supplier lists and panels allow agencies to speed up the appointment process. Information on pre-qualification and how the Government Procurement Rules work for pre-qualification and using secondary procurement processes is available in [Rule 57: panel of suppliers](#).






Using panels means you can select suppliers quickly based on the panel's pre-agreed selection criteria. You should check if a panel is already available to you, such as the [construction consultancy services](#) for professional services.

The Government Procurement Rules require open tender unless your project qualifies for exemption from open advertising, which includes panel arrangements.

### **Partnering between client and supplier**

During this stage, you should seek to adopt the principles in the Accord's [Contract Partnering Agreement](#). It sets out how parties should work together and put the Accord principles into practice.

## Stage 8: Prepare contract

	<b>Purpose:</b> Select and prepare a contract and payment model that suits your project.
	<b>People you will need to engage:</b> You are likely to require legal assistance, either from your internal legal team or an external provider.
	<b>Challenges you may face:</b> Aim to minimise special conditions and avoid bespoke contracts.
	<b>Time it may take you to complete this activity:</b> 2 – 4 weeks
	<b>Tips for senior leaders:</b> Try to use standard terms and minimise the addition of special conditions as much as possible. Check that the risk allocation is fair and reasonable, and that it is allocated to the parties best able to manage the risk.

### Guiding principles of contract

Wherever possible use contracts that are common and known to your agency and to the market. For professional services engagements, the All-of-Government (AoG) [construction consultancy services](#) contract is preferred, if available to your organisation.

While special conditions to the contract will be required to account for differences among projects, try to minimise the addition of special conditions wherever possible. This will help keep the contract close to the standard form, making it easier for everyone to know what they are signing up to and making the contracting process quicker. You should seek legal advice on special conditions.

The contract execution process often delays the start of work. This delays both the mobilisation process (through delays to professional services contracts) and the project itself (delays to delivery partners). This highlights the importance of decision making processes that let people act quickly so that they do not hold up execution.

The procurement process provides an opportunity to expand the horizon of the project to achieve your [broader outcomes](#) by ensuring particular outcomes can be achieved through the contract.

### Standard terms

A list of standard [Contract Clauses](#) is available from the Government Procurement website.

Before going out to market, you need to develop a payment or reimbursement model that is appropriate for your project. The typical payment models, as well as when they should be used, can be found in [Appendix J](#).

[Further guidance on developing your construction procurement strategy.](#)

### Contract management

At this stage you should also make sure you are ready to manage your contract and supplier relationships during the delivery phase. This means ensuring you have a fit for purpose structure in place to manage and support the supplier to deliver the contract.

Paying your suppliers quickly is key to helping mitigate supplier cash flow risks. Ensure criteria for any milestone payments are well understood and you are able to make the payments in a timely manner.

A range of guidance material is available to help you [manage your contract](#).



## Appendix A. Typical mobilisation milestones

Typical milestones for the mobilisation phase are shown in the table below. The sequencing of tasks may differ between projects and many tasks can occur in parallel to speed up mobilisation.

Table 1: Mobilisation milestones

Milestone	Comment	Approvals and reporting	Potential to shorten
Business case		Funding application and approval as part of business case approval	Simplified business case approach may be possible depending on project type.  Single-stage business case approach can also shorten this stage. Guidance can be found on the Treasury <a href="#">website</a> .
Project governance and team establishment	Including governance structure, identification of responsible and accountable people, reporting and approval structures. Chief Executive and Chief Financial Officer should have governance involvement for complex and accelerated projects.  Project owner internal resources confirmed and appointed.		<a href="#">Construction project governance guidance</a> can also be found on the construction guidelines.
External project support engaged (where required)	As needed, engage external project management, stakeholder engagement support, contract management, Engineer to Contract, other advisors (such as legal or commercial). Consider whether communications expertise is required for the project.  Consider opportunities to leverage internal expertise and capability – including where it might be available from other public organisations – before engaging contract and consultant resources. Similarly, development and learning opportunities for internal people should be a key consideration within mobilisation planning to build depth and long term capability.	Seek budget approvals as part of funding application	Can follow soon after project team set establishment
Risk register developed	Often produced at the business case stage. See risk register <a href="#">template in the construction guidelines</a> .  Informs the risk allocation table in <a href="#">Appendix F</a> which supports tender and contract processes	Updates to risk register (major risks) should be included as part of regular reporting to governance	Can be done in parallel with other stages.  Important that the risk register is kept up to date to reflect current risks.

Milestone	Comment	Approvals and reporting	Potential to shorten
	Should be developed through a risk workshop(s) with people who are able to advise on the range of project risks  Risks should be quantified as inputs to the cost estimation and tender budget processes		
Project brief prepared	Clearly setting out scope, objectives etc, as basis for procurement and contracting	Sign-off prior to procurement - stage gate 1	First draft can be prepared early in the mobilisation process. See <a href="#">guidance on developing the supplier brief</a> .
Procurement strategy and plan	Including selection approach, delivery and payment model, contract selection	Sign-off prior to procurement - stage gate 1: has plan been followed/any deviations from the plan	Find <a href="#">guidance on writing a procurement plan and templates</a>
Consultants engaged	Including designers, RMA planning, quantity surveyor		Can be sped up through rapid tendering or work allocation
Site assessments	Including (as required) geotechnical, topographical, contaminated land		Can be run in parallel with other activities but may be dependent on property ownership
Draft tender design report issued	Design completed to tender design level (in accordance with requirements under the delivery model).		
Approvals processes	RMA, other environmental approvals, building consents:	Monthly progress reports	
Applications prepared and lodged with approving authority (council)	If using Public Works Act (PWA) processes then statutory processes initiated and followed.		
Property acquisition processes initiated	If using fast-track RMA process, engage consultant support (planning, legal).		
Cost estimate	Level of certainty in the estimate should support tender process and will depend on the selected delivery model.  Engage quantity surveyor for estimate.		
Procurement process conducted; select preferred tenderer			Refer to allocate work (tender) section of the Playbook

## Appendix B. Rapid mobilisation timeframes for a horizontal sector project

The following table provides an example of rapid mobilisation timeframes and guidance for a horizontal sector project.

Mobilisation stages	Indicative time per stage (acting with a rapid mindset)	Can the stage be run in parallel?	Comment and guidance on the time required
Establish governance and project team	Within 2 weeks if team available.  Longer if need to engage external resource (2 – 4 weeks).	No – this important planning work should be completed before progressing to deliverables stages.	Assumes some thinking / preparation has been done in advance.  Achieving these timeframes requires experienced parties. Where necessary, seek external advice.
Engage external project support where required, eg project management	2 – 4 weeks		
Prepare mobilisation plan	Within 1 week	Yes	Made faster if templates are used.
Prepare risk register	Within 1 week		Dependent on approval processes.
Reaffirm outcomes and project brief	Within 1 week		If consultants are on board at this stage, then detailed user requirements can be developed with the potential for moving to design and build.
Procure consultants: <ul style="list-style-type: none"> <li>• Design</li> <li>• Planning (RMA, legal)</li> <li>• Cost estimation</li> <li>• Others as needed (eg stakeholders and communications)</li> </ul>	1 – 3 weeks (rates-only)  3 – 5 (priced)	May be started in parallel with earlier activities if consultant scope(s) is known.  Market engagement / notice can occur earlier.	Time must allow for preparation of scope of work, consultant response, evaluation and approval (for example, 1 week each).  Timing depends on whether consultants are already engaged, a consultant panel is available, a competitive process is required etc. A panel may be available with pre-qualified consultants who can be appointed quickly such as All-of-Government <a href="#">construction consultancy services</a> . Engaging consultants on a rates-only basis for the early stages is quicker than priced submissions.  A lead consultant (such as a designer) could be engaged to contract other specialist consultants. Registration of interest (ROI) or shortlisting of consultants for the design works can be done through a panel arrangement but if unique or specific skills are required there may need to be a specific ROI as part of a larger tender process.

Mobilisation stages	Indicative time per stage (acting with a rapid mindset)	Can the stage be run in parallel?	Comment and guidance on the time required
Site assessments	~6 weeks	Yes  Can be done at the business case stage as part of site due diligence.	Duration can vary widely and depends on site size, existing assessments, nature of investigations required – such as geotechnical drilling versus topographic survey.
Produce design to tender level	2 – 3 months for design + 1 month to checking and review	Yes	<p>Time depends on project complexity and availability of consultants There may be delays if people need to be redeployed from other activities.</p> <p>Streamlined approval process such as dedicated and available approval resources will speed up reviews. Allow time for independent checking, such as road safety audit and internal quality assurance.</p> <p>You can use provisional sums to get to market faster for elements that are difficult to scope or remain unresolved. These need to be resolved during the tender process to avoid problems during delivery. If you are using the NZS3910 contract, you should ensure there is a clearly defined (open-book) provisional sum process.</p> <p>If you have internal design knowledge you can shorten the design process by keeping client requirements lean, such as only asking for information that is needed.</p>
Prepare and lodge consent / Notice of Requirement (NOR) application	6 – 8 weeks (simple) 12 weeks (complex)		<p>Depends on project complexity, greenfield vs brownfield (are there existing consents), rural vs urban, clarity of scope at outset, etc.</p> <p>Need to allow time for applicant's internal reviews.</p>
Consent / NOR processing to final decision / approval (if required) – <b>business as usual path</b>	3 months (simple) 3 - 9 months (complex) If appealed, add 3 – 6 months	If NOR required, then regional consents cannot start until NOR submitted.	<p>Depends on whether new consents are required; whether publicly notified and extent of alternatives assessments required; and on the appeals process.</p> <p>Engage with the approval authority (council) before lodgement to help them to prepare for the application.</p>

Mobilisation stages	Indicative time per stage (acting with a rapid mindset)	Can the stage be run in parallel?	Comment and guidance on the time required
Consent processing to final decision / approval – <b>fast-track consenting path</b>	3 – 5 months		
Property acquisition	If willing buyer-willing seller, 1-2 months  If Public Works Act, up to 2 years	In some cases.	Acquisition under the Public Works Act process is dependent on a designation being in place. This can add significant time to the process, unless the project is able to proceed while full property acquisition is pending.
Property access or easement	6 weeks (to gain access)  12 weeks (to legally formalise easement)		Relates to projects that do not require acquisition, such as underground infrastructure.
Determine procurement strategy	2 weeks	Yes.  Can be one of the project manager's first tasks and refreshed later, during design.	Requires organisation's procedural rules to be sufficiently flexible to allow rapid mobilisation. Allow time to engage internal stakeholders to gain agreement on proposed procurement approach.  The procurement strategy may also cover the procurement of consultants (or a separate strategy may be developed for that step).
Project requirements brief (supplier brief)	1 week	Yes	This assumes tender design is available.  Subject to approval times.
Prepare tender documentation	2 – 5 weeks	Yes	Use standard documents. If appropriate borrow from previous tenders.  Documents should be detailed and prepared to a high standard. Lack of detail may necessitate provisional sums for ill-defined items, which can slow down negotiations; or give rise to variations or claims during delivery.
Market engagement	2 weeks (can be spread over multiple points in the process)	Yes – this should be run in parallel with earlier stages	Market engagement prior to the start of the formal tender process is very important as it enables the market to respond quickly once the tender is issued. It should be covered in your procurement strategy.

Mobilisation stages	Indicative time per stage (acting with a rapid mindset)	Can the stage be run in parallel?	Comment and guidance on the time required
Registration of Interest (ROI) / Expression of Interest (EOI)	1 – 2 weeks	Yes, if using ECI	May be skipped if a panel is available or a closed contest can be run.  You may be subject to the minimum time periods under the Government Procurement Rules (Rule 34). There are options to reduce this requirement through the allowances under Rule 31.
Review ROI/EOI, shortlist and gain internal approval	3 days	Yes, if using ECI	Timing reliant on your approvals processes.  Allow extra time if contractor financial due diligence is to be done.
Request for Proposal (RFP)	4 – 6 weeks (measure and value)  6 weeks (lump-sum construct- only)  8 – 12 weeks (design and construct, depending on the extent of tender design)	Yes, if using ECI	Need to allow for contractor's own internal review and approval process (up to 2 weeks).  Time needed depends on the number of sub-contractors that tenderers need to engage with to prepare their tenders.  You may be subject to the minimum time periods under the Government Procurement Rules (Rule 34). There are options to reduce the requirement through the allowances under Rule 31.
Evaluate tenders, select preferred tenderer	1 week	Yes, if using ECI	Approvals can slow this down.
Negotiate with preferred tenderer, gain internal approvals, close contract	2 - 4 weeks	Yes, if using ECI	Degree of negotiation required depends on the level of certainty in the tender response (the number of tags), which in turn depends on the clarity of the tender documentation prepared in the earlier stage.  Allow for the internal approvals process – streamlined approvals will enable faster mobilisation. If you are a local government entity, you may need a council resolution in advance delegating authority to your Chief Executive to authorise staff to negotiate with preferred tender on council behalf, and then (dependent on staff recommendation) for your Chief Executive to execute the contract on behalf of the council, up to a stated maximum contract sum.



## Appendix C. Rapid mobilisation timeframes for a vertical sector project

The following table provides an example of rapid mobilisation timeframes and guidance for a vertical sector project.

Mobilisation stages	Indicative time per stage (acting with a rapid mindset)	Can the stage be run in parallel?	Comment and guidance on the time required
Establish governance and project team	Within 2 weeks if team available.  Longer if need to engage external resource (2 – 4 weeks).	No – this important planning work should be completed before progressing to deliverables stages.	Assumes some thinking / preparation has been done in advance.  Achieving these timeframes requires experienced parties. Where necessary, seek external advice.
Engage external project support (where required), such as project management	2 – 4 weeks		
Prepare mobilisation plan	Within 1 week	Yes	Made faster if templates are used.
Prepare risk register	Within 1 week		Dependent on approval processes.
Reaffirm outcomes and project brief	Within 1 week		If consultants are on board at this stage, then detailed user requirements can be developed with the potential for moving to design and build.
Procure consultants: <ul style="list-style-type: none"> <li>• Design</li> <li>• Planning (RMA, legal)</li> <li>• Cost estimation</li> <li>• Others as needed (such as stakeholders and communications)</li> </ul>	1 – 3 weeks (rates-only)  3 – 5 (priced)	May be started in parallel with above activities if consultant scope(s) is known. Can be good to have design consultants on board in time to assist with the scope definition above. Market engagement / notice can occur earlier.	Time must allow for preparation of scope of work, consultant response, evaluation and approval (for example, 1 week each).  Timing depends on whether consultants are already engaged, a consultant panel is available, a competitive process is required etc. A panel may be available with pre-qualified consultants who can be appointed quickly such as All-of-Government <a href="#">construction consultancy services</a> . Engaging consultants on a rates-only basis for the early stages is quicker than priced submissions.  A lead consultant (such as a designer) could be engaged to contract other specialist consultants.  Registration of interest (ROI) or shortlisting of consultants for the design works can be done through a panel arrangement but if unique or specific skills are required there may need to be a specific ROI as part of a larger tender process.

Mobilisation stages	Indicative time per stage (acting with a rapid mindset)	Can the stage be run in parallel?	Comment and guidance on the time required
Site assessments	~6 weeks	Yes  Can be done at the business case stage as part of site due diligence.	Duration can vary widely and depends on site size, existing assessments, nature of investigations required – such as geotechnical drilling, topographic survey, contaminated land etc.
Produce design to tender level	3 months (simple), up to 12 months (complex)	Yes	<p>Time depends on project complexity and availability of consultants There may be delays if people need to be redeployed from other activities.</p> <p>Streamlined approval process such as dedicated and available approval resources will speed up reviews. Allow time for independent checking, such as road safety audit and internal quality assurance.</p> <p>You can use provisional sums to get to market faster for elements that are difficult to scope or remain unresolved. These need to be resolved during the tender process to avoid problems during delivery. If you are using the NZS3910 contract, you should ensure there is a clearly defined (open-book) provisional sum process.</p> <p>If you have internal design knowledge you can shorten the design process by keeping client requirements lean, such as only asking for information that is needed.</p>
Prepare and lodge building consent application	1 – 2 months	Yes	<p>Depends on whether new consents are required; whether publicly notified and extent of alternatives assessments required; and on the appeals process.</p> <p>Building consent application(s) can run in parallel with design. For example, you could apply for building consent based on developed design and finalise the 'for construction' documentation while the consent is being processed. For major or complex building projects, consent may be obtained in multiple stages as design elements are developed. You should use a pre-application meeting to confirm the council will accept this approach.</p>








Mobilisation stages	Indicative time per stage (acting with a rapid mindset)	Can the stage be run in parallel?	Comment and guidance on the time required
Resource consent processing to final decision / approval (if required) – <b>business as usual path</b>	3 – 4 months		<p>Depends on whether new consents are required; whether publicly notification is required, the extent of alternative assessments required and the appeals process.</p> <p>Engage with the approval authority (council) prior to lodgement to help them to prepare for the application. Use the pre-application meeting to agree with council how the process can be completed quickly, for example by pre-preparing for peer review at the design review (PS2).</p>
Resource consent processing to final decision / approval – <b>fast-track consenting path</b>			
Property acquisition	<p>If willing buyer-willing seller, 1-2 months</p> <p>If PWA, up to 2 years</p>	In some cases	
Property access or easement	<p>6 weeks (to gain access)</p> <p>12 weeks (to legally formalise easement)</p>		Relates to projects that do not require acquisition – such as underground infrastructure.
Determine procurement strategy	2 weeks	<p>Yes.</p> <p>Can be one of the project manager's first tasks, and then refreshed during design.</p>	<p>Requires organisation's procedural rules to be sufficiently flexible to allow rapid mobilisation. Allow time to engage internal stakeholders to gain agreement on proposed procurement approach.</p> <p>The procurement strategy may also cover the procurement of consultants, or a separate strategy may be developed for that step.</p>










































































Mobilisation stages	Indicative time per stage (acting with a rapid mindset)	Can the stage be run in parallel?	Comment and guidance on the time required
Project requirements brief (supplier brief)	1 week	Yes	This assumes tender design is available.  Subject to approval times.
Prepare tender documentation	2 – 5 weeks	Yes	Use standard documents. If appropriate borrow from previous tenders.  Documents should be detailed and prepared to a high standard. Lack of detail may necessitate provisional sums for ill-defined items, which can slow down negotiations; or give rise to variations or claims during delivery.
Market engagement	2 weeks (can be spread over multiple points in the process)	Yes – this should run in parallel with earlier stages	Market engagement prior to the start of the formal tender process is very important as it enables the market to respond quickly once the tender is issued. It should be covered in your procurement strategy.
Registration of Interest (ROI) / Expression of Interest (EOI)	1 – 2 weeks	Yes, if using early contractor engagement (ECI)	May be skipped if a panel is available or a closed contest can be run.  You may be subject to the minimum time periods under the Government Procurement Rules (Rule 34). There are options to reduce this requirement through the allowances under Rule 31.
Review ROI/EOI, shortlist and gain internal approval	3 days	Yes, if using ECI	Timing is reliant on your approvals processes.  Allow extra time if contractor financial due diligence is to be done.
Request for Proposal (RFP)	6 weeks (lump sum construct only)  6 – 8 weeks (design & construct, depending on the extent of tender design)	Yes, if using ECI	Need to allow for contractor's own internal review and approval process (up to 2 weeks).  Time needed depends on the number of sub-contractors tenderers need to engage with to prepare their tenders. There are typically more sub-contractors in vertical build projects.  You may be subject to the minimum time periods under the Government Procurement Rules (Rule 34). There are options to reduce the requirement through the allowances under Rule 31.

Mobilisation stages	Indicative time per stage (acting with a rapid mindset)	Can the stage be run in parallel?	Comment and guidance on the time required
Evaluate tenders, select preferred tenderer	1 week	Yes, if using ECI	Approvals can slow this down.
Negotiate with preferred tenderer, gain internal approvals, close contract	2 - 4 weeks	Yes, if using ECI	<p>Degree of negotiation required depends on the level of certainty in the tender response (the number of tags), which in turn depends on the clarity of the tender documentation prepared in the earlier stage.</p> <p>Allow for the internal approvals process – streamlined approvals will enable faster mobilisation. If you are a local government entity, you may need a council resolution in advance delegating authority to your Chief Executive to authorise staff to negotiate with preferred tender on council behalf, and then (dependent on staff recommendation) for your Chief Executive to execute the contract on behalf of the council, up to a stated maximum contract sum.</p>

## Appendix D. Typical governance requirements for project complexity and scale

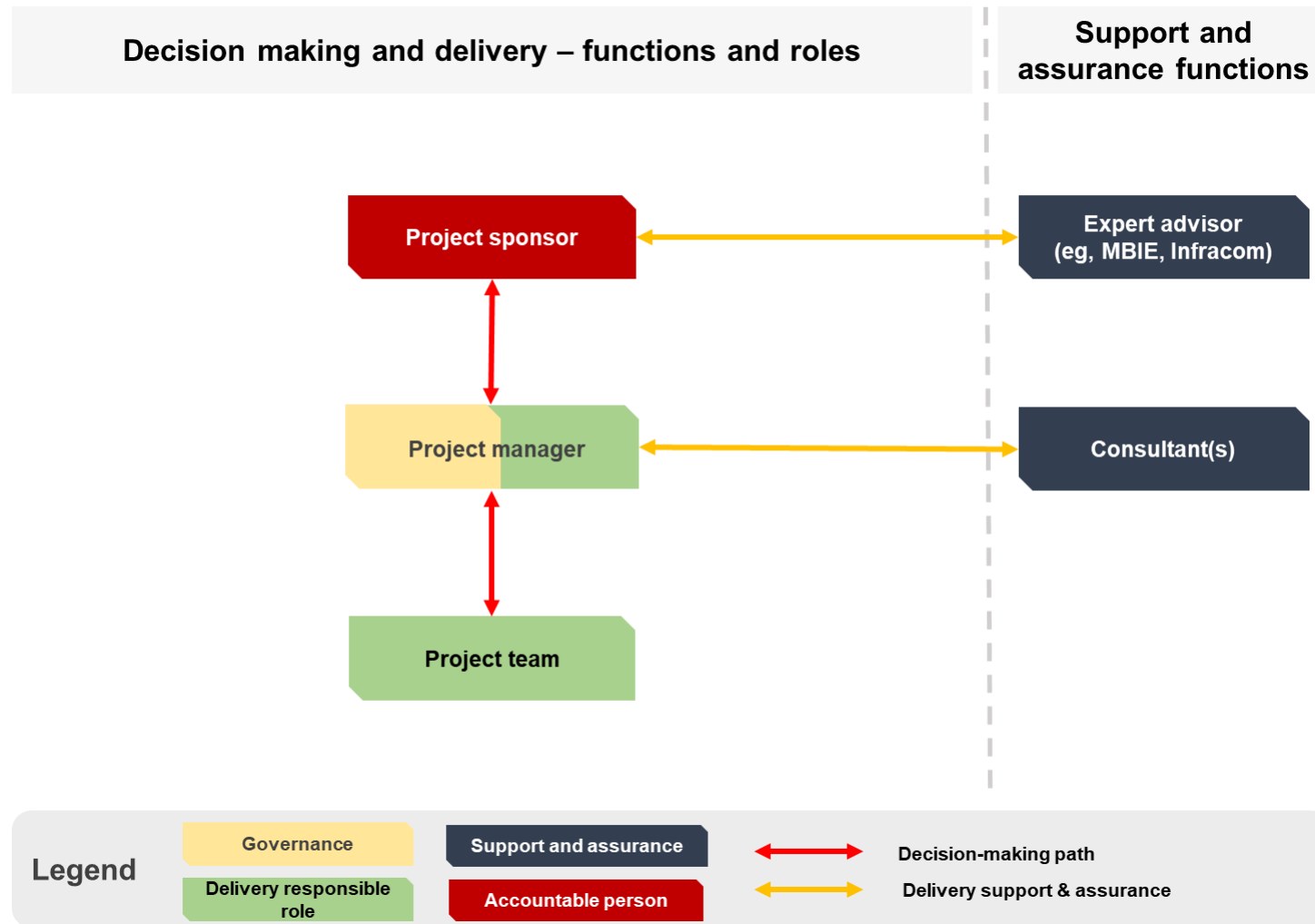
The tables below provide examples of typical governance requirements across various cost and complexities of project.

Icon	Role	Icon	Role
	Project sponsor / project owner		Stakeholder advisory group
	Steering committee chair		Consultants (technical support)
	Steering committee / project governance board		Independent reviewer / probity auditor
	Project director / project manager		

	Cost range (\$ million)					
Complexity range	10-25	25-50	50-100	100-250	250-500	500-
<b>Low complexity:</b>						
Standard design						
Limited stakeholder risk						
Low uncertainty						
Low-constrained programme						
						
<b>Mid complexity:</b>						
Standard design with some departures						
Considerable stakeholder risk						
Medium uncertainty						
Constrained programme						
						
<b>High complexity:</b>						
Bespoke design process						
High stakeholder risk						
High uncertainty						
Highly constrained programme						
						
						

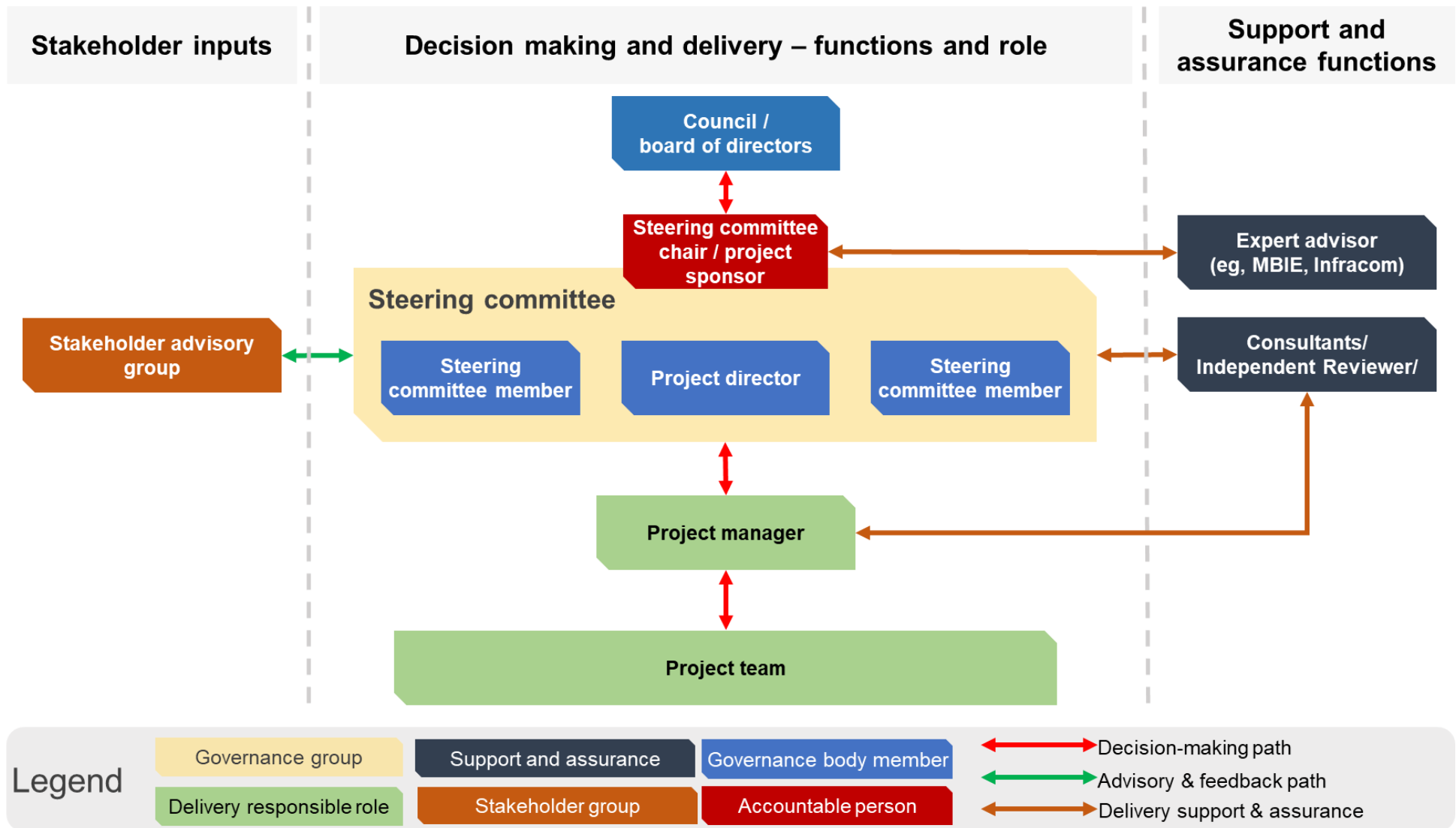
## Appendix E. Example Governance Structures

Example outline governance structure for a low complexity project





Example outline governance structure for a high complexity project



## Appendix F. Example risk allocation table

A template of this table can be found at the [Playbook webpage](#).

Type of risk	Owner retains risk	Supplier retains risk
<b>General</b>		
Specific law changes	Yes	No
General changes in law	No	Yes
Force majeure events such as earthquake or extreme weather events	Shared	Shared
Uninsurable risks (such as COVID19-related risks)	Etc.	
Construction insurance costs		
Stakeholder engagement		
Protest action		
Labour relations		
<b>Financial risk</b>		
Indexation risk (maintenance and operational phase)		
<b>Site risk</b>		
Land acquisition delay		
Ground conditions		
Unforeseen contamination		
Planning approvals		
Third party site access – such as utility owners, landowners etc.		
Archaeological artefact finds		
<b>Design</b>		
Design specification / fit for purpose		
Compliance with legislative design standards		
Design for safety performance		
Planning approvals - impact of designation conditions on design (prior to contract signing)		
Cost and responsibility of obtaining outline planning consent approvals		
Design delays		
<b>Construction</b>		
Site safety		
Construction cost and programme risk		
Design fault		
Construction traffic management		
Adverse weather events (for extreme weather events see force majeure above)		
Planning approvals - impact of designation conditions on construction		
Construction cost increases including fuel and material supply costs		
Construction errors and defects		
<b>Other risks</b>		

## Appendix G. Project brief horizontal exemplar

You can find the template for these examples at the [Playbook webpage](#).

Project brief example - horizontal infrastructure	
Infrastructure group	[example infrastructure group]
Infrastructure area	Horizontal infrastructure
Option	Upgrading of the transportation network
Outcomes	
To improve the safety of the section of road A from bridge A to bridge B.	
Scope	
<p><b>Infrastructure scope:</b></p> <ul style="list-style-type: none"> <li>• Install a median barrier down the centre of the lane</li> <li>• Shared path on either side of the carriageway with separation barrier (mesh fence)</li> <li>• Resealing existing carriageway and tie-in to existing bridges A and B.</li> <li>• Relocation and upgrading of existing utilities</li> <li>• Improved lighting</li> <li>• Obtain resource consents as necessary</li> </ul> <p><b>Non-infrastructure scope:</b></p> <ul style="list-style-type: none"> <li>• Ensure site is secure and cordoned off when unattended.</li> <li>• Implement COVID-19 response plan in the case of future increase in restrictions</li> <li>• Implement controls to control driver behaviour through site when traffic management is operational.</li> </ul> <p><b>Excluded scope:</b></p> <ul style="list-style-type: none"> <li>• Any land acquisitions</li> <li>• Infrastructure works on bridges A and B</li> <li>• Landscaping works surrounding the carriageway</li> <li>• CCTV services</li> <li>• Maintenance of roading infrastructure</li> </ul> <p><b>Assumptions:</b></p> <ul style="list-style-type: none"> <li>• Ground is not contaminated and can be utilised for bulk fill</li> <li>• Traffic management plan in the form of stop/go traffic control can operation throughout the construction works</li> </ul> <p><b>Applicable standards and requirements:</b></p> <ul style="list-style-type: none"> <li>• NZS3910</li> <li>• Austroads Guides</li> <li>• HSWA 2015</li> </ul>	

**Risks:**

- Unforeseen ground conditions.
- Ground contamination.
- Overhead power lines
- Unknown underground utilities

**Dependencies:**

- Ongoing negotiations with regional asphalt plant and quarry to ensure aggregate and bitumen supplies are available for this project.
- Site office constraints, ongoing negotiations with existing tenant near site boundary regarding use of land for the duration of construction activities.

**Project brief cost estimate****Total cost estimate**

\$25M

The cost estimate is considered to be -15 / +20% and reflects variability in market appetite, assumptions and extent of assessment undertaken.

Cost estimate is exclusive of GST

**Scope breakdown**

This cost estimate includes the following scope items:

- Preliminary and General: 15%
- Design, consultation and planning: 20%
- Construction services (including contractor margin): 50%
- Contingency: 15%

**Cost estimate basis and range**

This cost estimate has an indicative accuracy of -15 / +20%, based on:

- Site investigations: not undertaken.
- Previous work of a similar nature.
- Level of design done: option brief.
- Region where construction is taking place consists of multiple tier-one contractors.

## Appendix H. Project brief vertical exemplar

You can find the template for these examples at the [Playbook webpage](#).

Project brief example - vertical infrastructure	
Infrastructure group	[example infrastructure group]
Infrastructure area	Vertical infrastructure
Option	Expansion of school A
Outcomes	
To facilitate better learning through the expansion of existing learning environments at school A and to cater for future demands outlined in the school master plan.	
Scope	
<p><b>Infrastructure scope:</b></p> <ul style="list-style-type: none"> <li>• New teaching block comprising eight standard classrooms across two levels</li> <li>• Demolition of existing block D</li> <li>• Expansion of existing satellite teaching space</li> <li>• Construction of new gym</li> </ul> <p><b>Non-infrastructure scope:</b></p> <ul style="list-style-type: none"> <li>• Implement COVID-19 response plan in the case of future increase in restrictions</li> <li>• Supply and install loose furniture, fixtures and equipment (FF&amp;E)</li> <li>• All learning facilities constructed or expanded are to be fit-for-purpose and provide learning environments which correlate to those specified in the national curriculum.</li> </ul> <p><b>Excluded scope:</b></p> <ul style="list-style-type: none"> <li>• Any land acquisitions</li> <li>• Maintenance of school and FF&amp;E post completion of works</li> <li>• School IT services and hardware within server room</li> <li>• Delivery and installation of legacy FF&amp;E items</li> </ul> <p><b>Assumptions:</b></p> <ul style="list-style-type: none"> <li>• Ground is not contaminated and can be used for bulk fill</li> <li>• No asbestos present within the existing satellite teaching space or block D</li> <li>• School to function at business as usual state for the duration of the construction activities</li> </ul>	

**Applicable standards and requirements:**

- NZS3910
- NZ Building Code
- NZS4104 Seismic Restraint of Building Contents
- Safety in design guidelines
- HSWA 2015
- ARC TP90: Erosion and Sediment Control Guidelines
- Specification requirements set out in the principals requirements document
- NZS 4121 Design for access and mobility
- NZS 4431 Code of Practice for earth fill for residential development

**Risks:**

- Unforeseen ground conditions.
- Ground contamination.
- Asbestos
- Structural condition of block D and satellite teaching room
- Underground utilities

**Dependencies:**

- Ongoing negotiations with Ministry of Education in relation to validity of existing scope of works.
- Site office constraints, ongoing negotiations with adjacent tenant near site boundary regarding use of land for the duration of construction activities.

**Project brief cost estimate****Total cost estimate**

\$12M

The cost estimate is considered to be -10/ +10% and reflects the potential increase in scope as a result of future assessments of the existing structures as well as the assumptions stated above.

Cost estimate is exclusive of GST

**Scope breakdown**

This cost estimate includes the following scope items:

- Preliminary and General: 15%
- Design, consultation and planning: 20%
- Construction services (including contractor margin): 45%
- Contingency: 20%

**Cost estimate basis and range**

This cost estimate has an indicative accuracy of -10/ +10%, based on:

- Site investigations including updated topographic survey not taken.
- Previous work undertaken of a similar nature.
- Geotechnical and structural assessment on block D and satellite teaching space not done.
- Pre-demolition/renovation assessment for hazardous materials not yet done.

# Appendix I.Delivery model descriptions & conditions of use

Delivery model: traditional (build-only)
<p><b>How it works/description:</b></p> <ul style="list-style-type: none"> <li>• This form of delivery involves separate design and construction contracts. The client will prepare a project requirement brief (usually with the assistance of consultants) and engage a design contractor to complete the design stage, including preparation of the construction documents.</li> <li>• Once the design is complete, the client initiates the selection process for a suitable construction contractor. The process can begin before the design documentation is complete if there is sufficient detail in the documents to go to tender; however this must be carefully managed and understood as there may be financial implications due to greater risk of later variations during the delivery phase.</li> <li>• The contractor hands over the completed facility at practical completion to the client who then initiates asset / facilities management and operational roles. These are sourced by the client directly, outside this process.</li> </ul>
<p><b>When should this be used:</b></p> <ul style="list-style-type: none"> <li>• Projects capable of being fully designed to construction-ready status by the project owner.</li> <li>• Project owner has sufficient capacity and capability to manage designers and design process, understands and manages the procurement phase, manages stakeholders and manages the overall contract with the assistance of the Engineer to Contract.</li> <li>• Site / ground or latent conditions are well known or manageable.</li> <li>• Well-defined scope.</li> <li>• Limited innovation required from the contractor during delivery.</li> <li>• Suitable for projects that are standardised or potentially repetitious.</li> <li>• It is desirable to complete design documentation prior to tendering.</li> </ul>
Delivery model: design and build / construct (D&B, D&C)
<p><b>How it works/description:</b></p> <ul style="list-style-type: none"> <li>• Design and construction services are contracted by a single entity (the D&amp;C party) via a competitive tender process.</li> <li>• The delivery schedule can be hastened by overlapping the design and construction phases of a project. However, the procurement process requires more time relative to the traditional model.</li> </ul>
<p><b>When should this be used:</b></p> <ul style="list-style-type: none"> <li>• Projects where project owner can develop concept design.</li> <li>• Contractor best placed to manage design engagement with project owner and take risk on design.</li> <li>• Suited to greenfield and brownfield projects where the risk can be assessed and priced.</li> <li>• Opportunity for innovation in design.</li> </ul>



### **Delivery model: direct managed**

#### **How it works/description:**

- This delivery model involves the client directly managing all aspects of the full delivery of the project works.
- The client typically does and coordinates some (or all) of the design activities, is responsible for all preliminaries and project management, prepares the trade packages, conducts the tenders, and selects and pays suppliers and subcontractors.
- This model gives the client substantial flexibility and control over the project and achievement of outcomes – although this also means risk transfer is limited.

#### **When should this be used:**

- Client has sufficient capacity and capability to manage the full delivery of project works.
- Opportunity for flexibility in terms of achievement of outcomes/changes to design etc with the project owner taking the majority of the risk.
- Project owner has internal design and contractor management skills or is able to source these skills externally.

### **Delivery model: management contracting**

#### **How it works/description:**

- The client appoints and works with a management contractor from the design stage. The contractor assists in breaking down the project into separate packages which can be tendered as soon as design is ready.
- The contractor is contracted based on rates and margins, and payments are made based on an open-book accounting process.
- Management contracting reduces the client's risk and the administrative burden of contracts but can adversely impact on the price level and certainty.
- If separate work packages are possible this can allow early commencement of some packages.

#### **When should this be used:**

- Projects that require design flexibility through all stages of delivery.
- Project owner has some design and contractor management skills.
- Project owner desires high visibility of subcontractor pricing.
- Suited to greenfield projects where the risk can be assessed and priced.

### **Delivery model: early contractor involvement (ECI)**

#### **How it works/description:**

- Contractor(s) are appointed early through a competitive tender process (stage 1) as the client works to develop and refine design - including contribution of constructability, staging, cost planning and supply chain inputs. A target lump sum as well as certain fixed rates are often submitted.
- On completion of design, tender documents are prepared and issued to the contractor(s) to tender a fixed price (lump sum) construction cost (stage 2).

- Client measures tender responses against the pre-tender estimate prepared by quantity surveyor and the affordability threshold.
- ECI incentivises design/construction interface considerations and brings expertise, although can lead to longer procurement timeframes and can be commercially challenging to manage.

**When should this be used:**

- Final design developed/owned by contractor – commercial alignment between design and constructability particularly if (schematic) design team is novated to contractor.
- Contractor innovation can be designed into project.
- Early collaboration provides opportunities to resolve design and other risks, encouraging effective risk transfer and insights into profit opportunities.
- The contractor works with the client to develop the project scope in planning phase, with the result that less effort is required interpreting the client's project scope in the delivery phase.
- Encourages integration of design and construction teams.
- Competitive tension is maintained if the client adopts a competitive ECI tender process.
- Collaborative contracting/innovation sharing.

**Delivery model: alliance**

**How it works/description:**

- Alliance contracting is a relationship-style arrangement that brings together the client and one or more parties to work collaboratively as an integrated, collaborative team to deal with key project delivery matters- sharing project risks and rewards.
- A fully integrated project team deals with planning, design and construction.
- The commercial model incentivises the parties to work together in good faith, act with integrity, and make best-for-project decisions.
- The model is generally best used for large scale projects where the project scope and risks are uncertain and complex, requiring flexibility and potentially innovative solutions.

**When should this be used:**

- Project owner has sufficient internal resources.
- Project has risks that cannot be adequately defined or dimensioned in the business case nor during subsequent work prior to tendering.
- If cost of transferring certain risks is prohibitive in the prevailing market conditions.
- If the project needs to start as early as possible before the risks can be fully identified.
- Project owner has superior knowledge, skills, preference and capacity to influence or participate in the development and delivery of the project.
- A collective and transparent approach to assessing and managing risk will produce a better outcome.
- Suited to uncertain or ill-defined scope.

## Appendix J. Payment Models

Payment Models	How it works / description	Risk allocation / when it works
Reimbursable (cost plus)	<ul style="list-style-type: none"> <li>The contractor claims the value of their project related expenditures from the client, plus profit margins.</li> <li>Sometimes called time and materials (T&amp;M) or time and expense (T&amp;E).</li> </ul>	<ul style="list-style-type: none"> <li>Pricing risk sits fully with the project owner. The project owner must pay any costs incurred by the contractor. The project owner takes the risk on both quantity of work required and the productivity of the contractor.</li> <li>Reimbursable models work well when: <ul style="list-style-type: none"> <li>The project owner is not sensitive to the total project cost (for example a 100 - 200% overrun is not material to overall budget).</li> <li>There is time pressure for a contractor to commence (typically contractors can price and approve commencing on reimbursable jobs very quickly).</li> <li>There is low certainty on the project's scope (either design is not complete, or there are significant unknowns – such as underground conditions).</li> <li>Flexibility and speed of contractor response is key.</li> </ul> </li> <li>Often reimbursable payment covers only the uncertain portion of a project's overall scope, with the balance covered by other payment methodologies.</li> </ul>
Reimbursable to a maximum price (cost plus max)	<ul style="list-style-type: none"> <li>The contractor claims the value of their project related expenditures from the client, plus profit margins, up to a price cap which is imposed to reduce the risk of cost overrun.</li> </ul>	<ul style="list-style-type: none"> <li>Pricing risk sits fully with the project owner up to a given value, beyond which the risk sits with the contractor.</li> <li>Cost plus max contracts work well when: <ul style="list-style-type: none"> <li>The project owner is sensitive to the total project cost beyond a given amount (the maximum price), but knows that the project will most likely cost less than the agreed price maximum.</li> <li>The maximum price is large enough to cover most outcomes, and the project owner retains a contingency to manage any unforeseen events.</li> <li>The scope is well understood, and significant unknowns are excluded, thereby the contractor is incentivised to be productive on the known scope.</li> </ul> </li> </ul>
Fixed price / lump sum	<ul style="list-style-type: none"> <li>The contractor is paid a lump sum equal to the tendered or negotiated amount.</li> </ul>	<ul style="list-style-type: none"> <li>Pricing risk sits fully with the contractor. The contractor is obliged to pay costs in performing the work, but the project owner only pays the agreed lump sum.</li> <li>Fixed price / lump sum contracts work well when: <ul style="list-style-type: none"> <li>The scope is well understood, known, and simple, and significant unknowns are excluded.</li> <li>Competitive pressure has not resulted in the contractor's under-pricing the work.</li> <li>The project owner retains contingency to be able to manage any unforeseen events.</li> </ul> </li> </ul>

Payment Models	How it works / description	Risk allocation / when it works
Measure and value (M&V)	<ul style="list-style-type: none"> <li>M&amp;V remuneration involves the contractor measuring the work they have completed and claiming the value of that work as the project progresses.</li> <li>Contractors are awarded the contract based on tendered or negotiated rates.</li> </ul>	<ul style="list-style-type: none"> <li>Pricing risk is shared between the project owner and the contractor. The project owner takes the risk on the quantities, and the contractor takes the risk on the productivity.</li> <li>Measure and value contracts work well when: <ul style="list-style-type: none"> <li>The quantities are unknown due to the design not being completed and/or material assumptions remain.</li> <li>The project owner wishes to on-board the contractor before design is completed but still wishes to achieve a level of price tension through achieving competitive rates.</li> </ul> </li> </ul>
Target cost	<ul style="list-style-type: none"> <li>Contract is based on a cost reimbursable basis where the contractor is reimbursed their costs subject to assessment at the completion of the project which will determine whether any savings were made as a result of this project or whether the contractor will be required to contribute to any overspend.</li> </ul>	<ul style="list-style-type: none"> <li>Pricing risk is shared between the project owner and the contractor.</li> <li>Target cost contracts work well when: <ul style="list-style-type: none"> <li>The target set is achievable and realistic yet still a challenge. Where targets are either too low or too high, game playing between the project owner and contractor tends to occur.</li> <li>The mechanism for calculating performance against the target is transparent and simple, and so also is calculation of any gain share or pain share.</li> </ul> </li> </ul>

