Collaborative Procurement and Delivery Model

Concept Paper (draft)

November 2021

Queensland Government

Document Details

1.1 Contact for enquires and proposed changes

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1.2 Version History

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2. Moral Rights

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Introduction and objectives

The Department of Transport and Main Roads (TMR) is committed to delivering its vision of 'creating a single integrated transport network accessible to everyone'. The department is responsible for providing, enhancing and maintaining the state's transport network to ensure the movement and connecting of people, places, goods and services safely, efficiently and effectively across Queensland.

To support its vision, TMR will deliver a significant program of transport infrastructure projects over the next four years. This is reflected in the *Queensland Transport and Roads Investment Program* (QTRIP) which outlines $27.5 billion in committed transport investment over 2021-22 to 2024-25. There are also a number of factors that will drive the pipeline of transport projects to be progressed in Queensland over the next 10 years, including the 2032 Olympic Games, significant population growth in South East Queensland and the Commonwealth and State Government's response to the COVID-19 pandemic.

TMR is also progressing a range of initiatives to facilitate 'best practice' regarding the delivery of transport infrastructure projects. This includes seeking to ensure the highest possible standards regarding workplace health, safety and conditions on transport projects, and encourage greater collaboration between TMR and industry.

Project Objectives

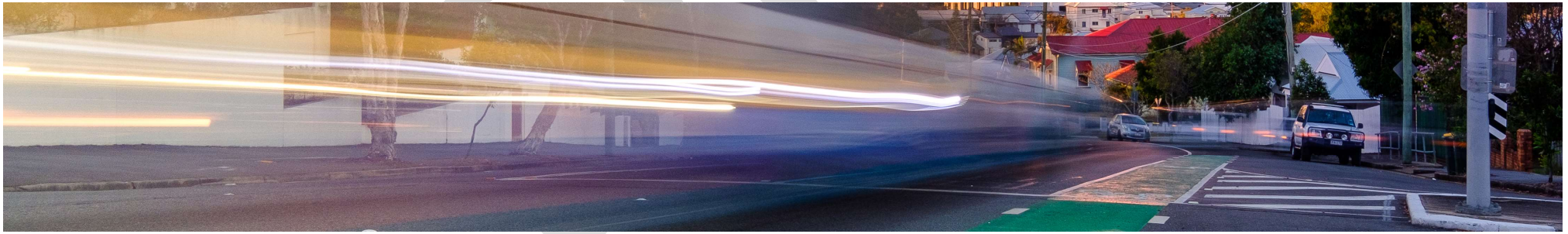
Given the extent of transport projects to be delivered over the coming years, TMR is reviewing its procurement and contracting frameworks to ensure they are 'fit for purpose' and provide tangible social, economic and environmental benefits for the state. A key element of this work is the development of a Collaborative Procurement and Delivery Model – a streamlined, collaborative framework for awarding contracts based on contractor capability, capacity, past performance and ability to deliver value for money.

The *Collaborative Procurement and Delivery Model – Concept Paper* provides:

- recommendations regarding the 'key principles' of a final Collaborative Procurement and Delivery Model
- a 'concept' version of the Collaborative Procurement and Delivery Model for stakeholder consultation.

This paper does not address changes to TMR policy or internal processes required to support a collaborative model.

This document is intended to facilitate discussion and **does not represent government policy.**



Collaborative Procurement and Delivery Model, Taskforce and Working Group

TMR is reviewing its procurement and contracting frameworks to ensure they can effectively and efficiently deliver the state's forward program of transport infrastructure projects. This includes working with industry to ensure these frameworks:

- contribute towards transport projects being delivered 'on time', 'on budget' and to a high standard
- support local suppliers and industries
- provide social, environmental and economic benefits
- do not impose onerous financial risk or burden on industry
- encourage initiatives, such as innovation, to optimise the delivery of transport infrastructure.

In late 2020, TMR facilitated a workshop with key industry groups to identify opportunities to improve its procurement and contracting frameworks. The key themes from this workshop included:

- capability and capacity issues, including potential skill shortages that may threaten TMR's ability to deliver its planned program of transport projects
- contractors are engaging in a ‘race to the bottom’ by underbidding in order to secure work; this is leading to various issues including exposing contractors and TMR to additional risk
- the length of TMR’s procurement processes is imposing additional costs on industry and the department
- risks are not being identified and addressed in planning and design activities which is creating issues in the delivery phase.

Based on this feedback, a joint Collaborative Procurement and Delivery Taskforce (Taskforce), consisting of senior TMR officers and senior representatives from industry, was established in January 2021. The key pieces of work to be delivered by the Taskforce include:

- **TMR - Industry Engagement Charter** – details how TMR and industry will work together, including expectations regarding communication, safety, accountability and collaboration.
- **Collaborative Procurement and Delivery Model** – a collaborative model for the procurement and delivery of transport infrastructure projects.

Collaborative Procurement Delivery Model - Working Group

To support the development of the model, the Collaborative Procurement and Delivery Model – Working Group (the Working Group) was formed in July 2021. Consisting of technical experts from TMR and industry, the Working Group is responsible for developing a concept Collaborative Procurement and Delivery Model for Taskforce review and endorsement (see Figure 1).

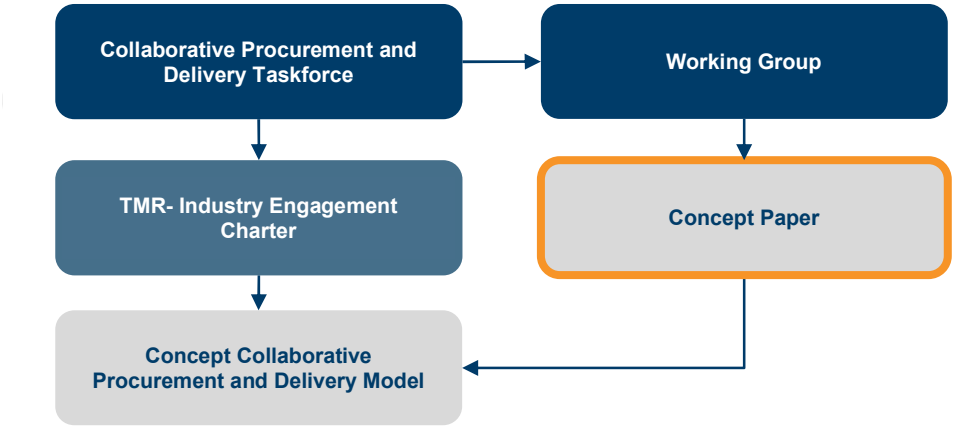


Figure 1 Governance Structure

Queensland Procurement Framework

Queensland Procurement Policy

The Queensland Procurement Policy (QPP) is the Queensland Government's overarching policy for the procurement of goods and services. The policy seeks to ensure that procurement activities undertaken by Queensland Government agencies deliver value for money, including advancing the government's economic, environmental and social objectives for the long-term wellbeing of the community.

The key aims of the policy are to:

- focus on the economic benefit to Queensland – by applying a local benefit test for all significant procurement, and supporting secure and fair employment outcomes
- support regional and remote economies – by allowing agencies to procure outside of whole-of-government supply arrangements for regional and remote locations
- support disadvantaged Queenslanders – by increasing procurement with genuine, quality social enterprises.

Best Practice Principles

The QPP nominates a number of best practice principles applicable to projects of $100 million and above. The *Best Practice Principles; Quality, Safe Workplaces* (BPP) guides agencies, contractors and subcontractors to apply the best practice principles to enable 'quality' workplaces for people engaged on State Government projects by ensuring the highest possible standards of workplace health and safety, to engage an appropriate number of trainees and apprentices and adopt best practice industrial relations.

For applicable projects, the BPP is facilitated through the procurement process and must be incorporated into tender documentation. Evaluation panel members must consider the BPP in their evaluation of tender responses. Commitments made by tenderers in respect of the BPP must be included in the resulting contract(s). These commitments must also be included as part of the contract management plan and monitored on a regular basis.

Other State Procurement Documents

There are a range of Queensland Government policy and process documents that support the QPP and guide the procurement of goods and services by government agencies. This includes, but is not limited to:

- ***Ethical supplier Threshold*** – defines wage and entitlement standards expected of all suppliers who do business with the Queensland Government
- ***Ethical Supplier Mandate*** - outlines how the Queensland Government will manage instances where a supplier fails to meet the standards outlined in the Ethical Supplier Threshold
- ***Queensland Indigenous Procurement Policy*** - outlines how the Queensland Government will facilitate the targeting of procurement activities to ensure indigenous business can equitably access procurement spend.
- ***Capital Works Maintenance Framework*** - policy for managing risks in the planning and delivery of Queensland Government building projects.
- ***Project Assessment Framework*** - provides the framework for ensuring that project evaluation, procurement and delivery activities are undertaken effectively and efficiently across government and achieve value for money.
- ***Transport Best Practice Industry Conditions*** - articulates TMR's expectations regarding best practice industrial relations for major transport projects.

TMR's Procurement Framework

Transport and Main Roads Strategic Procurement Plan

The *Transport and Main Roads Strategic Procurement Plan 2021-2025* establishes the department's procurement vision of:

> *We use our significant buying power, technology enablement and capability uplift to deliver Queensland Government objectives and realise TMR's vision.*

The plan establishes several procurement priorities to achieve this vision, including process by design, best practice and improved service delivery. It also provides various 'indicators of success', including:

- an increase in local, small medium enterprise and indigenous business procurement spend contributing to government targets
- enhanced procurement datasets that provide procurement intelligence and support reporting that enables the identification of improvement initiatives as well as more insight into the performance and health of the procurement function.

Key Result Areas and the Best Practice Industry Conditions

The following Key Result Areas (KRAs) provide a consistent approach to facilitate and motivate better performance on major transport infrastructure projects:

1. Quality Jobs
2. Safe Workplaces
3. Local supply chains and manufacturing
4. Sustainability
5. Project Delivery Optimisation.

The KRAs are supported with relevant performance measures to determine performance standards. The KRAs will be included in the tender documentation for transport projects valued in excess of $100M.

The QPP and BPP are supported by TMR's *Best Practice Industry Conditions* (Transport BPIC) which sets out wage rates and employment conditions applicable for major transport infrastructure projects. The Transport BPIC is enabled through the application of the KRA's.

Procurement Guidelines

TMR's *Transport Infrastructure Project Delivery System* (TIPDS) establishes the framework for the procurement of road and bridge infrastructure works. The document provides guidance regarding:

- developing the best strategy for procurement and project delivery
- how tenders should be called, compiled and assessed
- who should be eligible to tender.

The document consists of three volumes:

- Volume 1: Selection of Delivery Options
- Volume 2: Tendering for Infrastructure Works
- Volume 3: Prequalification System.

There are several additional documents that inform TMR's procurement processes for infrastructure projects, including the:

- **Consultants for Engineering Projects** (CFEP) manual - provides TMR's specific requirements for consultants on engineering projects.
- **Contract Administration System** (CAS) - is a reference manual designed to assist in contract administration activities for transport infrastructure projects. The document seeks to ensure that contract administration activities are undertaken in a consistent approach and meet departmental and legal requirements.

Pre-qualification (construction)

Contractors delivering asphalt, road or bridge projects greater than $1m must hold prequalification status with TMR. In order to obtain pre-qualification, a contractor must demonstrate relevant technical experience of key personnel, good performance on previous applicable projects, readily available resources, and financial capacity to successfully complete a contract at a specified level.

Prequalification (design)

Designers working on a TMR project must have the relevant prequalification under TMR's Engineering Consultant Prequalification System. The system provides ten (10) categories of

prequalification, including bridge design, geotechnical engineering, highway design and transport planning.

Contract Administrators

TMR currently engages contract administrators to work on infrastructure projects via a standing offer arrangement (SOA).

Contracting Types

TMR maintains a suite of contracting types that reflect the broad scope of work progressed by the department. TMR has a number of performance incentivised cost reimbursable contracts that seek to facilitate industry and departmental collaboration in the delivery of transport projects (see Table 1)

Table 1 TMR's Collaborative Contracts

Contract	Delivery Type	Risk	Value	Details
Transport Infrastructure Contract – Cost Reimbursable (TIC-CR)	Construct only	Medium to High Risk	Medium to High Value	Suited to situations where TMR has a substantially completed design but is seeking constructability input to finalise the design. It is appropriate to use this form of contract when there is likely to be substantial unknown risks that cannot easily be allocated to the different contracting parties at the time of tender and provides a mechanism for sharing risks and rewards which in turn drives more collaborative behaviours in such circumstances.
Collaborative Project Agreement (CPA)	Design and construct	Medium to High Risk	High Value (min. $100m)	Suited to situations where TMR has limited or no detailed design and is seeking significant design development and construction of the project. It is appropriate to use this form of contract where there is likely to be substantial unknown risks that cannot easily be allocated to the different contracting parties at the time of tender and provides a mechanism for sharing risks and rewards which in turn drives more collaborative behaviours in such circumstances. This arrangement also encourages innovation with regards to technical solutions and challenges.

Issues and Key Principles

This section outlines the key principles that will inform the development of the concept Collaborative Procurement and Delivery Model. These principles were developed based on extensive consultation with industry and technical input from Working Group members.

Reduced Cost and Time of Tendering

Over the last five (5) years, QTRIP (i.e. the state's transport infrastructure program) has expanded in value by over 35%. This capital program will continue to grow over the next ten years given various external influences that will drive the need for transport infrastructure, including continued strong population growth in South East Queensland and the 2032 Olympics.

TMR's existing multi-stage procurement process generally consists of shortlisting two to four contractors based on non-price considerations (Stage 1) who will undertake various development phase activities, including the development of a project cost (Stage 2). The department will then assess shortlisted contractors on non-price and price considerations but the award generally favours the lowest price (see Figure 2). It generally takes between 9-12 months to complete this process for a major transport infrastructure project.

For contractors, there are significant resource implications (i.e. time, capability and cost) associated with participating in a two-stage procurement process. Feedback from industry is that costs associated with participating in these processes can be hundreds of thousands to millions of dollars. TMR may contribute towards tendering costs but they are not fully reimbursed. The 'stop/start' nature of current procurement processes causes challenges to contractor resource allocation and management which can lead to unnecessary 'bench time' or reallocation of resources onto other projects, including limiting contractors' ability to be proactive in finding alternative work.

The existing process of managing multiple contractors through the project delivery phase also imposes significant administrative burden on TMR officers. Managing multiple contractors limits officers' ability to undertake higher value activities, including actively contributing to deliverables produced. This burden will only heighten with the increasing pipeline of projects to be delivered by TMR over the coming years.

Given TMR's program of infrastructure works will continue to grow into the near future, the existing 'inefficiencies' in the department's procurement frameworks are likely to compound. This includes the ability to engage suitably skilled contractors in a constrained labour market which threatens the department's ability to deliver its forward program of works.

It is recommended that the Collaborative Procurement and Delivery Model implement mechanisms to reduce the 'cost' (e.g. time, resources and financial) of tendering for both TMR and industry. Potential strategies for achieving this principle include:

- streamlining and simplifying existing procurement processes
- reducing procurement timeframes for infrastructure projects
- standardising procurement documentation
- 'front loading' procurement requirements, including the establishment of common terms and agreements for working on a TMR project.

Key principle 1 – The Collaborative Procurement and Delivery Model will reduce the cost of tendering for both TMR and industry.

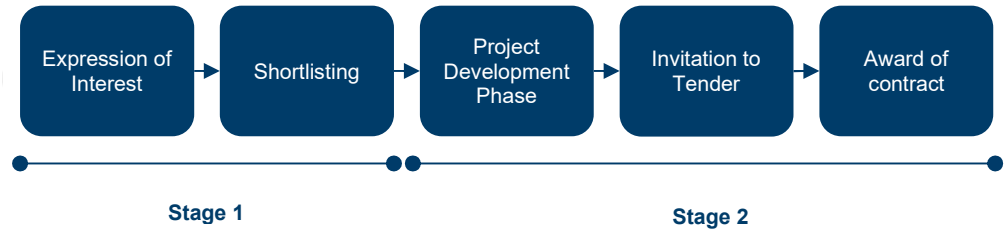


Figure 2 Typical – two stage procurement process

Alternative Mechanisms for Determining Value for Money

For a two stage procurement process, TMR will take multiple tenderers through shortlisting process to contract award, which tend to favour price considerations. Shortlisting multiple contractors maintains the 'competitive tension' in the process which helps achieve 'value for money' outcomes for TMR.

Feedback from industry and TMR technical officers is that competitive tension can result in contractors underbidding in order to secure work in what sometimes becomes a race to the bottom. Under bidding contractors will seek to ‘claw back’ revenue via project variations which can result in ‘blow outs’ of project budgets or delays. Subsequently, these 'blow outs'

deteriorate the value for money benefits provided by the competitive tension of multiple tenderers.

The existing, 'priced based' approach for awarding transport infrastructure contracts does not adequately 'weight' a contractor's potential value to a project or how they will contribute to achieving the state's economic, social and environmental objectives. For example, awarding a contract primarily on price (that is, having the price criteria weighted too high) does not always influence the outcomes of the tendering process to adequately reflect the importance of certain government priorities, including how a contractor may support local supply chains, provide quality employment, provide 'best practice' regarding workplace safety or deliver an innovative solution that provides benefits across the life of the infrastructure asset.

It has also been identified that value for money is not only determining cost benefit, but broader project benefits. Models of major infrastructure project delivery which emphasise and reward broader project benefits (such as capability build, BPIC principles, community benefits, quality outcomes, etc) ultimately lead to self-perpetuating benefits. For example, when a client such as TMR, encourages high performance in these areas, the capability of the industry increases to deliver on these areas, enabling better performance on future jobs, improved self-governance, improved data sources etc.

It is recommended that a Collaborative Procurement and Delivery Model seek to implement alternative mechanisms for achieving value for money outside of tendered cost. That is, moving away from the predominately price-based approach for awarding transport infrastructure contracts to instead focus on a contractor's benefit to the project and the state.

Further Work – Additional work, including sourcing data, is required to:

- substantiate the extent to which underbidding is occurring on TMR projects and what (if any) impacts is having on project outcomes.
- Find examples in other jurisdictions where 'non price' based procurement approaches have achieved 'value for money'.

Key Principle 2 – The Collaborative Procurement and Delivery Model will provide alternative mechanisms for determining value for money than target outturn cost.

Maximise the value at the 'Front' of the Procurement Process

Feedback from industry is that TMR's procurement processes for a multi-stage selection are overly cumbersome and resource intensive – with the department taking a significant amount of time to review tender documentation and award a contract. As noted above, this imposes significant burden on industry given there are substantial costs associated with tendering for TMR transport infrastructure projects.

Feedback from industry has been that streamlining existing procurement processes will provide benefits across the project lifespan. For example, reducing timeframes to select a preferred tenderer will provide additional time for a contractor to undertake 'higher value' activities, including refining initial designs (if relevant), providing constructability input, gaining a better understanding of project risks, providing additional time to innovate and develop an accurate target outturn cost.

Streamlining procurement processes is also going to have a cost benefit for most stakeholders. For contractors, it provides certainty early in the procurement process whether they are going to be selected to deliver a contract. For those contractors who ‘miss out’, it frees them up to find alternative work and reduces their tendering costs. For TMR, it provides officers greater opportunity to undertake activities that provide value to the project rather than on administrative activities.

It was also recognised that more robust planning activities need to be undertaken to identify risks which will inform a project's design and construction phases. This will help TMR and contractors to better understand project constraints, drive more accurate pricing of works and more equitable risk allocation.

Strategies for achieving 'true value' at the front of the procurement process include taking a single contractor through shortlisting and establishing a suite of ‘standard’ documents that a contractor must agree to in order to tender on a TMR project. Further work is also required to understand the shortcoming(s) of the department's planning activities and develop appropriate mitigation strategies.

Further Work – Additional work, including sourcing relevant data and examples, is required to substantiate:

- whether TMR's procurement processes for transport infrastructure projects are subject to 'lengthy' timeframes
- the impacts of industry, including costs, associated with the timeframes for TMR's existing procurement processes.

Key Principle 3 – The Collaborative Procurement and Delivery Model will maximise the 'true value' at the front end of the procurement process.

Leveraging the Existing Contracting Framework

TMR and industry have developed an engagement charter outlining commitments and expectations regarding how they will work together to deliver the department's future program of transport infrastructure projects. Key objectives of this charter include the need for greater collaboration between all parties, open communication, strong leadership and positive performance.

In order to achieve these outcomes, TMR's contracting framework needs to incentivise and encourage the appropriate behaviours and reflect and reward performance. Greater incentivisation will also help to remove the existing 'fear' that can drive decision making on TMR projects; 'the fear' of 'getting in trouble', 'making a loss' or 'being taken advantage of'. That is, providing a 'carrot' (incentivisation) instead of a 'stick' (penalty) will encourage a high level of contractor performance, rather than achieving the minimum expectations.

Feedback from industry is that TMR's existing suite of collaborative contracts already contain mechanisms that incentivise good behaviour and performance. As a result, it is recommended that the Collaborative Procurement and Delivery Model actively leverage and re-purpose TMR's existing suite of collaborative contracts.

While TMR's existing contracting suite is sophisticated regarding encouraging appropriate behaviours, it is likely that some contracts may need to be amended to provide additional/appropriate incentivisation mechanisms. This includes consideration of gain/pain share thresholds, prescribed margins and more relevant key performance indicators. In addition, TMR will work with contract administrators and their engagement conditions to ensure that focus is placed on collaborative behaviours.

Key Principle 4 – The Collaborative Procurement and Delivery Model will leverage TMR's existing suite of collaborative contracts and improve existing delivery team capability assessment techniques.

Realistic Project Outturn Cost

Over the last 10 years, there have been a number of TMR transport infrastructure projects that have experienced exceedances in projected budgets due to a contract being awarded on an unrealistic or unachievable target outturn cost. This can be attributed to a range of factors, including:

- costings based on poorly defined scope and poor scope management
- inadequate identification and management of project risks
- lack of adequate time to undertake project planning
- ineffective mechanisms for managing the target outturn cost within the project budget
- contractors underbidding in order to secure work in the case of competitive target outturn costs.

The delivery of projects significantly above target outturn cost has a number of negative impacts on both TMR and contractors. This includes reputational damage, increased need for project variations (including the need for mediation and arbitration) and deterioration of relationships between contractors and TMR. Conversely, a target outturn cost that is too high does not drive delivery efficiencies or innovation and can diminish value for money.

It is recommended that the Collaborative Procurement and Delivery Model contain mechanisms that seek to ensure that projects produce more realistic target outturn costs. Strategies for achieving this outcome in the collaborative model include:

- appropriate effort in project planning activities to ensure sufficient investigation and understanding of project risks
- TMR and contractors working collaboratively to undertake development phase activities, enhancing understanding of project risks and more accurately pricing them
- Undertaking progressive reviews of target outturn costs to ensure the target outturn costs remains within TMR's budget and there are no surprises at the completion of the development phase
- providing enhanced opportunities for contractor input into design considerations, including 'constructability' review(s)
- providing adequate time to undertake development phase activities, including ensuring designs are robust and appropriate prior to the development of a target outturn cost.

Further Work – Additional work, including sourcing relevant data, is required to substantiate:

- confirm whether a significant portion of TMR projects are being delivered significantly above the established target outturn cost

Key Principle 5 – The Collaborative Procurement and Delivery Model will produce more realistic project outturn costs.

Future Market Capacity

The State Government's significant forward program of infrastructure projects is likely to continue to increase over the coming years. Concurrently, other Australian states and territories have made commitments to deliver significant forward programs of transport infrastructure projects. This includes Victoria's 'Big Build' (which establishes $80 billion in transport projects) and New South Wales' State Infrastructure Strategy (the state's 20 year infrastructure investment plan) which outlines over $100 billion in infrastructure spending over the next four years.

The extent of government spending over the coming years is going to impact on the capacity of the market to deliver the planned number of infrastructure projects across Australia. In particular, it is anticipated that there will be increasingly constrained market capacity to deliver projects with a contract value greater than $200 million.

As a result, it is recommended that a collaborative procurement and delivery model is available to all spectrums of the market; from very large to smaller scale projects and applied in the appropriate circumstances. This will enable TMR to tailor its procurement strategy to leverage capacity in the market while being able to engage a contractor in an expeditated manner.

Key Principle 6 – The Collaborative Procurement and Delivery Model will enable TMR to access capacity in the market.

Incremental Change

TMR has already implemented a large range of collaborative contracting models over a period of time, with varied success. This Collaborative Delivery and Procurement Model is intended to apply to a large range of contracts including different modes of transport, varying levels of complexity, various scopes (design and construct, and construct only), and different target cost values.

It would be the intent that the Collaborative Delivery and Procurement Model is phased into implementation. There are various elements that are proposed for future change, and implementing all aspects in one single (or very few) implementations would remove the opportunity to be able to test elements of the model through a pilot and evaluation type approach.

It is strongly recommended that TMR adopt an incremental, staged approach to implementing a collaborative procurement and delivery model. This includes:

- progressively implementing and testing elements of the model – as opposed to a 'one off' full implementation approach
- test the model on projects of various contract value, mode and scope including in different geographic locations
- develop objective mechanisms to test the effectiveness of the model at various points in the procurement process
- adopt a 'continuous improvement' approach to implementing the model, including amending elements as required.

Key Principle 7 – The Collaborative Procurement and Delivery Model will involve a phased implementation, with progressive evaluations enabling continuous improvement to the various procurement and contract mechanisms.

Collaborative Procurement and Delivery Model

Based on the key principles identified earlier in this document, the Working Group has developed a 'concept version' of the Collaborative Procurement and Delivery Model. The model consists of the following key elements:

- **Panel Membership** (pre-procurement) – suitably qualified and skilled individuals or organisations can obtain membership to the relevant construction, design or contract administration panel.
- **Expression of Interest** – selected panel members participate in a short expression of interest process based on project criteria (i.e. non-price based assessment)
- **Project Development Phase** – a single, shortlisted contractor undertakes project planning activities, preliminary design, constructability reviews and the development of a target outturn cost.
- **Project Delivery Phase** – the contractor delivers the relevant detailed design (if applicable) and construction works.

A summary of the Collaborative Procurement and Delivery Model has been provided on Page 15. Please note, this is a **concept only** and does **not reflect government policy.**

PRE-PROCUREMENT

Application of the Model

Prior to the establishment of a procurement strategy, the relevant project officer must determine whether the Collaborative Procurement and Delivery Model is appropriate for their project. It is recommended that the model be applied to projects with the following characteristics:

- A contract value greater than a certain threshold – tentatively nominated at $25M but requires consideration of the cost effectiveness of the model for smaller projects
- medium to high level of complexity
- medium, high level of uncertainty and risks that are either unknown and/or not easy to quantify/allocate
- all forms of transport projects, including road and rail, and
- would benefit from greater contractor and TMR collaboration.

Note, the collaborative model may not be suitable for all projects; especially where an alternative delivery approach would provide greater benefits.

Panel Membership

A key element of the Collaborative Procurement and Delivery Model is the establishment of a panel framework that allows TMR to invite pre-qualified contractors, designers or contract administrators to apply for construction works and services in an expeditated manner.

An organisation or individual may seek membership to a nominated TMR construction, design or contract administrator panel. In order to obtain panel membership, an organisation or individual must:

- maintain the relevant level of pre-qualification with TMR
- agree to panel documentation, including relevant terms and conditions, and commercial framework
- agree to the contents of TMR - Industry Engagement Charter
- agree to comply with any relevant state or TMR policy, including the Transport BPIC.

Past performance against the TMR - Industry Engagement Charter will also be considered as part of the evaluation criteria for panel membership.

Further work is required to develop the framework for panel membership, including:

- determining an appropriate panel structure
- consideration of appropriate size of panel membership taking into account the number of contractors already prequalified with TMR and actively winning work
- determining the terms and conditions required for panel membership
- specific criteria for panel membership, including relevant prequalification levels, financial status, capability and past performance
- determining the time periods in which an applicant may join a panel.

- determining the framework for reviewing contractor performance – this will be used to inform eligibility/suitability for future TMR projects and potentially disqualification from the panel arrangement.
- finalising the specific construction, design and contract administrator panel 'bands'
- developing the framework and processes for engaging and communicating with panel members, including processes for storing, maintaining and updating panel documentation.

Panel Membership - Joint Ventures

TMR has a strong history of working with joint venture partners to deliver transport infrastructure projects. Joint ventures have been critical for the capability development of smaller contractors in the Queensland market, and should be supported to ensure the ongoing sponsorship of capability development within the market. This includes providing the opportunity for smaller contractors to partner with larger firms to gain experience delivering increasingly complex projects.

The Working Group has agreed that joint ventures can participate under a Collaborative Procurement and Delivery Model, including being able to obtain panel membership. The specifics of this participation and requirements specific to joint ventures are subject to further consideration.

Contracting Approach

Prior to going to market, the relevant TMR project manager must develop a supporting procurement strategy. A key element of this strategy is identifying the objectives, risks, opportunities, market capacity and capability to inform an appropriate delivery methodology and specific contract type(s). Under the Collaborative Procurement and Delivery Model, it is recommended that the following contract types be applied:

- **Collaborative Project Agreement** – which operates with a no blame framework, where minimal design works have been completed (for design and construct) or design has not commenced
- **Transport Infrastructure Contract – Cost Reimbursable** – where a design has been substantially completed.

Each of these contracts will have the following collaborative elements:

- a fixed profit margin (tentatively proposed at 10%)
- painshare / gainshare based on the contractor's performance against the target outturn cost and key performance indicators – painshare / gainshare will be split at 50/50 between the contractor and TMR and capped for the contractor at 5% of the total contract cost (i.e. the contract's margin is capped between 5 – 15%).
- 'no liability' (Collaborative Project Agreement only)
- reimbursement for specific costs incurred during the project development and delivery phases.

PROCUREMENT

Expression of Interest

Under the concept Collaborative Procurement and Delivery Model, TMR will invite specific panel members (between 2-3 panel members) to participate in a short expression of interest (EOI). Invited panel members will be selected based on previous performance, current organisational capacity and availability, local knowledge and project specific technical capability. When selecting a contractor to participate in an EOI process, TMR will consider current work commitments and seek to ensure that parties are not exposed to unacceptable risk (i.e. being awarded work that is beyond their financial or technical expertise) and actively investigate opportunities to provide smaller contractors the chance to develop their experience and capability leading increasingly complex projects.

PROJECT DEVELOPMENT PHASE

Contractor

Based on the responses received in the EOI phase, TMR will select one (1) contractor to progress through to the Project Development Phase. The contractor will work collaboratively with TMR to complete various project planning activities which may include:

- planning and preliminary design work to develop or refine a design to a point where it can be accurately priced
- constructability reviews
- effective scope management
- risk analysis
- cost planning

- development of a target outturn cost.

The contractor will be paid a fee covering their overhead and profit. Specific contractor costs incurred during the project will be reimbursed. Further work is required to determine what costs will and will not be eligible for reimbursement.

At any time during the Project Development Phase, TMR may terminate the contract with the contractor and seek to engage another panel member. Generally, this option will only be used where there are issues in the relationship between TMR and the contractor that cannot be resolved and/or performance is unsatisfactory.

Designer

Under the Collaborative Procurement and Delivery Model, designers will be engaged via a panel arrangement and receive a fee for their overhead and profit. A modifier will be used to scale the fee up or down (within limits) based on the designer's performance in accordance with defined indicators.

Further work is required to determine how designers will be engaged under a Collaborative Procurement and Delivery Model, including:

- the process for engaging a designer via a panel arrangement
- the party who will be responsible for selecting the designer for a design and construct project
- fee multiplier
- ongoing ownership for design risk
- consideration regarding the engagement of multiple designers over the lifespan of a project
- engaging and retaining designers to undertake 'rework' elements
- the potential of 'forced marriages' between designers and contractors
- the relationships between contractors and designers, including whether designers will be engaged as sub-contractors
- liability and insurance considerations.

Contract Administrator

During the Project Development Phase, TMR will engage (or nominate) a contract administrator who will work 'collaboratively' with the department, the designer and the contractor. This will include the facilitation of the optimisation of tasks, milestones and performance throughout the project development phase to support the development of a defensible target. The skill and tact used by the administrator will be key to driving the collaborative behaviours that underpin the model. Engagement of the contract administrator during the Project Development Phase will also allow them to start forming a relationship with the contractor to maximise the potential for collaboration during the Project Delivery Phase.

Active Client

Throughout the project, TMR will act as an 'active client'; collaborating and working with the contractor to inform and progress relevant project deliverables. This includes working closely with the contractor to develop a target outturn cost that is accurate, aligns with the project scope and the department's expectations. Functioning as an active client will provide TMR the ability to identify potential issues as they arise and time to work with the contractor to develop an appropriate solution.

In order to function as an 'active client', TMR will commit to sharing information and known risks as early as possible facilitating joint development of solutions. TMR will also develop and maintain supporting datasets to inform project development activities, including project and resource costs, supplier capacity and resource commitments, supplier benchmarks and data to support pipeline optimisation.

Further work is required to determine how TMR can best participate as an active client under a Collaborative Procurement and Delivery Model.

Target Outturn Cost Assessment

At the end of the Project Development Phase, the contractor will develop a target outturn cost to deliver the project. Based on this figure, TMR will:

- engage the contractor to progress the Project Delivery Phase based on the provided target outturn cost, or
- amend the project scope and engage the contractor to redevelop the target outturn cost (although preferably this should be done progressively as the preliminary design is being developed), or
- engage an alternative panel member or contractor to provide a new target outturn cost.

Value for Money

Value for money (VFM) can be described as maximising the total potential or actual benefit derived from a good or a service for a given total cost. Historically, TMR has tended to procure transport infrastructure projects through a competitive tendering process with contracts generally awarded to the lowest price. VFM has been implied through acceptance of a lowest price bid for a fixed scope of works. The upside to this approach is that it is relatively simple; does not require any highly developed procurement skills and generally provides a robust outcome that can withstand scrutiny. However, the downside is that it tends to drive overly competitive and unsustainable pricing in certain circumstances (particularly in a tight market) which in turn can drive undesirable behaviours during the delivery of the project such as aggressive claims to recover any underbid costs. This has been termed “the race to the bottom”.

Under the proposed ~~a~~ Collaborative Procurement and Delivery Model, only one contractor (for each available contract) will be taken through to the project development phase. This is somewhat of a departure from the more traditional tendering processes but is considered to potentially offer better VFM through providing an opportunity to negotiate the “right price” for the project avoiding the "race to the bottom”. This arrangement allows both TMR and contractors to work together to develop a target outturn cost that aligns with the department's expectations, including funding envelope. In assessing VFM, a greater emphasis will be placed on commitment to delivering against government priorities and social benefits through the use of non-price selection criteria. TMR will also rely on advice from its commercial advisors in assessing the target outturn cost to ensure it represents value for money and will continue to rely on the use of probity advisors. This will require additional effort compared to more traditional procurement arrangements but is considered more likely to give better project outcomes. Some of the value for money considerations include -

- tailoring tendering criteria around project specifics (including the state's procurement objectives, contractor capacity, key personnel capability
- setting contractor margins (tentatively set at 10%)
- developing the target outturn cost as part of an open book process
- establish independent cost verification to ensure contractor costs are fair and reasonable, benchmarked to similar projects, compared to TMR estimates and are auditable.

PROJECT DELIVERY

If the contractor’s target outturn cost is accepted by TMR, the relevant parties will enter into a contract to deliver the project. Under a Collaborative Procurement and Delivery Model, the relevant construction contract will include a number of elements that encourage collaboration, including:

Painshare/Gainshare

Under more traditional delivery arrangements, the contractor benefits fully from any gains made during the delivery but also carries much of any pain experienced. Research has shown that for complex projects where risks cannot easily be defined and allocated, delivery models that provide for sharing of the gain and pain can drive more collaborative behaviours. Models that share both the pain and gain elements incentivise both the client and the contractor to work together to achieve better project outcomes as they both have a vested interest.

The use of a collaborative delivery approach requires a different mindset from all parties (client, contractor, designer, contract administrator) delivering the project. Unlike more traditional delivery arrangements where the contractor is largely responsible for any key decisions relating to its construction methodology, under collaborative models it is a joint responsibility. This can sometimes be challenging for key personnel coming from a background of traditional delivery. Retraining and guidance will be required.

The use of KRA’s in addition to a pain/gain share commercial regime can also further enhance collaborative behaviours and drive the parties to focus on project outcomes that are most important to the client.

Under the proposed Collaborative Procurement and Delivery Model, contractors will be reimbursed for the work completed and be provided a nominated margin (tentatively proposed at 10%). This margin can be modified to reflect the contractor's performance against project specific performance indicators, with the margin having a fixed upside (i.e. 'gainshare') and downside (e.g. 'painshare') limit. Tentatively, the working group has agreed that the painshare and gainshare should be capped at 5%. That is, a contractor's margin can be as low as 5% and as high as 15% based on their performance.

OTHER MATTERS

Insurance

Further work is required to determine responsibilities regarding the provision of relevant insurance under a Collaborative Procurement and Delivery Model. This will require consultation with TMR's Principal Arranged Insurance (PAI) provider to understand how TMR's insurance arrangements may be impacted by the use of alternate delivery models.

Dispute Avoidance Mechanisms

Traditional delivery models often provide mechanisms for the escalation and resolution of matters in dispute including the use of Dispute Resolution Boards.

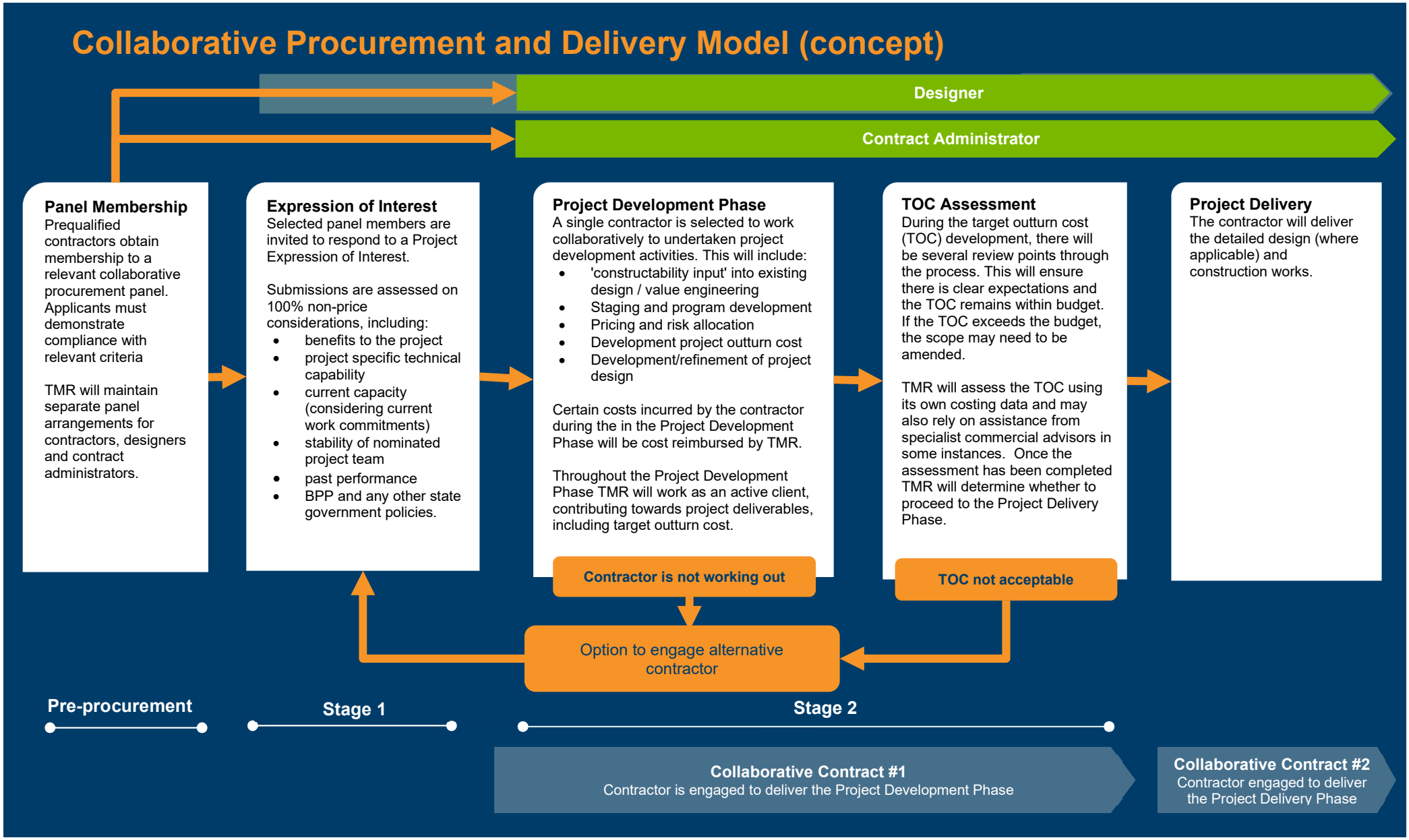
Under the proposed Collaborative Procurement and Delivery Model, TMR's collaborative contracting arrangements will provide formal mechanisms for TMR and contractors to resolve differences however there will be an increased focus on dispute avoidance rather than resolution.

Further work is required to determine how this arrangement would work in practice.

Contractor Review

At the end of the project, TMR will undertake a review of the contractor's performance. This will provide TMR the opportunity to provide constructive feedback to the contractor.

The contractor's performance will inform their ability to secure future work under the Collaborative Procurement and Delivery Model. In certain circumstances, exceptionally good performance may provide increased opportunities for repeat work – this may occur when good performance occurs on a project that forms part of a program of similar projects. However, poor performance may result in a contractor being excluded from opportunities to secure work for a period of time or even removed from a panel arrangement.


Collaborative Procurement and Delivery Model (concept)
Designer
Contract Administrator
Panel Membership
Prequalified contractors obtain membership to a relevant collaborative procurement panel. Applicants must demonstrate compliance with relevant criteria
TMR will maintain separate panel arrangements for contractors, designers and contract administrators.
Expression of Interest
Selected panel members are invited to respond to a Project Expression of Interest.
Submissions are assessed on 100% non-price considerations, including:
benefits to the project
project specific technical capability
current capacity (considering current work commitments)
stability of nominated project team
past performance
BPP and any other state government policies.
Project Development Phase
A single contractor is selected to work collaboratively to undertaken project development activities. This will include:
'constructability input' into existing design / value engineering
Staging and program development
Pricing and risk allocation
Development project outturn cost
Development/refinement of project design
Certain costs incurred by the contractor during the in the Project Development Phase will be cost reimbursed by TMR.
Throughout the Project Development Phase TMR will work as an active client, contributing towards project deliverables, including target outturn cost.
TOC Assessment
During the target outturn cost (TOC) development, there will be several review points through the process. This will ensure there is clear expectations and the TOC remains within budget. If the TOC exceeds the budget, the scope may need to be amended.
TMR will assess the TOC using its own costing data and may also rely on assistance from specialist commercial advisors in some instances. Once the assessment has been completed TMR will determine whether to proceed to the Project Delivery Phase.
Project Delivery
The contractor will deliver the detailed design (where applicable) and construction works.
Contractor is not working out
TOC not acceptable
Option to engage alternative contractor
Pre-procurement
Stage 1
Stage 2
Collaborative Contract #1
Contractor is engaged to deliver the Project Development Phase
Collaborative Contract #2
Contractor engaged to deliver the Project Delivery Phase

Next Steps

Through the working group consultation, a body of work has been distilled with the aim of supporting the development of the proposed Collaborative Procurement and Delivery Model. To progress, TMR intends to engage an independent consultant. The tasks have been categorised in the table below.

Task	Action
Literature Review	Investigate current best practice in procuring and delivering transport infrastructure projects focusing on Queensland / Australian context.
Jurisdictional Analysis	Investigating other collaborative and delivery models and contracting arrangements. Further to that, they will be required to identify 'delivery pain points' / barriers to collaboration experienced by other jurisdictions and solutions adopted.
Review TMR's procurement and contracting framework	Identify elements that have been working well and identify barriers to collaboration with suggestions to enhance and augment existing arrangements. This will include broader consultation with key industry representatives including suppliers/subcontractors; stakeholders who are not members of industry groups and other internal TMR stakeholders where there has been limited engagement to date.
Review proposed model	Review proposed model against themes identified in the literature review and provide recommendations that align with best practice. Possible barriers to implementation will also be identified with potential solutions where possible.
Implementation	Develop an implementation plan including identified changes associated with this paper's recommendations.

In parallel with this work, the Rockhampton Ring Road project has been identified to trial some elements of the proposed collaborative model. This is a significant project comprising of two large (circa $300M+) contracts with a completion date some 3 to 4 years away. Whilst learnings will be captured progressively it will take an extended period of time before the elements of the model are fully tested on this project.

Accordingly, it is proposed that a couple of smaller projects with shorter durations be identified to enable broader learnings to be capture earlier. Notionally, it has been suggested that the model be tested on projects <$50M and $50M-$100M. Based on this testing, the model will be amended and refined as required, considering the outcomes of the independent consultant recommendations and the learnings from the trial projects.

Suitable projects for further trials will be identified and presented to the Taskforce for endorsement.

Once the independent consultant has completed the work outlined, it is envisaged that a detailed implementation plan will be developed early 2022. This will provide a series of key milestones and delivery timeframes that will be presented back to the Taskforce. There may be an ongoing need to re-assemble the Working Group on an as needs basis to progress specific tasks once key deliverables are established. The progress of this work will be periodically reported back to the Taskforce to ensure alignment with TMR and Industry expectations.

Recommendation

It is recommended that the Taskforce endorse:

- The concept paper and its content;
- The next steps approach to the analysis and implementation of the proposed Collaborative Procurement and Delivery Model;
- The re-engagement of the Working Group on an 'as needs basis' to progress specific tasks which may come out of the independent consultant's review