

National Alliance Contracting Guidelines

Guidance Note 5
Developing the Target Outturn Cost
in Alliance Contracting

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Note

Governments in each jurisdiction will have their own individual approval processes for capital investment projects, as well as policies (e.g. probity) and legislation that will impact on all capital works delivery. These overarching jurisdictional requirements are precedent to the alliance practices covered in this document.

Acknowledgement

This Guidance Note is based on the guidance note of the same name prepared under the sponsorship of the Inter-Jurisdictional Alliancing Steering Committee with membership from:

- Department of Treasury and Finance, Victoria (Chair)
- Treasury, New South Wales
- · Treasury, Queensland
- Department of Treasury and Finance, Western Australia
- Department of Infrastructure and Regional Development, Australian Government

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1 Preamble

Governments¹ seek to achieve a very broad range of social, environmental and economic objectives on behalf of the community. This results in an equally broad range of capital and infrastructure projects. There are a number of project delivery methods which can be applied to government projects on a 'fit-for-purpose' basis. The project delivery method should be selected on the basis of careful and knowledgeable analysis of the relevant project characteristics and risks.

Governments often use alliance contracting to procure significant infrastructure. A key value proposition of alliance contracting is that government entities reduce their traditional contractual rights (under a 'risk transfer' contract) in exchange for Non-Owner Participants (NOPs) bringing to the project their good faith, acting with the highest level of integrity and making decisions which are best-for-project. The Owner Participants and NOPs collaborate to determine the best project solution and to deliver the project. A key element of the project solution is the Target Outturn Cost (TOC), which is the target cost estimate to deliver the project.

This Guidance Note has been prepared to assist public officials ensure Value-for-Money (VfM) outcomes through the TOC development process as set out in Chapter 5 of *The Guide to Alliance Contracting*² (the Guide).

Like all delivery methods, there should be continual improvements to alliance contracting. This Guidance Note aims to identify where alliance arrangements can be improved to further deliver and demonstrate value to the state.

¹ Unless otherwise stated, the expression 'government' is used to denote all the government entities of Australia, which include the Commonwealth of Australia and all Australian state governments and territories.

² National Alliance Contracting *Guide to Alliance Contracting;* Department of Infrastructure and Transport, Commonwealth of Australia, April 2011.

2 Introduction

This chapter provides an introduction, explaining the context and appropriate use of Guidance Note No. 5.

2.1 Objectives of the Target Outturn Cost development process

The alliance Target Outturn Cost (TOC) development process is a unique and, if well managed, highly beneficial, collaborative process that both:

- produces a Project Solution at a price that represents optimum VfM; and
- gives the Owner great insight into the capabilities of its potential delivery partners before final NOP selection and entering a PAA.

2.2 Purpose of this Guidance Note

This Guidance Note has been prepared to:

- provide consistent and leading practice guidance on TOC development in alliance contracting to government departments and agencies that develop and own infrastructure projects ('Owners');
- provide the minimum conditions for Owners in order to comply with the principles in the *Policy Principles* (the 'Policy')³ when developing the TOC;
- assist public officials using alliance contracting to ensure Value-for-Money (VfM) outcomes through the TOC development process as set out in Chapter 5 of The Guide to Alliance Contracting (the 'Guide');
- provide a template for reporting the alignment between the TOC developed with the preferred tender Proponent and the estimate and other objectives approved in the Business Case; and
- improve the quality, consistency and commercial outcomes of public sector alliance projects.

The Guidance Note has been developed recognising that alliance contracting:

- should comply with all relevant government policies and principles that generally regulate public sector procurement; and
- is a complex commercial transaction and, accordingly, Owners should apply good commercial practices to the selection, development, procurement and implementation of alliance contracts.

This Guidance Note does not address:

- the process for government approval of a project;
- the Owner's assessment of alternative procurement strategy options;
- the preparation of capital cost estimates for Business Cases;
- the broader processes involved in government procurement; or
- the processes involved in detailed cost management during the delivery phase of projects, including alliances.

These are dealt with in other (general) government policies and guidelines and are not repeated here.

³ National Alliance Contracting *Policy Principles;* Department of Infrastructure and Transport, Commonwealth of Australia, March 2011

2.3 How to use this Guidance Note

This Guidance Note is an aid to navigate the practical realities of TOC development in alliance contracting. It outlines successful and proven practices, and incorporates insights and examples from recent research⁴ and experienced alliance Participants. This should assist public officials with understanding the process, the opportunities to enhance VfM, the key risks and how to mitigate them, and to ultimately conduct a successful TOC development process.

Alliance contracting is a complex delivery method, and successful development of the TOC is similarly complex and critical to successfully achieving the Owner's VfM Statement. Consequently, there can be no 'single truth' or 'recipe' for the development of a TOC. In this Guidance Note, the Owner is provided with principles and benchmark practices that, if applied to their TOC development process, will position them to agree an appropriate TOC for their project.

This Guidance Note includes chapters on all key parts of the TOC development process as follows:

Chapter	Guidance Subject
3	Understand the context of the TOC.
4	Scope and risk included in the alliance.
5	TOC definition and related funding requirements.
6	The process of TOC development.
7	Effective competition in TOC development.
8	Owner interaction and probity considerations.
9	Effective participation in TOC preparation.
10	Evaluate effectively.
11	Effectively conclude negotiation and reach agreement.
12	Business Case Alignment Report (BCAR).
13	Cost management obligations under the PAA.
Appendices	Case studies.

This Guidance Note has been written on the basis that Owners are experienced in infrastructure delivery and government decision-making and that they will refer to other general (non-alliance specific) government policies and guidelines applying to procurement planning including Business Case project budget guidelines.

2.4 Relationship with Policy and other Guidance Notes

This Guidance Note is one of a suite of related National Alliance Contracting documents⁵ that are specific to alliance contracting as illustrated in Figure 1 and outlined below:

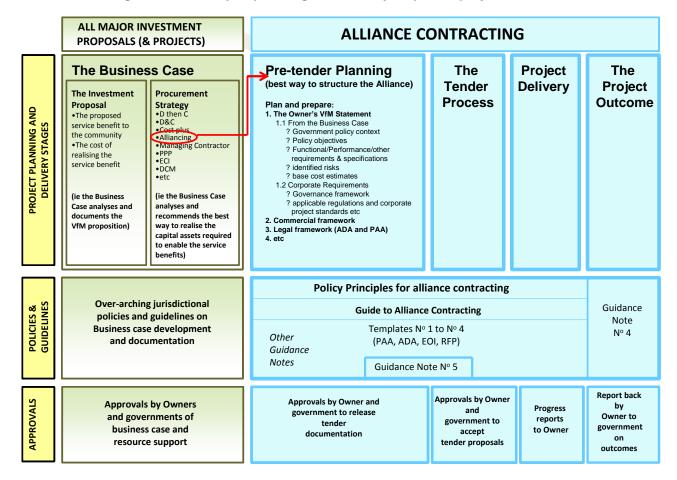
- the Policy Principles—which sets out the minimum (mandated) requirements for alliance contracting
- the Guide:
- this Guidance Note—which provides a detailed working of some concepts and principles presented in Chapter 5 of the Guide;

⁴ In Pursuit of Additional Value – A benchmarking study into alliancing in the Australian Public Sector, DTF Victoria, October 2009.

⁵ Published on the Department of Infrastructure and Transport, Commonwealth of Australia, website: <u>www.infrastructure.gov.au</u>.

- other Guidance Notes; and
- all relevant general (non-alliance specific) government policies and guidelines that have been approved in each jurisdiction, such as those relating to probity, tendering processes, Business Case development, procurement and cost management.

Figure 1: Hierarchy of planning and delivery steps in a project alliance



2.5 Themes in this Guidance Note

There are several key themes which underpin the advice provided in this Guidance Note:

a) 'TOC as a dollar value' and the 'TOC development process'

There is a clear and significant difference between the concept of the TOC as 'a dollar value', being a component of the Proponent's offer to the Owner, and the 'process of developing the TOC'.

b) Risk sharing and risk quantification

Alliances generally share the majority of the delivery risk, instead of allocating to the Owner, the constructor(s), the designers or other stakeholders, as occurs in traditional contracting. The Owner has exposure to the cost consequences of all of the shared risk. The TOC includes the expected cost consequences of the risks shared by the alliance taking into consideration the constraints of the Risk or Reward regime. The amount ultimately paid for risks is a function of the cost consequences of a risk event taking place and the TOC.

c) TOC represents output cost, not input price

The TOC is the <u>expected</u> cost at completion for the alliance scope and risk ('output cost'). Tender prices under traditional contracts are generally the <u>actual</u> price ('input cost') offered by the Tenderer to deliver the project. In both cases, these are subject to considerable adjustment depending on the level and nature of retained risk and the realisation of retained risks as the project is delivered.

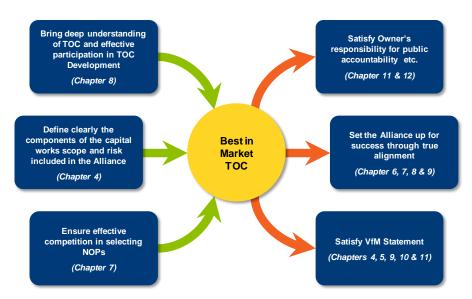
d) TOC and the TOC development process are unique to alliancing

The TOC and TOC development process are prepared transparently by the Proponent with collaboration from the Owner and are therefore different from the 'tendered price' and the process undertaken by a tenderer in a traditional (risk allocation) delivery project, where this is undertaken at arm's length.

e) The benefits to the Owner of using both effective competition and effective collaboration through participation in the TOC development process

Owners will, by using effective competition in selecting the NOPs and also by increasing their own participation in developing the TOC, simultaneously satisfy both the VfM Statement and discharge their duties as public officials in protecting the public interest. This is illustrated in Figure 2 below.

Figure 2: Benefits to the Owner of competition and Owner participation in TOC development



f) Effective competition in selecting NOPs is achieved through intellectual effort

The focus of competition must be on the intellectual effort⁶ (and outcomes) between Proponents as they seek to satisfy the Owner's VfM Statement at a fair price. It is not about squeezing profit margins below reasonable industry levels (recognising the nature of the project).

g) Best-in-market TOC is not necessarily the lowest TOC

The best-in-market TOC represents the Proponent's Final Proposal (including risk profile, construction methodology and team) which, in combination with non-price components of the offer and other attributes, best achieves the Owner's VfM Statement objectives as determined by the Owner (i.e. the best-in-market project solution). The best-in-market TOC will not necessarily be the lowest TOC.

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⁶ 'Intellectual effort' can be described as the application of the Proponent's expertise and capability, in collaboration with the Owner, to innovate across all elements of the Project Solution, as opposed to a focus solely on cost reduction.

h) TOC must be consistent with the approved Business Case

The scope and risk allocated to the alliance and the TOC must be consistent with the approved Business Case. Any modification to the Owner's approved Business Case and the Owner's VfM Statement will require approval in accordance with the applicable governance process (and this may include seeking government approval of the proposed modification).

i) TOC is not the Owner's capital works budget

The Owner's capital works budget must exceed the TOC to include:

- all sunk costs incurred prior to alliance selection;
- all project scope that is not to be delivered by the alliance;
- all costs to be incurred by the Owner in managing and governing the alliance including gainshare; and
- all risk that is not taken by the alliance; and a contingency allowance to cover the Owner's exposure to cost overrun.

3 Context of the TOC

This chapter describes how the TOC development process and TOC relate to the total community service uplift, asset scope, costs and outcomes.

3.1 Relationship of TOC to the government planning framework for resources

An alliance addresses the capital project required to enable the government approved uplift in specified community services that have been defined in an approved Business Case. In the context of this Guidance Note, the Business Case will also document the recommendation to use alliance contracting to deliver the capital project.

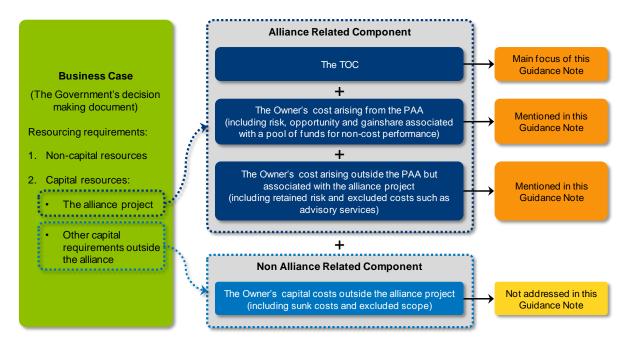
The government support for a Business Case investment proposal can be thought of in the following <u>resourcing</u> terms:

- Non-capital—the changes required to current practices and non-capital resourcing levels to achieve the uplift in community services; and
- Capital—the changes required to capital resources to achieve the uplift in community services including:
 - the alliance project; and
 - other capital requirements outside the alliance.

Government will be interested in understanding the financial performance of its agency in delivering the approved Business Case parameters and the outcomes resulting from the application of both the non-capital and capital resources.

The following diagram illustrates the relationship between the alliance scope of works and TOC and the other elements of the government resource-planning framework.

Figure 3: TOC in Context



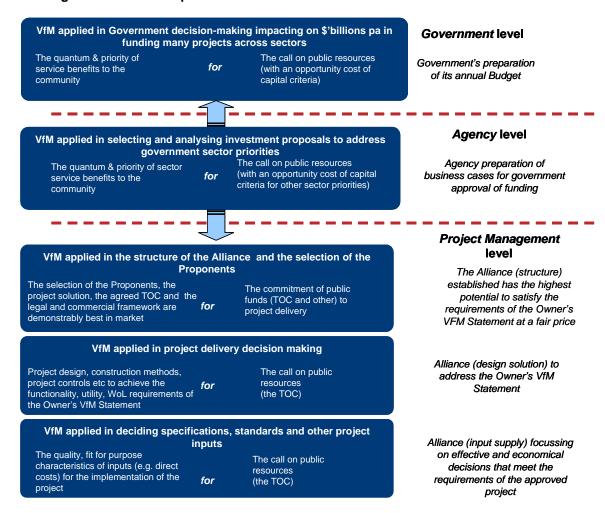
3.2 The Owner's VfM Statement

It is a government requirement that the Owner prepares a VfM Statement that includes project deliverables to be achieved by the alliance and the success criteria by which the alliance will be ultimately judged (additional details are provided in Guidance Note No 4: Reporting VfM Outcomes in Alliancing Contracting). The alliance's scope of works and the risk that it takes is addressed in the Owner's VfM Statement. The TOC must be consistent with the Owner's VfM Statement.

3.3 How does the TOC relate to VfM?

Guidance Note No 4: Reporting VfM Outcomes in Alliancing Contracting provides an extensive discussion on the application of VfM concepts in planning, government decision making and reporting project outcomes. In summary, VfM is a decision-making criteria that applies in different (but consistent) ways at different stages of planning. The following figure from Guidance Note No 4 illustrates this.

Figure 4: Relationship of TOC to VfM



Government approval of a Business Case Proposal is based on a judgement of the value to the community of the service benefit balanced against the cost of achieving this benefit. In effect, does the balance of the price and non-price impacts of a Business Case Proposal provide an attractive proposition, and does it demonstrate better VfM in comparison to other Business Case proposals (i.e. the 'opportunity cost of capital' considerations)?

This balance of the price and non-price considerations needs to be followed through in subsequent decisions. For example, the Owner's decision in selecting its Preferred Proponent will be a balanced judgement of the price and non-price attributes of the TOC development outcome (including a Proponent's proposed project solution) and the team capability it offers, the commercial and legal arrangements, etc (which have a significant implication for the final actual price paid). The Owner demonstrates VfM in their selection of the Preferred Proponent by taking into consideration all such matters not just the 'lowest price'.

Similarly, as the Owner Participants and the NOPs continue to plan and deliver the alliance project, there will be ongoing decisions that need to be made on a balance of the price and non-price impacts of, e.g., design decisions, stakeholder management and supply of construction inputs. These VfM decisions will need to be informed by the objectives and requirements of the Owner's VfM Statement and issues of affordability regarding the agreed TOC.

The VfM outcome in any complex project is significantly influenced by the Owner's procurement strategy for the selection of NOPs (i.e. full price competition or partial price competition or non-price selection), as well as by market conditions and the experience, capabilities and capacity of the Owner and Proponent individuals involved.

The Policy requires that the Owner complete a report (i.e. a Business Case Alignment Report (BCAR)) which reconciles the preferred project solution with the Business Case and Owner's VfM Statement. Further detail is provided in Chapter 12.

3.4 Capital works scope

The scope of the capital works is broadly defined in the Owner's VfM Statement, being the Owner's required physical works to deliver the approved uplift in community services. This broad definition should also include the Owner's project timelines, requirements for whole-of-life project planning and project affordability constraints.

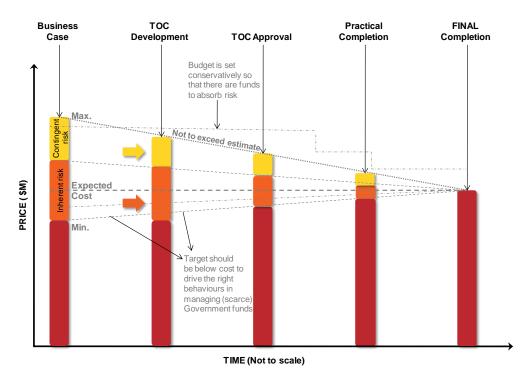
As illustrated in Figure 3, not all costs for capital works required by an approved Business Case are for works delivered by the alliance, including:

- all sunk costs incurred prior to alliance selection;
- all project scope that is not to be delivered by the alliance (e.g. land acquisition, early works etc);
- all costs to be incurred by the Owner in managing and governing the alliance including gainshare;
- all risk that is not taken by the alliance; and
- contingency allowance to cover the Owner's exposure to cost overrun.

3.5 Capital works cost and risk—increasing cost certainty over time

It is a characteristic of major capital works, particularly infrastructure assets, that they are of long duration, complex and integrated into the physical environment of the project and the community. Therefore, there is inevitably a high degree of uncertainty in the capital cost early in the project that will reduce as the project is approved then delivered as illustrated below.

Figure 5: Increasing capital cost certainty over the Project Delivery Life Cycle



This illustration applies equally to the whole of the Business Case's suite of capital works as it does to the alliance's scope. The TOC represents the expected cost of the alliance's scope at completion. The TOC should neither be a conservative nor a non-conservative figure. At the time of approval of the Business Case, there will be a material difference between the expected cost and the modelled 'maximum.⁷ At the time that the TOC is approved, there may still be a material gap if the alliance's scope has a number of risks that cannot be dimensioned until construction is underway. However, that difference should be significantly less given that the level of cost certainty is improved due to the collaborative effort by the Proponents and the Owner through the TOC development process. High degrees of certainty of cost outcome are always desirable, however, artificially high degrees of certainty will almost certainly inflate prices, particularly when there is limited or no price competition.

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⁷ A common practice is to use Monte Carlo analysis to calculate the P90 cost estimate for a major capital project, this being the calculated cost that has a 90 per cent chance of not being exceeded. The P90 cost estimate is often taken to be practically the 'maximum' cost. If there is a difference between the expected cost of a TOC and the 'P90' cost of less than 5–10 per cent, then it is highly likely that the TOC is conservative and inconsistent with the definition of the TOC.

4 Scope and Risk Included in the Alliance

This chapter describes how the scope is developed and risk defined consistent with the Owners VfM Statement.

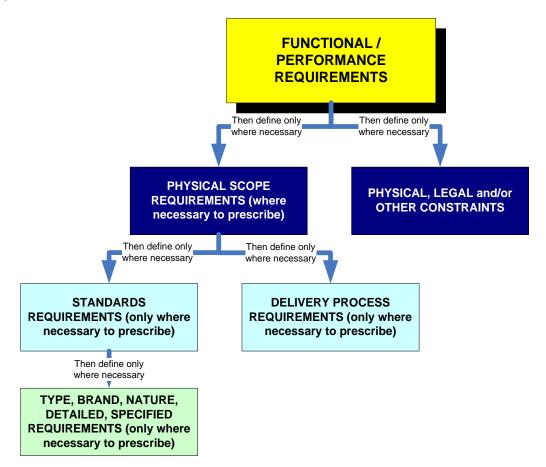
Guidance Note No. 4 Reporting VfM Outcomes in Alliance Contracting discusses the scope definition that is required in the Owner's VfM Statement, and the likely need for further scope definition for the alliance.

Consistent with the Owner's VfM Statement, the Owner must, through collaboration, take the lead in providing understanding, definition and guidance on project objectives in the scope and risk development undertaken by the Proponents through the TOC development process. This leadership role is the responsibility of the Owner, not the Proponents, and the TOC is a direct reflection of this scope and risk development.

The Owner must also define all requirements of other government departments or related entities unless these departments will participate directly in the alliance, or be treated by the alliance as authorities.

The functional specifications provided by an Owner in tender documentation for an alliance should include a definition of asset functional requirements in a manner and standard similar to that required for a traditional risk allocation in a Design and Construction (D&C) contract, although the further technical and delivery process risk allocation that is also included in a D&C contract should be excluded. Whist it is to be expected that functional specifications will evolve during TOC development, it is essential that a comprehensive description exists at the start of TOC development. This avoids wasted effort and provides clarity for Proponents (whether the process is competitive or not). Figure 6 below illustrates how functional specifications and requirements should be developed.

Figure 6: Defining Functional/Performance Requirements in the Functional Specification



The diagram illustrates that the Owner should first define the functional or performance obligations, then, and only where necessary, provide progressively further detailed information about requirements. This allows the Proponent maximum opportunity to provide their industrial and technical 'smarts' to provide the Owner with potentially innovative solutions right through the TOC development and delivery process. It also reduces the unintended potential of having 'alternative proposals' being submitted by Proponents (highly prescriptive and detailed specifications may generate a higher number of alternative proposals if Proponents suggest different technology to deliver the Project or different approaches to the Project design).

During the TOC development phase, the Proponent will develop a specific engineering, construction, procurement and management solution to the Owner's functional specification (this project solution is formally referred to as a Proponent's 'Project Proposal'). This Project Proposal is owned by the Proponent and should be consistent with the scope and risk definition in the Owner's VfM Statement.

The relationship between the Owner's VfM Statement, the functional specifications/requirements and the Project Proposal is illustrated in Figure 7 below.

ADA Phase PAA Phase Government Owner's VfM Statement (Approv by State) No change without No change without BCAR VfM report Owner/ Owner/ approval approval Owner Completed asset Functional Owner's Functional Specification Evolves during Adjusted for approved PAA Functional TOC development Alliance Scope Changes only Specification Incorporate all additional Proponent offer Alliance Project Proposal Evolves during Developed and evolved at As-constructed asset Project Proposal Participant's risk within PAA solution TOC development except for adjustment for approved Scope Change

Figure 7: Scope Responsibility Over Project Delivery Life Cycle⁸

The successful Proponent's Project Proposal, including the additional value to the Owner over the functional specifications/requirements identified in the Owner's VfM Statement, becomes a schedule of the executed PAA.

Subsequent to execution of the PAA, the alliance Participants, including the Owner, share the benefits of refining the delivered asset consistent with the PAA, on a best-for-project basis.

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⁸ As an outline to the process of establishing an alliance, the tender process normally commences with interested respondents participating in a competitive process comprised of three phases: the Expressions of Interest Phase (open to all interested organisations); the Request for Proposal Phase (open to Proponents on the Initial Shortlist); and the Alliance Development Phase (open to the two Shortlisted Proponents). The Selection Process is designed so that Initial Proposals submitted at the RFP Phase can be developed in conjunction with the Project Owner during the Alliance Development Phase (pursuant to an Alliance Development Agreement or ADA) to produce a final proposal, the Project Proposal, which satisfies the Project objectives. Once a Project Proposal is accepted by the Owner (and government), the Owner executes the Project Alliance Agreement with the Preferred Proponent and the alliance commences (these processes are documented in Templates 1 to 4 published by Department of Infrastructure and Regional Development, Commonwealth of Australia, website: www.infrastructure.gov.au).

5 TOC Definition and Related Funding Requirements

This chapter explains the concept of the TOC by addressing the questions of:

- What is its purpose in alliance contracting?
- What is included?
- What is excluded?
- What is its role?
- How does it relate to VfM?

5.1 TOC Definition and key considerations

The TOC is the acronym for Target Outturn Cost, which is the expected cost at completion of the alliance works. While the TOC is expressed as a number, the objective of the TOC development process is to 'provide substantially increased certainty of outcome in achieving the Owner's VfM Statement objectives at a fair price'.

Although the TOC becomes a part of the Proponent's Offer at the conclusion of the TOC development process, it is not the same as a lump sum tender price, which is a fixed price offer to undertake the work as defined in a risk allocation contract. It is a forecast of the cost at completion, against which the Actual Outturn Cost (AOC) will be measured for the purposes of assessing cost gainshare or painshare in accordance with the Commercial Framework. As an expected cost figure, it will include the expected cost impact of all risks and opportunities consistent with the scope and risk responsibilities of the alliance.

The TOC is the key financial component of the four interdependent alliance success factors introduced in the Guide:

- 1. integrated, collaborative team;
- 2. Project Solution;
- 3. commercial arrangements; and
- 4. Target Outturn Cost (TOC).

The TOC is a formal offer by the Proponent to the Owner, for providing certain services and having exposure to certain risks (shared with the Owner) based on the project deliverables and commercial arrangements set out in the PAA. It is determined using the same estimating skills and processes as traditional tendering and it will be extensively reviewed and formally approved internally by the Proponent's senior management before it is submitted to the Owner.⁹

5.2 Implications for the Owner

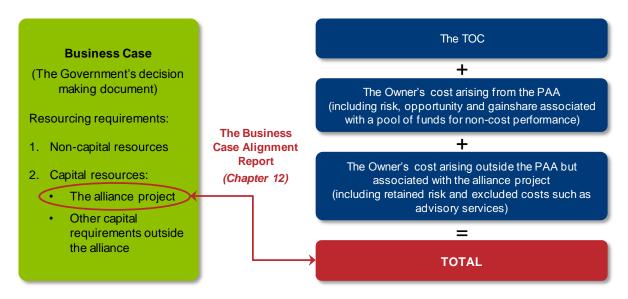
Governments make investment decisions based on Business Cases submitted by agencies. Faced with finite resources, funding for Business Case Proposals is rationed. The two relevant principles that apply to making decisions to approve a Business Case for funding are:

- VfM—based on the balanced judgement of the value (and priority) of the community service benefit promised vs. the cost of achieving this benefit; and
- Opportunity cost of capital—if a particular Business Case Proposal is approved, what other opportunities for uplifting community services are foregone?

⁹ On the other hand, if the TOC, once adjusted by the Owner, is greater than the Business Case budget then confirmation is needed by the Owner (and normally government) to proceed with the project.

The development of a high quality TOC that (by definition) is reconciled with Business Case functional and performance requirements, as well as with the Business Case cost estimates, is vital for good government decision making. It ensures that limited and rationed resources are optimised against government priorities. Figure 8 illustrates the relationship of the TOC to the Business Case estimate.

Figure 8: Relationship between Business Case and TOC



The ongoing transparency and collaboration in the competitive TOC development process should yield both a best-in-market estimate of the expected cost at completion and a high degree of confidence in its veracity. However, if the offered TOC is materially misaligned with the Business Case estimate, then the integrity of the government decision making on the allocation of limited public resources can be compromised. 'Too low' and government will have foregone opportunities for the early funding of projects leading to an earlier uplift in community services; 'too high' and the government is in the difficult position of having to decide whether to proceed with the project or to source funds from essentially other projects.

Moreover, in the event that the AOC is significantly less than the TOC (resulting in a significant gainshare), there is a likelihood of criticism that the TOC was 'too soft' and VfM has not been achieved by the Owner. This is not known when agreeing the TOC, but may become apparent as the project is delivered. Alternatively, there is the possibility of the alliance managing the cost outcome to the TOC target rather than to the best possible cost for the required scope (i.e. they will 'spend the money').

Normally, prudent government decision making will require an assessment of whether the best market response to a tender process is aligned with the original decision to fund the Business Case. Some of the issues to be considered in assessing the acceptability of the TOC and market response are:

- the alignment of best acceptable tender offer with the approved Business Case and hence the Owner's VfM Statement (including approval for adjustment if necessary);
- an assessment of whether competitive, best-in-market pricing for the best-in-market project solution has been obtained from the tender process; and
- whether the best acceptable tender offer is affordable in terms of the approved Business Case budget; or in the event that the Business Case budget is exceeded, affordable in the context of other government priorities requiring public funds.

The Owner should not accept a TOC—whether determined in competition or otherwise—if the offered project solution, commercial arrangements and/or the TOC are not consistent with the Owner's VfM Statement and the approved project budget.

Chapter 12 deals with the *Business Case Alignment Report* (BCAR), which is a report by the Owner to government (prior to execution of the PAA) on these points and on actual costs to date and other forecast costs outside of the alliance. The BCAR also includes reporting on the negotiated Commercial Framework and the PAA proposed for execution.

Whilst the focus of this Guidance Note is TOC development, the ultimate objective is achieving a satisfactory AOC during project delivery, preferably that matches or betters the final TOC. The Owner has the benefit of using the TOC development process to assess the quality of the Proponent's proposed team and their ability to manage the project to achieve an AOC that beats the TOC.

5.3 Implications for the Proponents

To Proponents, the TOC represents a contract sum similar in many ways to other tendered prices in its makeup of estimated direct and indirect costs plus allowances for risk and opportunity, escalation and a fee including expected profit margin.

In the same way that a Proponent will risk margin on its performance against the budget estimates in a tendered price, Proponents are prepared to risk the Fee against similar budgets and allowances in a TOC though the gains and losses are shared with the Owner in accordance with agreed commercial terms.

For Proponents, the TOC development process also represents an opportunity to optimise VfM by innovations on the most significant cost items and at the same time demonstrating their project management ability and leadership skills. Proponents can use the TOC development process to demonstrate the ability of their team to significantly influence the AOC outcome in matching or beating the TOC.

Due to the nature of projects suited to alliance contracting and the requirement for effective collaboration, the Owner's and Proponent's team must be highly experienced and capable. Although a 'high capability team' may increase the Owner's own costs and incur a higher NOPs Fee, a 'low capability team' can simply cost more overall. An Owner would generally benefit from spending more on an 'A' or 'B' team, as the benefit to the Owner is in the quality of the project solution and the outcome the team will deliver as opposed to the relatively minor difference in costs between an 'A' or 'B' team and a 'C' or 'D' team.

5.4 What does the TOC include?

The TOC will include the expected cost of everything for which the alliance is responsible including risk and any included Owner's costs. However, the TOC is only meaningful when analysed alongside the Commercial Framework. The Framework will impact the TOC during both project delivery and post completion, for example:

- the Risk or Reward Model (including any caps); and
- other costs such as requirements for project insurances (including deductibles and cover provided), Owner's costs in obtaining approvals, land purchases, etc.

The TOC is made up of components that are found in any project cost estimate and to a level of accuracy and certainty that gives Proponents' senior management assurance to approve the submission of the tendered TOC to the Owner and likewise for the Owner's senior management to recommend it to the Owner.

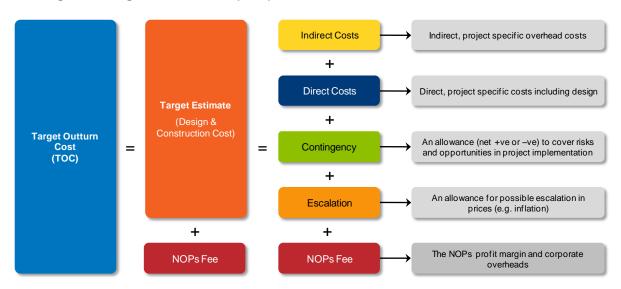
Elements of a generic project estimate for a traditional tender are generally grouped into the following categories:

- Indirect costs—indirect, project specific overhead costs;
- Direct costs—direct, project specific costs including design;
- Contingency —an allowance to cover risks and opportunities in project implementation (noting that this may be a negative number if opportunities out-weigh risks);
- Escalation —an allowance for possible escalation in prices (e.g. inflation); and

NOPs Fee—the NOP's profit margin and corporate overheads.

A typical TOC structure is shown in Figure 9 below.

Figure 9: Target Outturn Cost (TOC) Structure



These various components of the TOC are discussed below.

The base estimate of design and construction costs is an aggregate of the costs of inputs into the construction project and will be referenced against market rates where possible. The base construction cost of the TOC must be undertaken to the same level of detail and rigour as an experienced Proponent would undertake for a tendered price for a traditional project. The **target estimate** comprises:

- Indirect Costs—the specific project costs necessary to support the direct cost element of the project delivery. These will be defined in the Alliance Development Agreement (ADA) and agreed in the Project Alliance Agreement (PAA). Typical examples include site facilities, project insurances, site management and supervision.
- Direct Costs—the estimated most likely cost of labour, plant, materials and specialist subcontract work required to deliver the asset based on calculated quantities derived from the proposed design solutions and construction methodologies developed for the Project Proposal and based on industry best practice and as defined in the ADA and PAA.

It is expected that the estimate will be compiled on what is commonly referred to as a 'First Principles' basis by disaggregating the alliance's physical works into discrete activities and assessing the individual labour and plant productivity and material required for each activity. A 'cost plan' approach to the Base Estimate that relies substantially on global historical rates (e.g. \$/m² of bridge deck or \$/km track work) will rarely be acceptable unless there is a benchmark from a relevant, traditional, competitively sourced project.

Design fees directly attributable to the project would be included here (an acceptable alternative is to create a separate grouping). As with other elements of the direct costs, best practice is to estimate design fees from a 'First Principles' basis, not using historical percentages (though these may provide a 'sanity' check).

A generic estimate checklist is provided in Appendix A.

contingency—in estimating capital cost, it is necessary for the estimator(s) to make
numerous assumptions about what will be delivered and how and what circumstances
will arise as it is delivered. It is inevitable that these assumptions will not all be correct
and these unknowns or uncertainties can and will either cause cost increases or
decreases relative to the assumed cost.

The unknowns and uncertainties are addressed by a project specific contingency allowance (which can be positive or negative depending on the level of residual risk and opportunity). Consistent with the definition of the TOC, being the expected cost at completion, this contingency allowance must reflect the expected cost of risk and should be neither conservative nor non-conservative. Assumptions and the potential cost impacts of risks and opportunities to all parties should be rigorously analysed after devising and implementing responses appropriate to the potential impact of those risks or opportunities on the base estimate (direct and indirect costs). This will generally include a risk management process that conforms to the requirements of the Australian Standard AS/NZS ISO 31000:2009. Modelling of the cost impact of treated risks and opportunities must be complete and defensible. The modelling can include 'bottom-up' techniques, such as Monte Carlo simulation and 'top-down' techniques including benchmarking.

Risk and opportunity analysis and contingency calculations are most important in those circumstances when there are considerable levels of undimensionable externality, scope uncertainty and risk.

The TOC process provides the opportunity for risk to be explored in a much deeper, more effective way, through the participation of the Owner. This should have the effect of reducing the need for additional contingency relative to that required without participation; including that which may be found in comparative D&C projects.

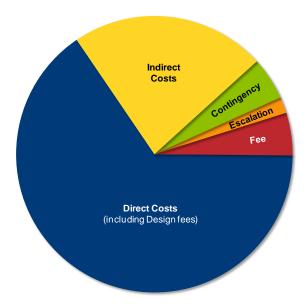
• **escalation**—an allowance to provide adequate compensation for forecast cost increases due to the rise and fall of costs in the construction sector during the construction and defects liability period.

The NOPs Fee, discussed in more detail in the Guide, is generally applied as a percentage markup to the NOPs' components of the TOC, but not to Owners' costs. The NOPs Fee comprises:

- Profit—the respective NOP's agreed profit margin.
- Corporate Overheads—the respective NOP's relevant business unit contribution towards recovery of non-project specific (corporate) overheads. It is important to ensure that this corporate overhead contribution does not include any reimbursement of project Direct and Indirect Costs which should already be included in the base estimate. Costs often mistakenly duplicated include tendering resources, payroll costs, IT support, bonus provisions and other, similar, ambiguous project/corporate overheads.

The typical relative magnitude of these components that comprise the TOC is illustrated in the following Figure 10. It highlights the very significant contribution of the Direct Costs to the TOC and the importance of close attention by Owners to this area of the target estimate. Indirect Costs, design costs, contingency, escalation and the Fee are largely a function of the construction Direct Costs of the project. Depending on the particular project, this impact of Direct Costs on the other TOC elements means that a reduction in Direct Costs of \$1 could yield total savings on the TOC of up to approximately \$1.75.

Figure 10: Relative size of TOC components¹⁰



Most experienced estimating practitioners are aware of these relationships and can provide current metrics and broad benchmarks of the interrelated ratios between each TOC component.

5.5 Other items that may be included or excluded from the TOC

The following table outlines other items that may be included or excluded from the TOC.

Table 1: Other items that may be included or excluded from the TOC

Cost Element or Activity	Implications for the TOC	Implications for the NOPs Fee	Comment
Owner personnel costs	Included in Indirect Costs.	Do not attract a Fee.	Owner costs that are to be included in the TOC need to be clearly articulated where possible in the Owner's VfM Statement and/or ADA/PAA to ensure transparency of all resource requirements.
Owner supplied items—where alliance is responsible for the goods	Included in Indirect Costs.	Do not attract a Fee.	
Owner supplied items—where Owner takes all procurement risk	Excluded.	Do not attract a Fee.	
Risks and management costs for Owner supplied items—where alliance is responsible for the goods	Included in Indirect Costs.	Attract an NOP Fee.	

 $^{^{\}rm 10}$ Cost proportions for a typical transport infrastructure project.

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Cost Element or Activity	Implications for the TOC	Implications for the NOPs Fee	Comment
Owner supplied resources	Included in Indirect Costs.	Do not attract a Fee.	Unless the work can be undertaken without significant integration with the work or the work sequencing of the alliance, they should be included in the alliance.
Risks and management costs for Owner-supplied resources	Included in Indirect Costs.	Attract an NOP Fee.	
Behavioural Coaching if necessary to integrate the team to work effectively and efficiently (not to achieve outstanding performance)	Included in Indirect Costs.	Do not attract a Fee.	Alliance development and coaching activities should only be undertaken to the extent that they directly support achieving the Owner's VfM Statement. Alliance culture and relationships should not be considered as the objectives or outcomes to be achieved by the alliance in their own right. In other words, they are a means to the end, not the end itself.
Owner costs which arise as a result of the commercial arrangements agreed in the PAA	Excluded.	Do not attract a Fee.	These may include the Owner's share of risk and opportunity complementary to and net of gainshare/painshare plus any performance pool payments.
Owner costs outside of the alliance's direct responsibility and the PAA	Excluded.	Do not attract a Fee.	These may include sunk costs such as land purchase and cost of advisory services, early works or other capital costs outside the alliance.
Items not managed by the alliance	Excluded.	Do not attract a Fee.	If the alliance is expected to share a material risk in the procurement of the goods or services, then the costs should be included in the TOC so they can be managed by the alliance.

6 TOC development process

This chapter discusses the process of TOC Development including its objective, benefits and key elements.

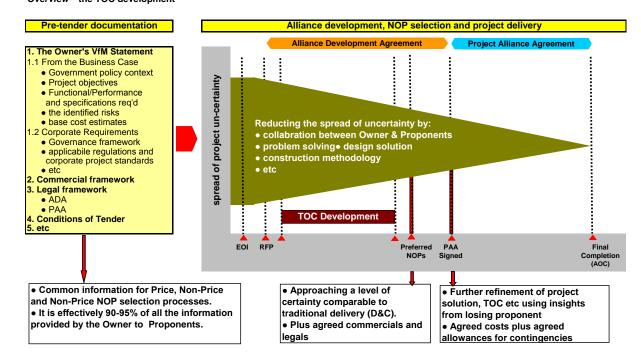
6.1 The objective of the TOC development process

There are two primary objectives of the TOC development process. The most obvious is to arrive at a TOC that is acceptable to both the Owner and the NOPs and for the Owner to have confidence that the TOC reflects a Project Proposal that will satisfy the Owner's VfM Statement at a fair cost at project completion (i.e. the AOC). The second objective is to give the Owner insight into its potential alliance partners to deliver a success outcome prior to entering a PAA. The process of developing the TOC provides the Owner with a high degree of assurance and understanding of the solution and allows them to participate effectively in project delivery.

The overall objective of a TOC development process can therefore be viewed as a collaborative effort by the Proponent's team and the Owner to improve and increase the certainty of project outcomes. The project outcomes are represented as achieving the Owner's VfM Statement after the application of competitive processes and best-in-market or market-tested pricing, which provides a high degree of certainty that the TOC can be relied upon by both the NOPs and the Owner.

Consistent with Figure 5, this objective of reducing uncertainty through the TOC development process is shown diagrammatically in Figure 11 below.

Figure 11: Reducing uncertainty by the TOC development process



Overview - the TOC development

6.2 The benefits of the TOC development process

The TOC development is undertaken by the Proponent in collaboration and participation with the Owner and has the potential to bring major benefits to the Owner compared to traditional delivery models.

(a) It will reduce uncertainty regarding 'what the client really wants'.

- (b) It will increase the Owner's understanding of their own functional requirements as they are subject to constructive questioning by the Proponent.
- (c) It will increase the Owner's insight into the Proponent's offer (including positive attributes that may not have been evident to the Proponent).
- (d) It will deeply inform the Owner of the strengths (and weaknesses) of the Proponent's team as they observe them in action over an extended period.
- (e) It will reduce the potential for misunderstanding by Proponents of the Owner's VfM Statement.
- (f) It will enable the Owner to appreciate critical activities that require early Owner intervention (upon execution of the PAA).

The TOC development process will not only provide these benefits, it will also lay a solid foundation for the alliance after the PAA is executed.

6.3 Why do Owners need to understand and participate in the TOC development process?

The differences between a traditional tender price and the Proponent's offer of a TOC also means there are differences in the role and participation of the Owner during the procurement and delivery phases. These differences are summarised in Table 2 below.

Table 2: Comparison of pricing in traditional and alliance contracting

Component	Traditional Project (e.g. D&C)	Alliance Contracting
Focus of Competition	Price.	Intellectual effort leading to efficiency, innovation and alignment rather than price discounting.
Tendered Price	Developed in (relative) isolation of Owner by Tenderer. Composition is not transparent.	TOC developed by Proponent in collaboration with Owner. Composition is transparent.
Risk (and Opportunity)	Transferred risk borne by	Shared by Proponent and Owner, expected cost
	Tenderers.	included in the TOC.
	Developed in (relative) isolation of Owner by Tenderer.	Developed transparently by Proponent with Owner input.
	Composition is not transparent.	Risk only excluded and retained by Owner by
	Owner retains some risk.	exception.
Level of Estimating	'First Principles', not cost plan.	'First Principles', not cost plan.
Management of Project	By successful Tenderer.	By NOP and Owner through a joint management structure and team.
Project Costs	Closed book to Owner.	Open book to Owner—reimbursable.
Performance Outcomes	Borne by successful Tenderers.	Shared by NOPs and Owner against the TOC.
Private/Public Monies	Private party manages own costs within agreed contract sum paid by government.	Management of 'public monies jointly by private and public sector Participants'.

It is an accepted truism of value management that the ability of a project Owner to positively influence VfM outcomes diminishes with progression through the project life cycle. In alliancing, the opportunity for the Owner to participate in the TOC development can be of significant benefit to the success of the project, including by reducing the overall cost. This

upfront opportunity does not diminish the importance of Owner participation during project delivery but rather emphasises the potential to optimise value from an effective TOC development process.

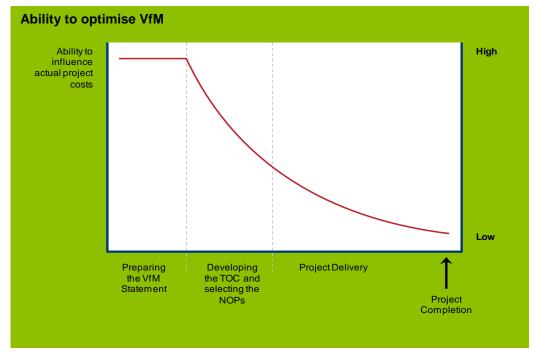


Figure 12: Ability to optimise VfM over time

In the context of the TOC development process and the Business Case Alignment Report, it is worth recalling that all agencies and their public officials are accountable for the use of public funds and the consequences flowing from their use, and for successful project delivery. Agencies are required to discharge this accountability in a transparent way, accepting responsibility for their decisions and actions, striving to make the best use of public resources, and submitting themselves to appropriate scrutiny. This means that Owners cannot delegate their accountabilities to the Proponents for the management of funds in their control, and that they should, independently from the NOPs, verify and ensure that the public interest is being protected throughout the procurement process and for the life of the alliance.

Additionally, as required by the Policy, the Owner must demonstrate that it has achieved VfM in the outcome of the TOC development process (the Preferred Proponent's Project Proposal). In pursuing VfM, the Owner must satisfy other policy requirements including accountability for public funds and ensuring the public interest is protected. The consequence of these requirements for public officials is that Owners must be actively and effectively involved in both the development of the TOC and the subsequent expenditure of public funds.

6.4 Addressing the Owner's VfM Statement in the TOC

The TOC is developed by costing the Project Proposal that the Proponent develops during the TOC development phase to address the Owner's VfM Statement.

This is an iterative process and the Proponent's proposal will require adjustments arising from the collaborative interactions in the TOC development phase. Furthermore, the proposal may offer additional benefits relative to those sought and defined in the Owner's functional specification/requirements. These benefits constitute part of the Proponent's offer in its Project Proposal and accrue to the Owner.

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¹¹ Paraphrased from the Victorian *Public Administration Act 2004*.

The Project Proposal developed by the Proponent may need to be adjusted during the project delivery phase. These changes, in response to changing conditions or new information, may be beneficial and should be made wherever they are best-for-project and should not constitute a scope change that results in an adjustment to the TOC ('TOC Target Adjustment').

6.5 The mechanics of the TOC development process

The outcome of the TOC development process will be a Project Proposal by the Proponent to the Owner comprising their offer of a project solution, PAA, Commercial Framework, team and TOC. Whilst the mechanics of developing the TOC number are very similar to the preparation of a traditional (D&C) tender estimate by Proponents, there is the very significant and critical input of Owner collaboration in the context of alliancing principles.

The preparation of the TOC is not a linear activity. In this iterative and interactive process the Proponent's team applies intellectual effort to the Project Solution and Commercial Framework as they strive to win the work. It requires high degrees of experience, judgement and innovation that will not come from any one individual but from the combined input of all Proponent members and the Owner Participants.

These TOC development mechanics can be considered in the context of the alliance success factors described in the Guide:

- Integrated, Collaborative Team;
- Project Solution;
- · Commercial Arrangements; and
- The TOC.

These are discussed in turn below, together with the importance of:

- estimating procedures;
- · risk assessment; and
- management resources (Proponent and Owner).

The Integrated, Collaborative Team

Ultimately, an integrated, collaborative team will be formed to undertake the alliance project. The Owner will consider the potential of each Proponent to form such a team as part of the tender selection process. Throughout the TOC development process, the Proponent's team will generally undertake some team development activities with the Owner's team (if approved by the Owner) and the proposed management team will meet regularly. This will provide the Proponent with the opportunity to showcase to the Owner its team's affinity with the Owner's team and ability to act in an interactive and collaborative manner to innovate, plan, design and cost the project. In doing so, the Proponent's team can also showcase their project management skills.

This also creates the opportunity for the Owner's selection panel to critically assess the Proponent team(s) and predict their future performance for the project. This observation of the team interaction, their behaviour, attitudes and performance will provide the Owner with insight about the integrated team's project delivery potential.

Some considerations for Owner participation are addressed in Chapter 8.

Project Solution

In determining the best Project Solution that it can offer to the Owner, each Proponent will identify, assess and compare options on the basis of potential cost and risk reduction. The activities and processes required to develop the Project Solution are decided as the team determines how best to produce the deliverables required by the Owner by the milestone dates, using information already known or as it becomes known and the resources are available.

For most projects these processes include design options development, assessment, design management, construction planning, procurement planning, risk analysis and value engineering of preferred options. Options should include preliminary assessment of construction methods, delivery methods and procurement strategies, assisted by estimating or cost benchmarking and targeted risk assessment and modelling if required.

It is in this stage that collaboration with the Owner produces the most valuable results as the Proponents tap into the Owner's experience and knowledge of the project and understand its VfM objectives.

Innovation of solution options in optimising physical quantities, resources and delivery methods has the most significant impact on pricing during TOC development as the solution is the primary driver for all other costs.

Selection of the preferred option will usually result in a 'design freeze' from which scope and quantities are defined for detailed cost estimating and commercial assessment as the designs, construction methods and associated procurement strategies are further developed towards the final Proposal.

Historically, in non-price selection a disproportionate level of attention is often focussed on the NOPs Fee. The Fee is usually of the order of 10% of the total TOC. The weight of focus of the Proponent and the Owner should be on the balance of the project price, representing the estimated cost of delivering the Project Solution. It is the Project Solution represented by the design solutions, construction methods, procurement and project management approach and contingency and escalation allowances that have a far greater impact on TOC and the VfM proposition to the Owner than the NOPs Fee.

The significance of the Project Solution on the TOC is illustrated in

Figure 13 below.

An Owner focused on innovating the Project Solution and associated costs will have a much greater impact on the agreed TOC and a higher level of certainty that VfM is satisfied than an Owner who is a passive partner to the better informed Proponents.

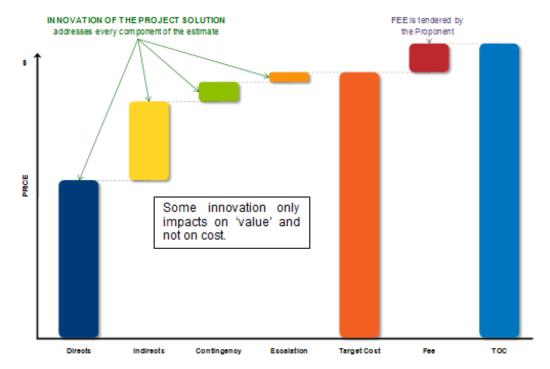


Figure 13: Significance of innovating the project solution

The Commercial Arrangements

The commercial arrangements, documented in the ADA and the PAA and summarised in other tender documentation, include a compensation framework that encompasses the NOPs Fee and a Risk or Reward regime designed to incentivise the combined team to perform better by aligning their commercial outcomes with success for the Owner.

As the preferred design and scope of work is defined, the risk register can be refined and treated in detail to more accurately reflect the project's risk profile. Draft commercial terms and associated guidelines for reimbursable costs can be reviewed in light of this risk profile and a Risk or Reward regime and contract terms finalised and agreed in Commercial Framework workshops.

The risk profile and commercial terms are finalised as sufficient cost estimates become available and the PAA agreed and finalised. Finally, potential scope change and variation scenarios, often referred to as 'Target Adjustment Guidelines' are agreed to and these provide the future alliance Participants with guidance to resolve issues regarding the scope of work for the alliance team.

The TOC

The TOC is the quantitative representation of the above three factors and is a financial estimate of the expected actual outturn cost of the project, including the expected cost of risks and opportunities and escalation. The NOPs and the Owner agree to use the TOC to measure the performance of the alliance.

Although prepared iteratively, the build-up of the detailed target estimate into a TOC is usually the final outcome of the alliance development process.

The team defines scope and quantities from a design and delivery solution informed by the Owner's VfM Statement and other project information. The team develops and optimises construction methodologies, delivery plans, and the best procurement plans to suit the market constraints and project schedule.

The team's structure is developed on a 'best-for-project' basis and is costed into the Indirect Costs component.

The risk profile is modelled using the price information and a contingency allowance to account for the expected cost of risk is inputted into the estimate, along with escalation and other allowances.

Final scope checks can be performed and corrections made to quantities and assumptions with base estimates. Adjustments to contingent allowances can be made by the Proponents' management in line with commercial and contract terms agreed with the Owner and a Risk or Reward Regime designed to suit the project risk and cost profiles. Finally, the Proponents will tender the Fee by applying the agreed percentage mark-up to complete the TOC number for inclusion in their final Project Proposal.

Figure 14 illustrates the progressive build up of components making up the TOC and highlights the magnitude and impact of each (which is very similar to the preparation of a traditional (D&C) tender estimate by Proponents).

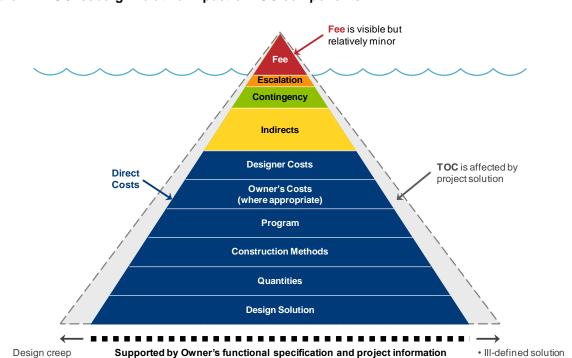


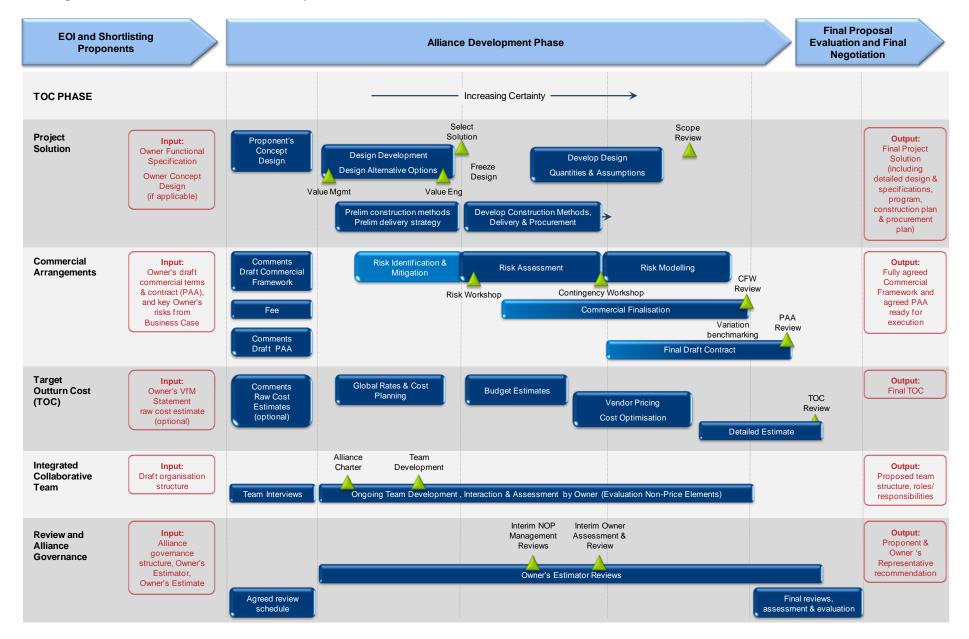
Figure 14: TOC Iceberg—relative impact of TOC components

Design creep increases TOC

Figure 15 below illustrates the typical activities included in the TOC development process. The generic TOC development process in Figure 15 is representative of most Project alliance development processes; however, it may differ for particular alliance projects, e.g., long-term alliance for the operations and maintenance of a complex waste water treatment plant where the Owner will be more interested in the Proponents' ability to develop safe and reliable methods to work in an operating environment rather than design development expertise. It is provided here to highlight the amount of effort required and the frequency and types of interaction that might be expected for an Owner to complete the process and achieve a final Project Proposal.

increases TOC Sub-optimal

Figure 15: Generic Alliance TOC Development Process



6.6 Why agreed estimating procedures are essential

A robust estimating procedure agreed with Proponents at the commencement of the ADA is essential to ensure that the TOC development process meets the requirements of the Owner's VfM Statement at a 'best-in-market' price. Such procedures will include a common set of tools and standards to achieve reliable estimates and also enable competent management of the financial aspects during the project delivery phase. An example of this is a well-defined Work Breakdown Structure (WBS) linking design tasks, estimate development and actual project execution costs in a common group of codes representing 'like' tasks such as 'Bulk Earthworks'.

In alliance contracting with the Participants' commitment to 'open book' and transparency, a comprehensive, effective and robust estimating procedure will need to:

- be easy to understand and use, so that it is transparent and does not require extensive analysis by the Owner to discover the make-up of any cost elements;
- have a common layout or format to allow easy assessment by the Owner;
- be comprehensive with sufficient detail of the interaction between, and obligation of, all
 parties including the review process and final approval;
- consist of simple processes and procedures with clearly defined outputs; and
- clearly articulate underpinning assumptions to be used in development of the TOC.

In the TOC development process, it is fundamental that the Proponents and the Owner use the same base information for the development and validation of the TOC, irrespective of whether it is a full price competition, partial price competition or non-price selection process. Issues such as the when the design is 'frozen', the level of Proponent self-performance of the works, the minimum number of third-party quotations, etc, need to be clearly spelt out in an estimating procedure.

Good examples of estimating procedures can be found in estimating guidelines such as the *Project Cost Estimating Manual* published by Department of Transport and Main Roads, Queensland.

Typical estimating procedures will include, as a minimum, the following sections:

- general introduction—brief statement about the project scope;
- purpose—a statement about the guidelines for TOC development;
- responsibilities—details of all Participants' inputs and accountabilities including the Owner's Estimator;
- design development, including value engineering, method of assessment and selection and definition of stage when design is 'frozen';
- estimate preparation—estimate structure (WBS), estimating software, method of preparation of Direct and Indirect Costs and procurement process;
- risk/opportunity and contingency assessment and quantification process;
- Construction Schedule including cash flow to facilitate escalation calculation;
- estimate review and approval regime including any reconciliation process; and
- Target Adjustment Events—including clear concise definition.

The estimating procedures should detail the approach to Proponent TOC evaluation. This is typically a process of validation using quantity surveying skills, elemental cost planning, benchmarking and first principles cost-estimating techniques. These requirements should be documented in the estimating procedures and agreed by both the Owner and the Proponent.

The process for the development of the Proponent's design and construction program will be documented within the estimating procedure. This will define scheduling tools and the

necessary detail of construction logic required to identify any constraints and their cost implications. A cashflow based on the design and construction program with cost inputs from the TOC will be used to determine the escalation allowance.

Risks and opportunities will be addressed separately following a detailed understanding of the TOC estimate. The estimating procedure will document the process for the identification, qualification and quantification of the inherent and contingent risks 12 based on the underpinning assumptions adopted during the alliance development. This would include consideration of current market conditions, design development, resource availability, construction risks and all other risk for which the alliance is responsible. A robust estimating procedure will detail the risk analysis technique and tools and the required output. Due to the increased transparency of and exposure to the cost consequences of risk, Owners must provide competent expertise to understand and review risk model inputs and outputs. This is discussed further below.

6.7 Why is understanding risk particularly important?

Alliance projects by nature are usually more complex and contain more risk elements than other projects. Furthermore, the parties to an alliance, including the Owner, will be exposed to the cost consequences of risks where they would normally be allocated to an individual party. Careful attention must be provided when preparing risk assessments for alliances.

In the alliance context it is important to understand that:

- Owners share risk (and opportunity) with the NOPs within the constraints of the Risk or Reward regime;
- Owners carry 100% risk where a NOP's painshare cap (if applicable) is reached; and
- Owners are a defacto contractor (as explained in the Guide).

The following sections highlight key areas where Owners should have strong capability and understanding either though their own resources or through engaging specialist advisors.

6.7.1 Accounting for project risk

A key feature and attraction of alliance contracting for Owners is that all Participants share project risks within the constraints of the Risk or Reward Regime. The Owner usually shortlists Proponents as experts in the management of design and construction risks associated with the development and delivery of the project. Moreover, by creating an alliance that will include the Owner, the alliance will generally manage and be exposed to Owners' responsibilities that it may not normally be party to. The Owner should expect the Proponents to collectively share with it the management and consequence of all risks associated with the project and to do otherwise should be the exception rather than the rule.

It is usually the case that not all information is available throughout the TOC process. This not only identifies issues for inclusion in the risk register but may encourage a 'worst-case' analysis of individual risks, e.g., worst case geotechnical conditions for the basis of design where limited information is available. By doing so, the risk is effectively not shared but is taken by the Owner through a conservative TOC. This is inconsistent with the principle of risk sharing and also the definition of TOC, which is the most likely expected cost at completion.

However, there are various ways in which risk and opportunity contingency values can be estimated in TOC development that are consistent with the principle of risk sharing and the definition of the TOC. Two approaches are:

Monte Carlo software simulations are simply calculating devices used to generate a
probabilistic distribution for the combined cost impact of the risks. Typically, the TOC
will include an appropriate contingency selected from this distribution. As the TOC is
the expected cost at completion, the risk contingency will generally be the difference

¹² Inherent risks (or opportunities) have a 100% likelihood of occurring although the consequences or impact of that event is not fully certain); contingent risk (or opportunities) have a less than 100% likelihood of occurring.

between the total estimated cost prior to the risk analysis and the P50¹³ forecast cost from the model. The P50 is recommended because of the collective share and management of all risks associated with the project and taking into consideration the Risk or Reward regime.

It must be noted that probabilistic software and Monte Carlo analysis are only tools for assisting the assessment and valuation of risk contingency values for a project that depend for their usefulness on the quality of the inputs. They are not a substitute for careful thought and insight into the specific project in question using the experience of Proponents and the Owner in delivering projects of a similar type, to determine the appropriate contingency value for inclusion in TOC.

• Qualitative methods to value project risk based on their own industry experience are often used by Proponents. They use their knowledge of the project and the accuracy of the estimate, in particular, their individual and collective experience, rules of thumb, knowledge of the team, the client and the estimator, and intuition.

Proponents may moderate these intuitive assessments by comparing these with the statistical probabilistic model outcomes. For example, a sound 'guesstimate' may produce a forecast expected outturn cost equivalent to the probabilistic model's P30 or P70. The top-down, intuitive assessments inform the Owner and Proponent in determining the decision on the appropriate contingency sum.

Another factor influencing a contingency value in traditional tendering is the attitude of the Proponent as the business owner, who will view a tender and the project's risk profile as an opportunity to make a business decision in setting the margin on the offer. A Proponent with a full order book and a suite of profitable projects in hand will look at the same project differently (and may assess the same risks and opportunities with different contingency values) to a Proponent without work. Likewise, a contractor with a book of mostly cost-reimbursable projects can be expected to take a different view on its portfolio risk than if it has a book of mostly D&C projects where it substantially carries the construction risk alone.

The Owner should seek to understand the Proponent's position with respect to risk and contingency valuation, although it should not be allowed to cloud the objective assessment of total cost. The Owner should also recognise in negotiating the final figure that it is generally in the interests of the Owner to have a lower TOC and the NOPs to have a higher TOC.

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¹³ There is a 50% confidence level that the outturn cost will be less than the P50 value, given the risks accounted for in the model.

7 Effective Competition in TOC Development

This Chapter explores the benefits of competition and its practical use in the selection of NOPs and development of the TOC.

7.1 Benefits of competition

In the alliance selection context, the use of effective competition provides the Owner with the best opportunity to satisfy the Owner's VfM Statement at a fair price and it:

- · satisfies government policy;
- overcomes misalignment in TOC development;
- enhances innovation; and
- allows Proponents the opportunity to differentiate.

These points are discussed further in the following sections.

7.1.1 Satisfies government policy

Consistent with the obligations of government, agencies and public officers to manage public funds at an exemplary standard and to optimise VfM throughout the project delivery process, the Policy requires the use of full competition as the default position unless it can be evidenced (in the Business Case) that there is a net public benefit in not using full competition in a specific project. In any case, the use of competition, exclusive collaboration and negotiation must comply with all relevant laws, policies, duties and responsibilities.

The Policy is satisfied when competition is used to assess both price and non-price elements of a Proponent's offer when selecting Participants for an alliance project. Competition also provides the most effective way of ensuring and demonstrating that taxpayers achieve the required project outcomes at a fair price.

7.1.2 Overcomes misalignment in TOC development

There is commercial misalignment and generally commercial asymmetry between the Owner and the Proponents during the TOC development phase that can be reduced with competition. This misalignment in a tender process is legitimate and normal. Indeed there are legislative obligations on publicly-listed corporation to ensure that they act in the interest of their shareholders. Therefore, the misalignment, between the corporate objective of growing shareholder value versus the sovereign obligations for the delivery of public services, needs to be recognised and respected. Failure to do so is a significant project management risk.

Figure 16 illustrates the issue of Owner and Proponent misalignment and the effect that price competition has on refocusing tension away from the Owner to a competing tension between opposing Proponents, and thereby promoting alignment between the Owner and the successful Proponent.

Figure 16: Focus of Competition in TOC development

Non-Price

'Validated' against Owner's benchmarks Proponent \$ High Commercial Misalignment \$ Low Owner

- Owner needs to match the capability of the Proponent to ensure VfM is achieved and demonstrated
- The Owner needs robust benchmarks (as in a Comparative TOC) to validate proposal
- Called an 'Alliance' but Owner & Proponent can't align until TOC agreed

Full Price & Partial Price



- Owner doesn't need to fully match capability of either Proponent to ensure VfM
- · Proponents match capability with each other
- Owner works with each proponent against the other to the extent equity and probity allows
- Owners are aligned with each Proponent against the other Proponent
- One Proponent will 'win' preferred status with the Owner and alignment strengthened

In the process of interacting with each Proponent in meetings and workshops, the Owner is collaborating with the teams to develop their Project Proposal to satisfy the VfM Statement.

This interaction, within the bounds of good probity, informs relationships and connections with each Proponent which are strengthened by the common goal to win preferred status over the opposing Proponent.

Provided that the Owner's Evaluation Team has appropriate capability and the confidence of Proponents, this can be done with a Proponent in a way that motivates the collaborative experience without compromising probity and is enhanced by the fact the same thing is happening with the other Proponent.

The knowledge that the Owner is interacting with a competing team is sufficient for a Proponent to strive to better differentiate itself from the other competitor and to build a good working relationship with the Owner and seek to innovate and develop the best solution to achieve the Owner's VfM Statement.

Using Competition to Build the Alliance Relationship

'The analysis revealed that a price competitive alliance facilitated stronger relationships as it enabled parties to work closer together and understand each organisations' cultural background, so that the trust building process could be facilitated more effectively.'

'Surprisingly, the determination of the TOC was found to be a factor that influenced the establishment of trust between the client and their partners during the competitive bidding process. If the client thought that the TOC signified VfM, then there was a greater propensity that confidence would be established with the alliance partner's ability. For the client confidence in the TOC enabled the foundations for trust to commence...When trust is absent, confidence in decision making may be jeopardised and opportunities for innovation can be missed.'

Price Competitive Alliance Projects: Identification of Success Factors for Public Clients
Peter E. D. Love; Dina Mistry; and Peter R. Davis.

Journal of Construction Engineering and Management, Volume 136, Issue 9, pp. 947–956. April 2010.

7.1.3 Enhances innovation

Section 2.5 advises Owners to focus competition on the intellectual contest between Proponents as they seek to innovate and develop the best solution to satisfy the Owner's VfM Statement and enhance relationships with the Owner during their interaction.

This intellectual effort is most effective in TOC development when focussed on innovating the Project Solution and associated scope and costs of constructing the works. It is at this point that the Proponents are motivated to demonstrate design and delivery innovation.

Competition enhances the application of intellectual effort on the Project Solution by improving the offered delivery solution and thereby impacting on Direct Costs and thereafter on reducing the remaining TOC components as shown in Figure 17 below. This illustrates the positive effect that competition has on costs and quality outcomes.

Minimum Competitive **Effective Competitive** Intellectual Effort Intellectual Effort **Direct Costs Direct Costs** TOC **Potential TOC** Indirect Costs Indirect Costs Contingency Contingency **Escalation** Escalation **NOP Fee NOP Fee**

Figure 17: Impact of applying competitive intellectual effort

Owners and Proponents should not be distracted by focussing competition only on Fee percentages.

7.1.4 Allows Proponents to differentiate

It is the Proponent, in conjunction with the Owner that provides the skills, experience and capacity to innovate and offer the best Project Solution and best TOC in their Project Proposal to the Owner, as well as provide the project management capability to achieve a good AOC outcome.

Competition motivates the Proponent to perform because it provides a direct measure or comparator of one Proponent against the other.

From the commencement of the market engagement to the signing of the PAA the focus of the Owner should be to design and conduct a selection process that creates relevant opportunities for interested and qualified Proponents to differentiate themselves from their competitors, in their ability to provide innovative solutions in the Project Proposal that best satisfies the VfM Statement.

The term 'relevant opportunities' should be understood as meaning effective competition on all elements of the project which are relevant to performance of contractual obligations for that project, and which are material to differentiating one Proponent from another.

These elements include not just engineering capability and alliancing behaviours, but also project management, developing project costs and assessing the risks and their overall potential to drive better outcomes in all of the KRAs.

The Owner should develop selection processes requiring observation of Proponent teams in action. Whilst the preferred behaviours will be specific to successful alliancing, i.e. collaboration, innovation, making best-for-project decisions and transparency, the Owner should also seek competent technical, project and risk management skills as key attributes the Owner is 'buying' in a Proponent's team. These skills are fundamental to project success.

7.2 How to determine the appropriate level of competition in the TOC development process

7.2.1 Alternative TOC development processes

The Guide (and this Guidance Note) outlines three NOP selection processes for alliance contracting that utilise varying degrees of competition:

- full price competition;
- partial price competition; and
- non-price competition.

The Guide outlines the significant differences between the three NOP selection processes as shown in Table 3 below.

Table 3: The three NOP selection processes compared – Key Proposal elements

Pr	oposal Element	Full Price	Partial Price	Non-price
1. Competitive elements		Project Collaborative Team VfM Commercial Arrangements Commercial Collaborative Team Commercial Collaborative Team Commercial Collaborative Team VfM Commercial Collaborative Team VfM	Project Collaborative Team VfM Commercial Arrangements Commercial (TOC)	Project Solution Collaborative Team VfM Commercial Arrangements Target Outturn Cost (TOC)
		Full Proposal	Partial Proposal	Limited Proposal
		Developed project solution.	Concept project solution.	
		Developed construction method.	Preliminary construction method.	
		Fully developed Commercial Framework.	Commercial Framework principles.	
		Observe and evaluate the combined Project Team 'in action' (Owner and Proponent/s). Price (full TOC).	Observe and evaluate Proponent Team 'in action'. Budget/indicative TOC without complete pricing of all components.	Observe and evaluate Project Team in limited, hypothetical situations or limited action prior to shortlisting of Preferred Proponent before TOC development process.
2.	Management of externalities and undimensionable risk	Externalities generally addressed by Owner personnel. Undimensionable risk addressed by combined team.	Externalities generally addressed by Owner personnel until competitive process concluded, after which integrated Owner and Proponent team can address collaboratively. undimensionable risk addressed by combined team.	Externalities addressed by integrated Owner and Proponent team collaboratively. Undimensionable risk addressed by combined team.
3.	Material issues left for agreement post selection	Negligible.	Negotiate TOC (on basis of Partial Proposal).	Negotiate TOC. Develop design solution. Develop construction method. Develop Commercial Framework.
4.	Target Outturn Cost	Tendered.	Key elements developed and tendered 80/20 or 90/10. Partially negotiated (on basis of partial competitive Project Proposal). Checked against the OCT and relevant benchmarks, etc.	Checked against the OCT and relevant benchmarks, etc. Fully negotiated without the basis of a competitive Project Proposal.

Each of the three NOP selection processes, in the context of this Guidance Note, is compared further in the following sections.

7.2.2 Determining the appropriate level of competition

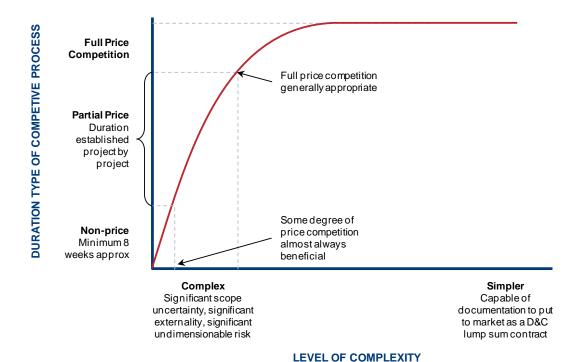
In principle, price competition on the total price should continue for as long as it is practicable to do so. It is unusual that price competition cannot be effectively incorporated into the selection process, at least to some extent.

In both full and partial price processes, the Owner has the significant benefit of assessing in real time, the non-price performance attributes of two Proponents in developing the project solution.

Significant scope uncertainty, undimensionable risk or the need for external consultation prior to completing pricing are reasons that price competition should be terminated at some point prior to completion of TOC development.

Determining the point when price competition should cease will depend on the individual project circumstances as illustrated below.

Figure 18: Duration of competitive process as a function of project complexity



The opportunity to competitively tender elements of the TOC will largely be dictated by the project nature and circumstances, the selection process and the requirements of the Owner. Table 4 provides some guidance as to the TOC elements on which effective TOC pricing competition should be applied in NOP selection.

Table 4: Effective TOC element pricing competition

T00 FI /	√/		
TOC Element	Full Price	Partial Price	Non-price
Fee*	✓	✓	?
Escalation	✓	Recommend first pass escalation forecast.	×
Contingency	✓	Recommend first pass risk and opportunity register and contingency calculations.	×
Indirect Costs	✓	Recommend budget indirects estimate, draft organisation chart, and overhead attendance costs.	×
Direct Costs [#] ✓		Recommend budget estimate including pricing (say) '80%' [†] of project scope including construction method, schedule and draft delivery and procurement arrangements.	×

- * It is recommended maximum fee percentages are offered by Proponents in shortlisting processes to be assessed against industry norms.
 - Shortlisted Proponents can then offer their tendered fee in the final Project Proposal to the Owner following the TOC development phase and the finalised commercial/legal framework.
- # The Owner will achieve the best solution by ensuring the selection process aims to reduce the base cost of the project through the application of intellectual effort to develop a better Project Solution in order to reduce the resources needed and efficiently construct the scope of work, which impacts on Direct then Indirect Cost and risk and, to some degree, design costs. For example, through competition the Proponents may be incentivised to reduce the overall volume of concrete required from 20,000 m³ to 15,000 m³ than simply tendering the unit price of concrete to save a few dollars per m³.
- † Applying the Pareto principle (80/20 rule), although the final percentage will change from project to price.

An effective full price selection process culminating in a full Project Proposal (including a TOC) offer to the Owner represents 'best-in-market' offers for the Owner and the best opportunity to acquire the best project solution, team, commercial arrangements and price for the state.

The Owner will have less reliance for external benchmarks such as the Owner's Comparative TOC (OCT) (see section 10.8) when provided with two valid and complete TOCs in a full price competition process. Whilst the Guide recommends the use of an OCT and benchmarks to compare Proponent Proposals with the Owner's VfM Statement, the ability to compare two full Project Proposals will provide the Owner with greater confidence that they have ensured optimal VfM.

Partial Price competition will achieve improved TOC and AOC outcomes and increased levels of TOC and AOC certainty, relative to a TOC process without any price competition. However, a poorly conceived partial price competition process may not achieve this.

Proponents must be clearly instructed as to the activities and deliverables expected of them in the competitive process and how they will be evaluated. In particular, to ensure that the process is focussed on intellectual effort for improved VfM, the relative importance placed on delivering improved value compared with lower cost must be made clear.

7.2.3 Full Price Competition

To optimise the benefit of a competitive full price process the Owner must ensure that each Proponent delivers a complete Project Proposal, capable of acceptance at the conclusion of the process. This being, to the greatest extent possible, agreed terms of the PAA including

the commercial arrangements and a TOC that allows the Participants to enter into an alliance contract with little or no further discussion, reconciliation of terms, scope or risk or negotiation. To achieve this, Owners should provide sufficient instruction, clarification and resources during full price selection to enable this.

As outlined in the Guide, VfM is more likely to be achieved if intellectual effort is focused on innovating the project solution and scope with the Proponents rather than just focussing on positional negotiations to reduce the NOPs Fee or simply driving the TOC down.

The management of undimensionable risk will require Proponents to have confidence that there is adequate time to properly address the issues and that the Owner will be realistic about assessing their impacts, including cost impacts. This must be properly addressed in the selection process.

7.2.4 Partial Price Competition

In Partial Price selection, the extent to which the Project Proposal can be developed requires pre-consideration by the Owner of what should be achieved or tendered under competition, how the NOPs will be selected, and the process required to continue negotiations that will result in an acceptable Project Proposal. To pre-plan or map out in advance a partial price selection development process requires an understanding of the project and the Owner's objectives, a sound knowledge of likely risk issues to be encountered and a good grasp of the project areas that most affect time, scope and cost. Owners require sound and experienced judgement in determining the extent of price competition and in drafting the terms and instructions for a 'project development' process in a partial price RFP.

An awareness of project development activities and how contractors and designers approach them is also advantageous in adapting to changing circumstances during selection.

Having made a determination, the Owner should clearly instruct the Proponents on the objectives and requirement of the competitive phase of the partial price selection process, and the deliverables to be provided in a partial Project Proposal capable of acceptance.

The Guide suggests that generally it is neither possible nor effective to develop a full TOC in a Partial Price process and that instead partial price should be expected where prices for packages of work or services can be obtained. It cautions Owners against requiring Proponents to contractually commit to discrete price elements in an incomplete estimate. A cost estimate for an alliance project is a complex combination of interdependent and overlapping elements that are not well understood except by the experienced estimating practitioners who author them. Owners should ensure that gaming of estimates and shifting costs within a TOC to reduce partial prices or transfer risk does not take place.

Partial Price development should be focussed on a significant portion of cost elements (selected on a project-by-project basis as these material elements may be different for each project). The price or price components developed during the competitive phase should be treated as an offer from the NOPs and the final TOC offer from the Preferred Proponent must be consistent with this offer.

Whilst a full TOC estimate is unlikely to be developed, Owners should at least have the following agreed or finalised to the greatest extent possible in the partial Project Proposal:

- a concept or preliminary design solution for the preferred option and associated construction methods and schedule;
- a budget estimate (TOC budget) to deliver this solution;
- firm tenders on those price elements representing the most significant costs in a future TOC estimate.
- most contract terms in the PAA; and
- the commercial terms agreed, including the Risk or Reward regime that provides the mechanism by which the NOPs will be incentivised to align with the requirements in the Owner's VfM Statement.

The Owner's Estimator, and where developed, the OCT, will inform the Owner of the cost elements that constitute the key drivers for the overall TOC for inclusion in the binding tender and provide guidance during the final TOC negotiations. A recommended approach would be (where the project allows) in the order of 80% of cost elements by value, including those with the greatest influence on the final TOC.

The fee percentage should be agreed in a partial Price Proposal, keeping in mind that applying competition to only the Proponents' profit does not constitute effective competition; it is better to focus on the main scope and costs associated with the project solution.

Partial price competition allows the Owner and Proponent a period of time after the Preferred Proponent has been selected to address externalities, scope uncertainties and/or undimensionable risk issues collaboratively, using the most efficient resources and processes of the Owner with the NOP's. Prior to that point, other comments about full price apply.

7.2.5 Non-price competition

Non-Price processes may, on rare occasions, become necessary when the project is so dependent on externalities, scope uncertainty or undimensionable risk that it is unworkable for any measure of price competition. In such processes, as illustrated in Table 3, the Owner loses the benefit of competition and is fully exposed to the requirement to contribute, manage and negotiate the TOC with resources and capability consistent with those of the NOPs. In the non-price selection process, the majority of material TOC elements are negotiated outside of competition and resolution is dependent on the expertise and negotiating skills of the Owner.

In non-price selection, Proponents are usually shortlisted as part of an EOI process involving interviews, project appreciation scenarios or roleplaying and other non-price criteria. The shortlisted Proponents may then compete in further workshops and presentations involving non-price issues.

Sometimes they will be requested to comment or critique the Owner's budget and risk allowances and/or provide benchmark data from similar projects from their corporate portfolio. This does not constitute price competition. Any benchmarking or Proponent critique of the Business Case budget is not likely to be useful where there are too many unknowns at the commencement of TOC development. Market testing work packages does not represent a competitive selection process as it does not include a competition on both the Project Solution and productivity or quantities.

Generally, Proponents will be requested to offer their fee percentage and rates for people or other equipment. It is important that Fee percentages are not over-weighted in evaluation, because this is can to lead to gaming on the Fee and then recovery of the corporate profit targets through TOC negotiation and/or the project solution.

The Owner's Commercial Advisor, Owner's Estimator and the development of an OCT provide a proxy for competition in assessing the Proponent's Proposal.

Owners should be aware that a single Proponent may hold the view that the Owner has no alternative but to conclude and accept the TOC developed and execute the PAA (and this risk is heightened when the Owner engages the same single Proponent to concurrently undertake early works). The Guide recommends Owners retain the second Proponent during negotiation with the Preferred Proponent and ensure this is made clear in the probity arrangements and RFP instructions.

7.3 Process considerations

7.3.1 General

Whilst the structuring of the overall alliance procurement process is beyond the scope of this guideline, this section and Chapter 8 provide an overview of issues to be considered. The following table provides the key best practice considerations in structuring a full, partial or non-price NOP selection and TOC development process.

Table 5: The three NOP selection processes compared – selection elements to consider

Selection Element	Full Price	Partial Price	Non-price
Level of documentation	RFP and supporting technical specifications.	RFP and supporting technical specifications.	RFP and supporting technical specifications.
Human resourcing	Designated Owner Contact Person for each Proponent team for formal communication between Evaluation team and Proponent team. Other Owner Personnel for Proponent Interaction and Participant(s) as appropriate. All Owner Participants provide observations to Evaluation Panel. Owner Participant for each Proponent and 'crossover' team as appropriate. Roles for Commercial Advisor, Legal Advisor, Financial Advisor, and Owners Estimator. Specialist advisors as required. Other general procurement support functions.	Designated Owner Contact Person for each Proponent team for formal communication between Evaluation team and Proponent team. Other Owner Personnel for Proponent Interaction and Participant(s) as appropriate. All Owner Participants provide observations to Evaluation Panel. Owner Participant for each Proponent and 'crossover' team as appropriate. Same as full price plus Owner's Estimator to assist in negotiating Final TOC and more reliance on Commercial Advisor and Legal Advisor. Specialist advisors support functions. Other general procurement support functions.	Owner Participants and Evaluation Team for Selection Process that is concluded prior to commencement of TOC development phase. Multiple Owner Participants in TOC development. Owner is heavily reliant on Commercial Advisor, Legal Advisor, Financial Advisor, and Owners Estimator to assist in negotiating Final Project Proposal, including Final TOC. Specialist advisors as required. Other general procurement support functions.
Opportunities for Proponent differentiation	Maximum opportunity available.	Opportunity pre-determined by Owner.	Limited opportunity for shortlisted Proponent Teams during Selection Process prior to TOC development. No direct objective comparators available for Proponent during TOC development.
Probity considerations regarding Owner interaction during the TOC Development phase	Use of single evaluation team provides for both Proponents. Governance arrangements protect Proponent IP and process integrity. Owner has an embedded Participant(s) with each Proponent teams and/or a cross-over team working with both Proponents. All matters should be resolved before selection.	Use of single evaluation team provides for both Proponents. Governance arrangements protect Proponent IP and process integrity. Owner has an embedded Participant(s) with each Proponent teams and/or a crossover team working with both Proponents. Negotiation on selected final matters to be resolved after selection.	No probity process issue regarding confidentiality of IP as the single Proponent selected is through traditional EOI process; however, there are broader probity issues to be managed. High risk of capture by Proponents when engaged to undertake early works. TOC developed after selection of Preferred Proponent. Negotiation on all elements of the Project Proposal as none are resolved prior to selection.

Timelines for selection processes	Fixed by Owner.	Fixed by Owner	Can be longer than other processes as no competition or process to 'time-box' process (use of a capped fee provides some incentive for timeliness).
Reimbursement of Proponent costs	Capped Fee agreed up front. Suggested 50%.	Capped Fee agreed up front. Suggested 50%.	Capped fee agreed up front. Suggested 50% to 100% depending on circumstances.*

Where there is a very high degree of scope uncertainty and external consultation, it may be appropriate to pay full costs, but generally the fee should be limited to provide incentives to the Preferred Proponent to reach agreement on an acceptable TOC that aligns with the Business Case

7.3.2 Level of documentation

Best practice is that the documentation and information procedures should be equivalent for all procurement processes although the full and partial price processes require additional competitive process definition.

7.3.3 Human resourcing during the selection process

See also section 8.1 dealing with probity considerations.

7.3.3.1 Full price evaluation and interaction process resourcing

In the full price selection process, and, to a degree, in the partial price process, the Owner is assisted by competition between two Proponents where there is tension for each Proponent to strive to outdo the other and the Owner is in the advantageous position of evaluating the outcome of this tension in two Proponents simultaneously. This provides the Owner with an opportunity to directly compare two experts contending for the Owner's consideration to win the work.

It is essential that the evaluation panel has the capability to assess the Proponents on the intellectual effort required of the Full Price process and outcomes so achieved. This is important so that Proponents can compete on this basis with confidence. Mishandled, the process will deliver the lowest TOC rather than the highest VfM outcome sought.

7.3.3.2 Partial price evaluation and interaction process resourcing

In partial price selection, the Owner needs the same basic capability as in the full price process, with the addition of further expertise in the elements it has left for negotiation outside the competitive process and which must be negotiated on a one-on-one basis.

These negotiations require additional capability or skill from the Owner over and above the usual baseline capabilities required for full price competitive selection.

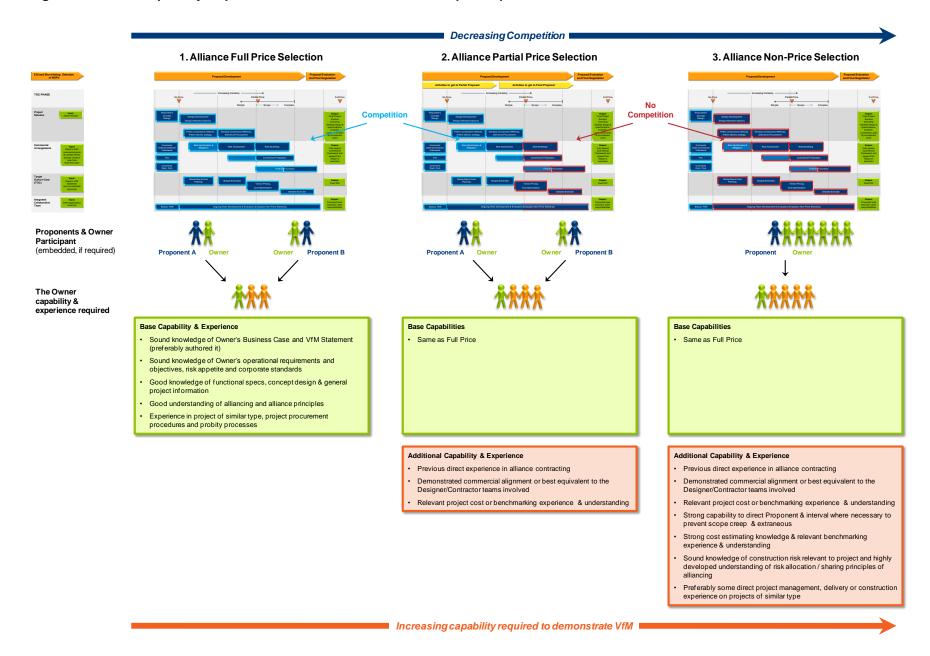
7.3.3.3 Non-price evaluation and interaction process resourcing

In non-price selection, the selection process for the Preferred Proponent concludes prior to the commencement of TOC development, although it remains beneficial to the Owner to preserve, and make clear, its right to invite an alternative Proponent to prepare a TOC if the Preferred Proponent is not performing to the required standard. During the non-competitive phase of the tender 'selection' process, the Owner needs the same basic range of capabilities as in the full price selection process plus a far greater skill set to understand all aspects of the Project Proposal negotiated outside competition. In this case, the Owner requires capability at least equal to that of the Proponent in the areas to be negotiated, including the capability to:

- assess the design and project solutions without any direct comparison;
- understand the proposed construction methodologies, delivery and procurement strategies, risks and costs associated with the project solution; and
- negotiate contract terms with a party who will have misaligned commercial drivers to the Owner.

The increasing capability required by the Owner as competition in the selection process decreases is depicted in Figure 19.

Figure 19: Owner capability requirements in alternative TOC development processes



7.3.4 Creating and evaluating opportunities for Proponent differentiation

7.3.4.1 Full price Proponent differentiation

As noted in section 7.2 above, in a full price selection process, the opportunities for the teams to differentiate are available at every step of the process on:

- design development and identification of the preferred solution;
- construction methods development, scheduling and delivery strategy decisions;
- cost estimating, risk analysis, modelling and TOC development and review; and
- commercial negotiations and reaching agreement on PAA terms.

Through the Owner Participants and by direct observation (in a full or partial price selection process), the Owner's evaluation panel has access to a detailed and direct visibility of what each team can bring to the specific project, not just in engineering capability and alliancing behaviours, but also in project management, in developing project costs, in assessing the risks and on their overall potential to drive better outcomes in all of the KRAs. These observations relate directly to the key attributes required of Proponents to deliver on the Owner's project requirements and will be part of any effective selection criteria.

Proponents are well versed with this environment as it aligns with their business model. They are likely to use every competitive advantage available to differentiate themselves from the other Proponent to ensure that they submit the best Proposal they can. Therefore, the Owner should structure the selection process in such a manner that capitalises on the processes and outputs of each Proponent team to differentiate in a substantial way against effective and competitive tender selection criteria.

Figure 20 illustrates the complete suite of selection criteria available to both Proponent and Owner in full price selection.

Differentiation Differentiation **Full Price Selection** Non-Price Selection PROPONENTA **PROPONENTA PROPONENTB PROPONENTB** Integrated, Collaborative Team Project Solution Integrated. **Project** Integrated, Collaborative Team Integrated Collaborative Team Collaborative Team (A) (B) (A) (B) (A) (B) arget Outturn Cost (TOC) Commercial Arrangements (A) (A) (B) (B) Owner Owner compares two teams and the Owner compares two teams and assesses their likely potential results of their efforts

Figure 20: Full price vs non-price selection comparison

7.3.4.2 Partial price Proponent differentiation

Essentially, a partial price selection follows the same process as the full price selection except it is curtailed prior to completion of the full project solution and TOC. The Partial Project Proposal will have some elements set aside for future agreement but the opportunities for teams to differentiate exists consistent with full price selection for the duration of the competitive process.

7.3.4.3 Non-price Proponent differentiation

Non-price selection is essentially a qualitative process based on written submissions and observations of team behaviours. The opportunities to differentiate occur in a limited period which affords the Owner limited opportunity to adequately assess their potential as an alliance partner.

The only opportunity Proponents have to differentiate themselves after the initial proposal submission is the initial selection phase of interviews, workshops, scenarios and roleplaying exercises. If not properly managed, this is likely to lead to staged or coached behaviours and does not provide opportunity for the team to demonstrate their ability to innovate based on outputs produced or their project management skills. Figure 21 reveals the limited opportunities afforded in non-price selection for effective Proponent differentiation.

Competent construction project and commercial management skill sets are essential to successfully manage difficult projects of the type suited to alliance contracts. It is a very difficult challenge to adequately demonstrate those in non-price selection. Therefore it is essential that the process is sufficiently thorough, of sufficient duration and evaluated with real expertise. The evalution panel will require superior skills in judging the potential capability of the individuals and teams, both technically and behaviourally. They are likely to also require expert support in assessing behaviours and performance potential. Owners should exercise great care in selecting NOPs based on brief interactions, interviews and workshops. The types of interactions found in full and partial price selection allows a better evaluation of the non-price attributes the Owner should be seeking in a successful alliance Proponent.

Furthermore, this selection process does not incentivise the Proponents to bring forward innovations or opportunities prior to finalising the TOC. Innovations that come to light post-TOC provide NOPs entitlements to the benefit of any cost savings in connection with those innovations. For an Owner, however every \$2 saved through innovations pre-TOC is worth only \$1 saved through innovations post TOC.

7.3.5 Comparative timelines for selection processes

7.3.5.1 Full price and partial price process timelines

Because these processes are undertaken under competition, it is essential that they are preplanned and properly managed in an equitable and effective manner. Using competition in selection also provides additional incentive to Proponents to achieve the best possible outcome in the time available to assist them to win the project. Capping compensation will also motivate the Proponents and the Owner to adopt a business-like efficiency in the TOC development process. The ability to ensure an efficient process generally results in the full price and partial price selection taking less time and being more efficient than noncompetitive processes.

To assist the Proponent, Owners are advised to pre-plan a timeline or 'roadmap' of the process to allow for continuous assessment on an equitable basis and provide target milestones to each team. A typical 'roadmap' would contain planned interactions, workshops, site inspections and other formal interventions encompassing the principles of good probity and equal access for both Proponents. This provides some certainty of timelines for all parties.

Owners should ensure that the number and timing of interactions are well planned and allow the Proponents appropriate time to focus on Proposal development. Too many interactions will distract the Proponents and result in a suboptimal Proposal. Generally, Proponents will spend 2–3 days to prepare for a ½ day workshop. Owners can consult with potential Proponents to inform their plan and timelines for TOC development processes.

7.3.5.2 Non-price TOC development process timeline

When comparing timelines for the different selection methods it should not be assumed that non-price competition is a faster process. Adopting open-ended cost reimbursement arrangements without competition exposes an Owner to the risk of prolonged timelines and

lower efficiency in TOC development. Furthermore, there is a high risk for the Owner of being 'captured' by Proponents when engaged to undertake early works during the TOC development process and prior to finalising and agreeing the PAA.

Any development process relying on information from sources outside the control of parties to the alliance, (e.g. approvals and land access) runs the same risk of delayed timelines and additional cost to the Owner.

7.3.6 Reimbursement of Proponent costs

7.3.6.1 Full price and partial price TOC development reimbursement

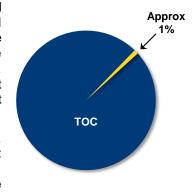
Some aspects of the process of TOC development are similar to that of tendering a traditional D&C project. The cost of tendering can vary widely but industry norms for a contractor's investment in a large D&C tender would typically be 1% of the tender price (this is dominated by design costs) and often absorbed in corporate overhead as a cost of doing business or added as a discrete item to the Proponent's tender.

In the alliancing tender process, NOPs are paid to compensate them for the increased intellectual effort and senior management input demanded by TOC development. The Guide recommends, where jurisdictional policies allow, that a portion of TOC development costs be reimbursed as a fixed or capped amount and suggests, as a starting point, a fair proportion is 50% of the Owner's estimate of the Proponent's likely costs to complete a Project Proposal.

Figure 21: Relative cost of reimbursing NOPs

The proportion of costs compensated should be balanced between the additional effort required by Proponents and the attractiveness of the project to them. It would be expected the total compensation costs for multiple Proponents be similar to that of a traditional D&C tender. Figure 21 shows the typical proportion of development costs and highlights their relative insignificance with respect to the TOC and forecast total project costs.

Limiting compensation, when applied to any selection, motivates Proponents to provide tight and efficient processes for TOC development, meeting milestones, deadlines and the delivery of outcomes, including the Project Proposal.



Where competitive processes are provided (full price and partial price) this incentive is heightened due to the same tensions where the competing Proponents will be keen to meet deadlines and milestone dates as they compete to demonstrate their superior skills to the Owner.

7.3.6.2 Non-price TOC development reimbursement

Projects approved for a non-price competitive process will generally have unknown scope, undimensionable risks or a high degree of externality. In these circumstances, it can be difficult to pre-estimate the likely alliance development costs. It is usual practise in non-price TOC development processes to pay Proponents actual costs expended on a cost-reimbursable basis and roll these into the TOC as interim or early works values. This arrangement should be used with extreme caution as without careful planning, forethought or proactive management, Owners can be faced with reimbursing large Proponent teams, searching for the right balance of risk and price to settle the TOC. Owners should generally cap the amount to be reimbursed for the reasons articulated in 7.3.6.1. The suggested cap is 50% of an appropriate budget figure.

8 Owner interaction and probity considerations

NOTE: this chapter is provided as a general discussion paper.¹⁴ The tender evaluation team interaction and Owner participation in TOC development need to be carefully pre-planned. The probity plan and protocols of each project and procurement strategy needs to be prepared by the Owner with the assistance of a qualified Probity Adviser.

8.1 Interaction and probity principles

Governments require adherence to the highest ethical standards and conduct in procurement and commercial engagements. Government and public officials must be able to demonstrate high levels of integrity in processes while pursuing VfM outcomes for the government and meeting the public interest.

The Commonwealth and many of the states have variously articulated the probity principles which apply to government procurement in their respective jurisdictions. Whilst there is not complete unanimity between the various government entities in respect of the description of the basic probity principles which should be present in all government procurements, commonly the fundamental probity principles cover such concepts as:

- transparency and accountability;
- integrity;
- fairness:
- free from bias, free from conflict of interest;
- security of confidential information; and
- consistency and objectivity

The jurisdictions have also developed 'best practice guidelines' and other policy documents to assist government officials with various aspects of the tendering process, including with alliance contracting. Additionally, the courts have considered a number of cases since 1997 which have provided guidance on many elements of government tendering processes.

Each significant alliance project will have one or more probity plan, and protocols tailored to address the probity risks of the particular project and government probity standards generally. These probity plans and protocols will be established using probity advisers. These concepts are discussed in the context of TOC development below.

8.1.1 The Owner's resources interaction with two bidders in dual negotiations

Agencies/Owners often conduct dual negotiations with two shortlisted parties. The application of this strategy ¹⁷ can be found in public-private partnerships, D&C, alliances, etc. In each case, the relevant probity principles which arise for particular consideration, management and mitigation are:

- fairness:
- consistency and objectivity; and

¹⁴ The assistance of Ms Anne Dalton, Probity Adviser, in the preparation of this section is gratefully acknowledged.

¹⁵ For example, State Procurement Policy in Queensland requires use of a probity advisor for construction projects valued of more than \$100 m. The Policy also encourages agencies to engage probity auditors or advisors for high-risk procurement below these thresholds.

¹⁶ This Guidance Note does not endeavour to provide a comprehensive overview of the selection process but focuses particularly on matters that pertain to the Owner in TOC development. The full tender selection process and criteria need to be developed by the Owner, using the input of its Probity Adviser, to meet the unique requirements and profile of its project.

¹⁷ 'Dual negotiations' refers to the tender strategy where the Owner identifies a shortlist of two Proponents and where both Proponents develop their best tender offer that is confirmed in their signed contract agreement. The Owner then concludes its evaluation and countersigns the agreement that best satisfies its requirements and tender selection criteria.

conflict of interest/bias.

In each significant procurement process, there is normally a step to establish a project probity plan that deals with these matters in both a business-as-usual manner as well as targeting specific probity risks heightened for the particular project.

Normally, in all procurement options (including alliancing) where the Owner undertakes a dual negotiation process, the Owner seeks to identify the Preferred Proponent based on its tender selection criteria that includes a range of price and non-price evaluation elements. In addition to the provision of tender documentation that articulates the Owner's project requirements, the Owner will make available resources to explain its requirements to the Proponents and answer questions. This is done in close adherence to probity protocols established specifically for the project and generally for government procurement processes.

8.1.2 Owner's participation in TOC development

In the case of alliancing, there is the additional dimension that in price competitive selection processes the Owner's resources work collaboratively with two Proponents. In addition to explaining and answering questions, the Owner's resources will contribute separately to each Proponent's Project Proposal and collaborate with them to understand the project, innovate and develop design solutions and other project deliverables leading to each Proponent offering the optimal project solution and TOC.

This assists the Proponents to align their Project Proposals with the Owner's requirements in an efficient, effective and economical way that leads to better project outcomes.

As previously stated, by working closely with the Proponents during the TOC development phase (in a Price or Partial Price selection process), the Owner has a detailed and direct visibility of what each team can bring to the specific project, including:

- engineering capability;
- alliancing behaviours;
- project management capability;
- developing project costs;
- assessing the risks; and
- potential to drive better outcomes in all of the KRAs

These observations by the Owner directly inform the Owner of the Proponents' capability in the key attributes required of Proponents to deliver on the Owner's project requirements. They will be part of any effective tender selection criteria that will assist in differentiating Proponents in a substantial way.

8.2 TOC Development in the context of tender selection criteria

The Owner's tender selection criteria, of both non-price and price elements, will be provided in the EOI and the RFP documents. The selection criteria will also incorporate a hurdle criterion, which often only address non-price elements, in both the EOI and RFP documents and these need to be satisfied if Proponents are to continue being eligible for consideration in the tender process.

Broadly, different tender selection criteria are used at different stages of the selection process:

• **EOI Stage**—generally the tender selection criteria here deals with non-price elements and focuses on the minimum level of corporate experience and capability required to undertake the project in hand (these do not generally deal with project costing). The Proponents need to satisfy these hurdle criteria in order to be shortlisted and proceed in the tender process. The EOI stage is commonly treated as a 'hurdle to entry' with corporate experience and capability set to minimum standards the Owner requires to undertake the project.

- The RFP Stage 1 [this is sometimes used in addition to the EOI Stage to help manage an expected large or highly competitive field of bidders, where another round of shortlisting is required. In this case, the RFP is structured into two stages]—generally, the shortlist in Stage 1 would receive detailed tender documentation and selection at this point is made on the (additional) basis of a selection criteria that generally includes specifics of experience, capability and commitment to alliancing principles, etc, and a response to the Proponents' acceptability of the draft commercial and legal (PAA) frameworks; and some pricing information. It is common for the RFP to call for the NOP fee to be nominated (unique for each designer/contractor consortia formed), and to also nominate the percentage split of sharing pain or gain between Participants within the Proponents team.
- The RFP Stage 2—the two shortlisted parties are assessed against the comprehensive tender selection criteria, including both price and non-price criteria. The selection criteria are (additionally) tailored to promote behaviours and display expertise that matches project characteristics and the Owner's objectives. The TOC development phase takes place as part of the RFP Stage 2. (The Owner's assessment of the acceptability of the nominated NOP fee should be finalised as part of the RFP Stage 2 towards end of the TOC development phase once the project scope, cost, commercial and legal framework etc are finalised.)

Figure 22: Illustration of the Selection process

EOI STAGE



EOI – Hurdle Tender Selection Criteria – examples

- Corporate experience e.g. Provide details of a number of recent similar projects
- Financial Capacity to undertake the Project
- Safety record
- · Quality and Environmental Management record
- Accreditation ISO accreditations

RFP STAGES

Proponent Proponent

Proponent

Proponent

RFP – Stage 1 Shortlist (Optional)

Shortlisted Proponent

Shortlisted Proponent

RFP – Stage 2 Alliance Development Stage



Preferred Proponent

RFP Stage 1 (Optional) - Selection Criteria – examples (in addition to the EOI)

Non-price Criteria

- Corporate experience
- Team capability demonstrate that the proposed team is capable and has the necessary skills and experience to deliver excellent outcomes for the Project.
- Sustainability of team (gives confidence that the team will be there for the entire project)
- Project systems
- Acceptability of commercial framework and draft PAA
- Governance

RFP Stage 2 - TOC Development Stage Selection Criteria – examples in addition to the EOI and RFP Stage 1 Non-price Criteria

- the Proponent's ability to innovate
- Proponent's understanding of the Project and associated risks
- Leadership and alliance affinity performance of the Proponent's nominees for key leadership (ALT and AMT) roles; performance of the Proponent's nominees for the wider team members; and Alliance Management Plan
- Proponent's commitment to the delivery of the projectunderstanding, ability and capacity to participate in this Project

Price Criteria

- Commercial and legal arrangements agreed
- Design solution and construction technical Proposal, certainty of outcomes and compliance in order to form a view on the quality and functionality of the design solution
- TOC and the quality and performance requirements which are set against it.

Applying the Selection Criteria in the TOC Development Process

During the TOC Development Phase the Owner will normally use a Probity Adviser throughout the process to ensure commercial confidentiality is maintained and to give confidence to the Proponents that the integrity of the process is maintained.

8.3 Alternative Owner Participation Arrangements

Each Proponent, with the Owner's input, develops its own design, construction methodology, delivery strategy and associated TOC consistent with the project objectives and performance and functionality requirements. There are a number of options (and variants) possible for structuring this collaboration that feeds into the tender selection process. Below are a few possible options:

Table 6: Options for structuring collaboration during selection process

In the full price and partial price selection process

Option 1A: Two Owner Teams

- The Owner appoints one senior Representative (usually the Owner's future ALT nominee) to work with each of the two shortlisted Proponents to facilitate the common interfacing and transfer of information with the Owner.
- The Owner appoints two core teams to work separately and collaboratively with each of the two Proponents. These embedded teams would have significant involvement in the technical reviews and clarification meetings, in the risks and opportunities workshops, and be the initial point of contact for commercial and legal negotiations with its Proponents (these discussions are usually conducted at ALT nominee level).
- Where necessary, the Owner may also appoint specialist subject expert(s) to work with both Proponents and share his/her unique expertise.
- The Owner establishes a tender selection committee (or evaluation panel) that is responsible for the development and implementation of the tender selection criteria. This committee receives structured evaluations from the core teams that feed into the evaluation process. (It is also common to have some 'external' committee members to avoid corporate 'group think', and provide some diversity.) The recommendations of the committee are forwarded either to a project steering group or directly to the Owner.

Option 1B: A Common Team

- The Owner appoints one senior Representative (usually the Owner's future ALT nominee) to work with each of the two shortlisted Proponents to facilitate the common interfacing and transfer of information with the Owner.
- The Owner appoints one core team to work with each Proponent in a collaborative and interactive manner; The team would have significant involvement in the technical reviews and clarification meetings, in the risks and opportunities workshops, and be the initial point of contact for commercial and legal negotiations with its Proponents (these discussions are usually conducted at ALT nominee level).
- Where necessary, the Owner may also appoint specialist subject expert(s) to work with both Proponents and share his/her unique expertise.
- The Owner establishes a tender selection committee (or evaluation panel) that is responsible for the development and implementation of the tender selection criteria. This committee receives structured evaluations from the core teams that feed into the evaluation process. (It is also common to have some 'external' committee members to avoid corporate 'group think', and provide some diversity.) The recommendations of the committee are forwarded either to a project steering group or directly to the Owner.

Non-price Selection Process

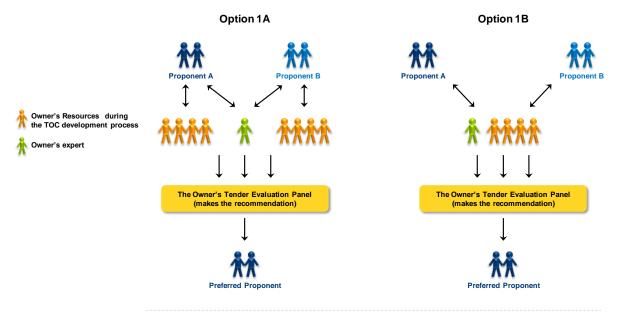
Option 2: One Team

- The Owner appoints a team, which also serves as the evaluation team, to work collaboratively with the Preferred Proponent. (However, as in Options 1A and 1B, the Owner may call on assistance of external commercial advisors to bolster capability and counter asymmetry.)
- The team will have significant involvement in the technical reviews and clarification meetings, in the risks and
 opportunities workshops, TOC development, and the commercial and legal negotiations with the Preferred
 Proponent during the TOC development stage.

These options are illustrated in the following diagram:

Figure 23: Selection Process during TOC development

Full/Partial Price selection process during TOC development



Non-price selection process during TOC development



8.4 Specific TOC development probity considerations

The TOC development process during full price and partial price selection process allows the recommendation on the Preferred Proponent to be made based on a more comprehensive and direct evaluation of behaviours and capabilities demonstrated working on the actual project than compared to non-price selection. The structured observations made by the Owner's team(s) in the workshops and other interactions with the Proponents during the TOC Development Phase will be used by the Tender Evaluation Panel to make a recommendation to the Owner on the Preferred Proponent.

The Owner's Probity Advisor will tailor a specific probity plan to deal with selection challenges. The following section provides an overview of issues, however, it does not replace a well thought out and tailored probity plan.

The Owner's Team

In addition to Owner's resources that work exclusively with only one Proponent, the Owner may have 'crossover resources' that work across the two Proponents. These would commonly be subject experts in limited numbers that the Owner would make available to both Proponents.

In summary, the following groupings of Owner resources are present in a dual negotiation process:

Table 7: Groupings of Owner resources

Group	Traditional	Alliancing	Implications for Alliancing
The Owner's subject expert or cross-over resources working with both Proponent teams	Both generalist and specialist resources will interact with the Proponents to explain and answer questions.	These are usually subject specialists who would collaborate separately with both Proponents in addition to explaining and answering questions.	Given the use of the same Owner's specialist resources, the probity principles of fairness; and consistency and objectivity should be met. The probity principle of conflict of interest/bias can also be managed with the establishment of appropriate probity rules and having a team with several individuals.
The Owner's resources working exclusively within one Proponent team	This does not apply in traditional contracting.	These are essentially the Owner's Participant(s), collaborating with their Proponent, for the duration of the ADA.	The probity objectives of fairness, consistency and conflicts of interest can be managed with the Owner ensuring that the knowledge, experience and capability of the two teams of Owner Participants for each Proponent are matched. The Owner will need to be responsive to any concerns raised by a Proponent.
The Owner's tender evaluation panel	Many members of this panel normally would also interact with the Proponents during tender offer preparation.	Some members of this panel normally would also collaborate with the Proponents during tender offer preparation. ¹⁸	A highly detailed and structured tender evaluation process, involving large evaluation teams will ensure that the probity objectives of fairness; consistency and objectivity, and conflict of interest/bias are managed.

Owner interaction

In all cases it should be clear to all parties that the Owner's resources provide information to assist the bidder in the construction of the bid; however, at all times the bid remains with the bidders.

If an Owner's Team (as in Option 1B) or a subject matter expert works with two Proponent bid teams, there is a need to ensure that both they and each Proponent team have a good understanding of their respective roles. It should be clear that all such crossover resources are there to provide information to assist the bidder in the construction of the bid, however, at all times the bid remains the bidder's and that the Owner's crossover resources do not cross the line and become a member of the bid team. They must remain outside and not of the team. This is important as a crossover individual or team cannot be a member of two competing teams; and an individual must not form a basis as to who should win outside of the confides of the tender selection criteria and tender selection process.

¹⁸ It would be expected that the Owner's resources working exclusively with one Proponent would undertake a structured and detailed evaluation, based on their experiences, of non-price elements of the tender selection criteria. The evaluation of the price component of the Proponents' Proposals may involve specialist resources who have not been involved in developing the Proponent's Proposal.

This can be a difficult assignment for an individual to perform as it is necessary to:

- keep separate in their own mind the underpinnings and nature of the offerings of the two bid teams to ensure that information obtained in working with one bid team is not inadvertently transferred to the other bidder; and
- potentially have two different solutions in their mind and in tasks they undertake and ensure they do not inadvertently allow knowledge of one bidder's solution to influence interaction with the other.

The Owner's subject expert (and 'crossover resources')

In more 'hard dollar' government tendering processes, the Proponents have their own technical expert to develop and inform their bids and they receive information in written form from the tendering organisation. The Proponent team's technical expert then analyses that written information and by that analysis and skill informs the bid team of the technical requirements then assists in the development of the bid. All these activities are undertaken through the skill and knowledge the Proponent team.

In the alliance model, the provision of Owner resources to work collaboratively with the Proponent is fundamental to achieving the optimal bid outcome. The role of these resources is to work with the bidding team in the development of their bid: to assist them from a technical perspective; to provide the technical sounding board; and provide input to the bidder's project team about the project's technical requirements.

Clarity of role and purpose is a very important probity principle in a tender process, because lack of clarity can lead to misunderstandings by Participants about what is happening in a process.

Whilst probity risks are found in all dual negotiation processes, particular care is required in alliancing because of its collaborative nature. To manage this heightened probity risk, information protocols are put in place to ensure that the processes are not influenced by the other, and that one party's negotiating position is not inadvertently put to the other party. Steps to promote quarantining of information between the two bidder teams include:

- the use of crossover teams rather than one crossover individual, so that the teams can mutually support each other in the maintenance of probity protocols;
- advising the bidder teams of the role and intended processes of each individual in the crossover team;
- briefing the expert on the importance of separation/quarantining of documents and information from the two Proponents (and documenting that briefing);
- administrative processes to aid quarantining of information (different filing cabinets/different coloured paper/having meetings on different but regular days/holding meetings in regular locations with each Proponent, etc); and
- other practices which promote the separation of information and mitigate the probity risks are to have one 'senior' internal expert available to each bidder team, accompanied by two 'junior' experts, one in each bidder team, which juniors get involved in the details and 'day-to-day' provision of subject matter expert advice.

If the above measures (or their like) are put in place¹⁹ in a dual TOC (or partial price) selection process, then the probity risks can be appropriately mitigated.

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¹⁹ And normally the operational practice of these measures is assessed and monitored by a Probity Adviser.

8.5 Conducting an equitable process

As with all competitive processes, the Owner must ensure that it provides all Proponents with the same information to allow them to compete on an equal footing. The Owner should always provide the most robust requirements definition possible (drawn from the Owner's VfM Statement) to assist the Proponents in their response. These requirements should allow opportunity for innovation in the Project Proposal by the Proponent teams.

In both, the full and partial price competition selection process, the Owner and its team actively assists both teams whilst at the same time preserving confidentiality of information between the two teams. When separate Owner's teams are provided to each Proponent (Option 1A), these resources should be of equivalent capability and project knowledge to maintain an equitable level of Owner involvement with both Proponents.

9 Effective Participation in TOC preparation

This Chapter focuses on how to effectively participate in the TOC development process. The role of Owner personnel in the evaluation of competitive proposals is discussed in Chapter 7.

9.1 The quality of the Owner's participation

As a future alliance Participant, the Owner has both the benefit of and an obligation to interact and collaborate with Proponents prior to and during TOC development.

In so doing, the Owner must fulfil its public sector obligations in protecting the public interest by ensuring it has a thorough understanding of the Proponent(s), their Project Proposal(s) and the additional risk an alliance contract can potentially place on the Owner. This thorough understanding is a prerequisite for accepting any Project Proposal and entering a PAA, and as previously discussed in Chapter 7, to ensure this the Owner needs to address the risk of asymmetry of capability.

To participate effectively, the Owner should plan for senior management interaction and staff participation, both during TOC development and project delivery. As covered in Chapter 8, the Owner needs to carefully plan and properly resource its participation and ensure that this is clearly articulated to Proponents.

Mechanisms and procedures will also be required for the transfer of price information to the Owner's Estimator. The Owner should plan and map a progressive Proposal review procedure that reflects the same level and quality of tender review processes undertaken by contractors, including various degrees of examination by senior management as the estimate is developed.

Prior to the TOC development process commencing, the Owner should have signed-off the involvement and process with the evaluation panel. This may include regular, formal or informal exposure of the Proponent teams to the evaluation panel as well as briefings by Owner's team on their observations. This enables an informed assessment of non-price attributes to be made by the evaluation panel.

9.1.1 Capability symmetry—a key public sector risk

Ensuring capability symmetry between Owners and Participants is particularly important during TOC development and the associated negotiations and agreement of the commercial terms with the Preferred Proponent. Whilst it can be a challenge for a public sector Owner to achieve an effective symmetry with Proponents, there are strategies that can be used to mitigate the adverse impacts of asymmetry. The most obvious of these is competition as discussed in Chapter 7.

Owners should be aware of the Proponent's capability in negotiating commercial terms and contracts. The Proponent's parties are adept at surviving in a 'hard dollar' project delivery industry which requires considerable commercial acumen and contracting proficiency that is not always matched by Owners at all levels (who generally come from a significantly different industry/business sector). That is not to say that Owners are any less competent in managing project delivery (as evidenced by the completion of many successful infrastructure projects); however, in alliancing Owners are in effect acting as, and being exposed to the risks, of an infrastructure designer/constructor. Owners should be aware of the potential for asymmetry of capability when negotiating commercial terms, contract conditions and the pricing of TOC components with an experienced infrastructure designer/constructor Proponent.

The Owner should demonstrate in the Business Case, when it recommends alliance contracting, that it has the capability, capacity and processes available to undertake a TOC development process with Proponents and can fully participate throughout the life of the alliance. The Owner should demonstrate that the quality of its resourcing during the

establishment and implementation of the alliance is commercially equivalent to the Proponent's.

9.1.2 Owner contribution of technical capability and capacity

Usually, an Owner seeks a designer/contractor Participant in an alliance because it does not have the relevant skills, industry resources or current expertise to undertake the project. However, there are cases where the Owner has technical knowledge and other skills related to its project that are better than industry and it seeks Proponents to supplement this capability. In these cases, the Owner should address the merits of the alliancing strategy in the Business Case to demonstrate it is the optimal procurement option for the Owner to perform a significant design or construction role in an alliance.

9.1.3 Heightened risk in the non-price selection process

The risk to the public interest is most significant when a non-price selection process is used to appoint the Preferred Proponent, where, in the absence of competition from a second Proponent, the Owner must rely solely on:

- its ability to negotiate favourable commercial and legal terms with a Proponent that is (normally) a leading industry practitioner who has the legitimate objective of optimising shareholder returns: and
- its ability to source up-to-date and leading industry knowledge of market conditions and pricing to formulate benchmarks it can use to assess the offer from a single Proponent.

Non-price selection works well where there is a full symmetry of capability and capacity between the two parties. For example, in the Australian infrastructure construction industry there are a handful of companies that are considered 'Tier One'. When a Tier One company wishes to let a subcontract to another Tier One company, it is reasonable to expect that there will be full symmetry of capability and capacity between the two. In this case, full or partial price competition would not necessarily be required for either contractor to assure its shareholders of the good VfM outcome of its negotiations (although, it is likely there will be some hard negotiation, wrangling and game playing; and it is also likely that the deal does not completely satisfy either party but is acceptable enough to proceed with the work).

When using full competition, to negotiate reasonable commercial terms and a fair TOC, the Owner would only require the capabilities of any competent agency experienced in procuring and delivering capital projects. However, a non-price process requires the Owner to match capability with a leading industry expert when both participating and evaluating the TOC development. When this symmetry is not achieved, there is a heightened risk to the public interest.

9.2 Contributing to the Project Proposal

The Owner remains responsible for the scope for which the alliance is responsible and for ascertaining any risk that the alliance does not take during the iterative TOC development process, through the Functional Specification and other parts of the PAA (refer to Chapter 4 for further details about the Functional Specification). The Owner must be particularly aware of the potential for over-scoping and over-designing in non-price TOC development processes. It is essential that the Owner clarifies that scope changes can only arise from direction from the Owner outside the alliance.

In ensuring that appropriate risks are shared by the alliance, the Owner will inform and participate in the risk management and quantitative analysis processes.

The Owner Participants in the TOC development stage will inform and may contribute to the development of the Project Solution subject to compliance with the selection process requirements and the probity plan. However, the Project design, construction, procurement and management solution is the responsibility of the Proponent until acceptance and then throughout the alliance.

Areas where the Owner can generally add particular value will be, for example, in communicating with other Owner personnel and groups, communication with external

stakeholders and authorities, engineering, supervision, sources of materials, local knowledge, commissioning and in some instances, construction.

As noted in Chapter 4, the development of the Project Solution (and evolution of the alliance scope where appropriate) is an iterative process.

The Owner must ensure that the IP of all Proponents is protected throughout the TOC development process.

9.3 Engagement with Owner stakeholders

Government agencies or departments that deliver capital works often have many departments and/or related entities that affect and are affected by capital works including environmental management, safety management, engineering, quality assurance, maintenance, operations, communications, specialist designer/supplier/installer groups for technologies and also internal authority groups.

The Owner must decide in advance how each of these groups is to be involved in the alliance. The main three alternatives are:

- active participation and risk sharing;
- documentation of requirements through Owner's Functional Requirements or the PAA;
- treatment as external stakeholders with risk taken by the alliance except for any specific risk that is retained by the Owner (not preferred); or
- treatment as a statutory authority.

Having made this decision, the Owner can then determine the appropriate participation of those stakeholders in the TOC development process.

9.4 Provision of Information

The Owner has a particularly important role in giving the Proponent access to all possible information to assist in the development of the best possible Project Solution and TOC and for the Proponents otherwise to put their best foot forward in the Owner's interests. In an alliance environment, such information can not only be made available through formal documents but through the active and iterative participation of the Owner's personnel. The Owner's personnel will have understandings and perspectives of the project which are valuable to the process. In particular, the Owner's personnel will have insights into delivery risks that are shared by the alliance but which may not normally be carried by Designers or Constructors.

9.5 Participation in Costing and Cost Reviews

Owner's team that participates in the TOC development must monitor and understand the structure, elements, assumptions, productivity calculations and rates that are included in the TOC by being actively involved in its development from the start, irrespective of the level of competition. They must participate in an informed manner in all review and approval processes throughout the TOC development phase.

Owner's team should avail themselves of appropriate support and expertise including the OCT, the Owner's Estimator and other advice required to be satisfied that VfM is being achieved and will be achieved through the delivery phase. This is particularly important in the partial and non-competitive processes.

9.6 Use of Owner's Comparative TOC

As outlined above, the Owner will be disadvantaged in evaluating and negotiating a TOC with a Proponent if they do not have an equal and deep understanding of the estimate and the build up behind any TOC on offer. The Owner's Estimator ('OE') is also at a

disadvantage, even with comparable skills to the Proponent, as the OE did not develop the TOC and will not have the same level of knowledge and understanding of the details.

For this reason the Guide introduced the option of an Owner's Comparative TOC (OCT) which is developed by the Owner in parallel with the Proponent in NOP selection processes. This will provide an independent comparison for the Owner during evaluation and provide the OE with a useful tool when analysing the Proponent's TOC.

If a price competitive selection process is not available to the Owner, the Owner may need to use a 'proxy', such as the OCT, with the support the OE, to assess the merit of a Proponent's Proposal. This may be the best option available to the Owner in a non-price process, where demonstrating VfM is more difficult than in a price competitive NOP selection process. Such 'proxy' comparators are not as informative as a second competitive Proposal as they rely predominantly on the Owner 'checking' the single Proponent's Proposal rather than directly comparing it to a second Proposal.

An OCT should highlight the pricing assumptions used by Proponent(s), the TOC build-up and risks. The OCT also provides useful benchmarks for informing the Owner during final negotiations until agreement of the TOC. An OCT will be of less use as a selection tool where a TOC is developed in a full price competition process, although it may provide useful insight into the quality of each Proponent and their Project Solution.

9.7 Owner's Estimator (OE)

The OE supports the Owner in reviewing the estimate build-up in the TOC. The effectiveness of this support will be related to how well the OE capability is matched to the Proponent's capability and the robustness of the estimating procedure to ensure a 'like-for-like' review of the TOC.

The selection of the OE should follow suitable criteria to address the skills mentioned in the Guide.

The Owner should ensure that the OE receives the benefit of gaining an understanding of the TOC components as they are developed during the TOC development process. Preferably, if an OCT is prepared, the Owner should be supported in this by the OE. Accordingly, the OE should be appointed early enough and resourced sufficiently to be able the OE to effectively assist in the preparation of the estimate and fulfil the OE role.

9.7.1 OE role in Price competition selection

In a full or partial price competitive process, the OE will be used mainly to provide advice to the Owner on the relative strengths and weaknesses of each competing TOC. The OE role can be:

- assisting the Owner to identify the true comparative price of each TOC to ensure like with like estimates are being considered;
- reviewing the completed TOC to assess compatibility with the design solution and TOC components;
- checking the scope of work and quantities; and
- checking that the programme and resource plans match the scope and the TOC estimate.

9.7.2 OE role in non-price competition TOC development

In a non-price competition process, the OE must be sufficiently experienced in construction estimation and sufficiently resourced to thoroughly review the NOPs' estimate and to provide realistic feedback to the Owner on the validity of the quantities, rates, prices and risk contingency included in the estimate. The Owner should be prepared to conduct hard commercial and technical negotiations with the NOPs to ensure the final TOC price represents a fair price for the works. This is discussed in more detail in Chapter 10.

This will require the OE to understand the design and delivery methodology and to review quantities, productivities and cost rates being used for each item of work to ensure these reflect current market conditions and best practice. This will require access to the quotations received by the NOPs to conduct the works (in some alliances these competitive quotations may constitute a large proportion of the price to the project). The OE then reviews the risk associated with the project and the allocation made for risk by the NOPs in the TOC to ensure this is consistent with the real project risks.

In this way, the OE effectively plays the role of a price competitor to the Proponent in a non-price selection process. For this reason the appointment of this OE is critical to achieving VfM in a non-price selection process. Owners seeking an exception to conduct this type of process should clearly articulate the appointment and processes associated with the OE position in their Business Case.

In many cases, there will be a difference in professional opinion between the OE and the Proponent about quantities, productivities, rates or risks. In this case, the Owner must consider both arguments presented and make a fair decision in the best interests of the project. In doing so, the Owner may seek additional specialist advice if required.

The Owner must understand that the development of a price for a transaction of the duration and complexity of a major capital works project is imprecise and the TOC offered by the Proponent will inevitably be different from the TOC estimated by the OE. Furthermore, the Owner must understand that there will need to be a negotiation which will conclude after the TOC has been fully developed and offered. This is discussed further in Chapter 10.

9.8 Participation in Management reviews and approvals

Most Proponents will not only have detailed and robust estimating procedures, they will also have detailed, robust and explicit internal review and approval procedures.

Such procedures will have been developed over many years as Proponents' senior management discharge their own responsibilities to the shareholders to prudently manage design and construction risk.

The procedures will vary between Proponents but the common steps that are relevant to the Owner are:

Interim reviews by senior management

This will generally be a lengthy (e.g. one day) review of all aspects of the Proposal (e.g. design, proposed team, client requirements, initial estimate, risk and opportunity, differentiators to competitors). The intent of the Proponents' senior management is to win the tender on acceptable terms and to review the tender at a stage where it is sufficiently developed to warrant a review but not so late that they cannot use their wisdom and experience to positively influence the outcome.

Final review by senior management

This involves a more formal and thorough examination than the interim review. It is likely to be over 2–3 days in the week prior to tender close, possibly involving functional staff from the Proponent's corporate office. The review will culminate in formal (written) approval by the Proponents' senior manager to submit the Final Proposal including the TOC to the Owner.

The Proponents' senior management have responsibilities to their shareholders just as public officials have to the public interest. Given that the Proponent's TOC may be jointly 'owned' by the Owner, Owner's senior managers should, especially in the case of non price competition, attend and participate in the above internal Proponent reviews as allowed by good probity procedures.

However, it is not appropriate that the Proponent attend any OCT reviews because the OCT may be informed by all Proponents and is the Owner's 'reserve price'.

10 Effective evaluation

This Chapter describes key elements that must be addressed to effectively evaluate the offered Project Proposal(s).

10.1 General

Prior to concluding the TOC Development Process, the offered Project Proposal(s) must be properly evaluated by the Owner. The evaluation process should be similar irrespective of whether the process involves full, partial or non-price competition and robust in order that the Owner and the state can demonstrate effectively to all parties, including unsuccessful Participants in the selection process, that due process has been followed.

As noted elsewhere in this Guidance Note, the TOC Development Process affords the Owner an unusually thorough insight into the Proponent's team and the Project Proposal that is produced. Properly evaluated and concluded, this can offer a significant benefit to the Owner and the government.

The evaluation must account for the following:

- Structured observations during any competitive component of the TOC development process.
- TOC development should be intellectually driven to provide the best project solution to meet the Owner's VfM Statement requirements at a fair price to government. The benefits that accrue through this process should be objectively assessed. They may take the form of higher productivity and therefore lower cost or they may produce a superior solution at a higher cost that is consistent with the VfM Statement. The focus of the process and the evaluation at its conclusion is on VfM as articulated in the tender documentation and the selection criteria.
- All relevant government processes must be followed and requirements observed in the evaluation.
- Probity requirements of the selection process must be followed.
- The Owner must formally identify and evaluate any non-conformances with the Owner's VfM Statement.
- The Owner should assess the risk carried by the alliance or retained by the Owner and formally include its risk adjustment in the evaluation.
- Additional benefits, offered relative to those sought under the Owner's VfM Statement must be properly evaluated and accounted for.
- Proper evaluation of all intangible benefits offered, e.g., those that may accrue to the community outside the Owner's VfM Statement must be properly accounted for in the evaluation.

11 Effective negotiation and agreement

This chapter discusses the importance of effectively concluding negotiations in order to ensure consistency with the Owner's VfM Statement and hence the approved Business Case.

11.1 Introduction

Irrespective of the completeness of the TOC development process, after completion of the Project Proposal(s), the evaluation and the selection of a Preferred Proponent, there is likely to be the need for resolution of some issues prior to recommendation to the government for award.

It is essential that the Owner properly concludes these processes prior to recommendation and award, because once award has occurred, the Owner's ability to negotiate is significantly reduced.

11.2 Identifying and resolving issues

After evaluation and the identification of a successful Proponent, it is very likely that the evaluation panel will have identified issues such as:

- conformance adjustments to the solution;
- conformance issues in relation to the legal agreement or commercial proposal taking into consideration any (value-adding) agreements given by Proponents the earlier stages of the selection process;
- risk issues that may require or benefit from further clarification, development and resolution; and/or
- additional benefits offered by the Proponent that need to be accepted and added to the PAA's Functional Specification.

Such issues would be expected to be minor at this late stage in a collaborative process of the nature of the TOC development process; however, the Owner must resolve these prior to concluding the process. It is in the interests of the government that competitive tension is maintained until this process has concluded.

In the absence of full competition on all aspects of the Project Proposal, it is to be expected that the issues that remain at the conclusion of the TOC development process will include all those listed above (which also apply to a the full price evaluation), as well as differences of opinion on elements of the TOC.

These issues are all-interrelated. As stated previously, given the complex, long duration nature of well-selected alliancing projects, it is inevitable that such differences will exist, even if they are not caused by the commercial or other competing interests of the parties. In particular, the limits of accuracy of the TOC calculation are such that there is no single, correct, deterministic cost figure. It is important in this context that public officials understand that the TOC becomes an 'offer' at this point in the process.

The Owner will understand that all parts of the Project Proposal are interrelated and that resolution of an issue in relation to any part of the Project Proposal may affect other parts. The process should not be concluded until the offer is consistent with the Owner's VfM Statement and hence the approved Business Case.

Any departure from the offer accepted during competition must be properly justified and would generally be unacceptable.

The Owner must be prepared to conduct hard commercial and technical negotiations with the Proponent at this stage. In so doing, the Owner must understand that:

- i. It is in the interests of the NOPs for the TOC and the alliance scope to be higher and larger respectively than is likely to be optimal for the Owner.
- ii. If a TOC is accepted without such hard negotiations, even if it is consistent with the VfM Statement, it is probable that the TOC is conservative and that it does not therefore comply with the definition of the TOC (as the expected cost at completion).

Public officers cannot delegate this responsibility to the Preferred Proponent or to any third party.

11.3 Rejecting the TOC(s) if necessary

The Owner must make clear to Proponents that it will not accept any Project Proposal if it is not considered to represent VfM or does not meet the requirements of the Owner's VfM Statement or otherwise the tender selection criteria, and be prepared to do so.

Whilst TOC development processes often develop solutions that the Owner considers will deliver superior VfM to that contemplated in the Owner's VfM Statement, changes that materially depart from the approved Business Case will require approval by the government prior to acceptance (see Chapter 12).

12 Business Case Alignment Report (BCAR)

This chapter outlines the use of a Business Case Alignment Report (BCAR) to demonstrate to government that the tender outcome is aligned with the Owner's VfM Statement, and hence the approved Business Case.

12.1 Government approval and PAA award

One of the major project milestone and approval requirements for alliance projects, as articulated in the Policy, ²⁰ is for the Owner to seek endorsement from the relevant Minister and approval from the Treasurer to execute the Project Alliance Agreement with the Preferred Proponent. The Owner, as part of its submission to government seeking that approval, is required to produce a report which demonstrates that the tender outcome is aligned with the requirements and objectives set out in the approved Business Case and the Owner's VfM Statement (which should also be aligned with the approved Business Case) at a fair cost, and that the process undertaken to come to this conclusion is consistent with the alliancing policy intent and guidelines. This Guidance Note proposes that this report be in the form of a Business Case Alignment Report (BCAR). The BCAR also reports on the negotiated Commercial Framework and the proposed PAA for execution.

As the key document supporting the decision to enter into an alliance contract, the BCAR should be impartial of the procuring processes and should be developed by the Owner. The report should reconcile the Project scope, service level and Project TOC with the corresponding items in the Business Case. Areas of significant variance must be explained in terms of changes relating to performance, innovation, risk profile or other.

The Business Case budget cost estimate for an alliance delivery method usually comprises:

- the TOC—Target Outturn Cost for the alliance;
- the Owner's estimated costs arising from the legal and commercial arrangements of the alliance (e.g. PAA); and
- the Owner's costs arising outside the alliance's responsibility and the PAA but are associated and are critical for the delivery of the alliance project

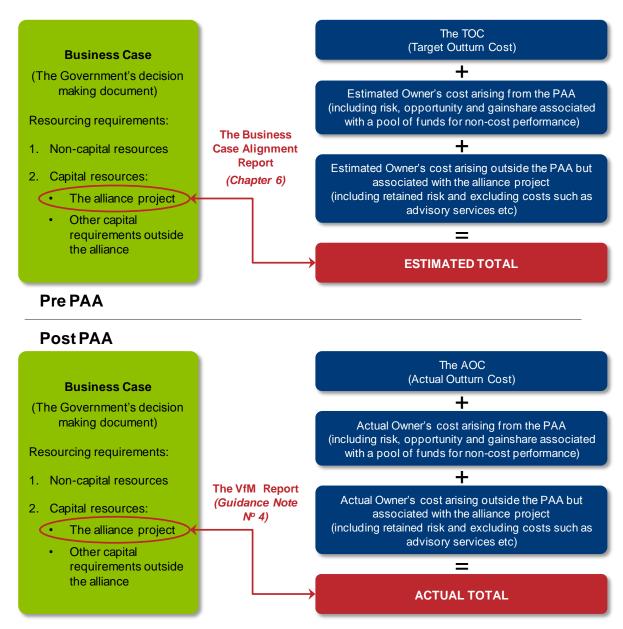
It is therefore necessary in the BCAR to include and reconcile all the estimated costs pre-PAA and outside the PAA but are associated with the alliance project that are required to deliver the objectives in the Business Case and not just those that the alliance itself will be responsible. It is also important for the Owner to be aware of any cost shifting between the TOC and those costs outside the TOC and understand the impact of these in terms of risk sharing.

The BCAR is prepared before the PAA is executed, whilst the VfM Report (see Guidance Note N° 4) is prepared post-PAA, once the project is final, as illustrated below.

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²⁰ The implementation of this requirement may vary from jurisdiction to jurisdiction.

Figure 24: Relationship of Business Case to estimated and actual alliance costs



Appendix C is a template of the recommended components for the BCAR.

12.2 Demonstrating VfM in the BCAR

To demonstrate VfM, it is necessary to demonstrate that the tender outcome genuinely represents best-in-market pricing for delivering the approved Business Case requirements and objectives through a best-in-market project solution.

It is generally not enough to compare a single Proposal with the Business Case as the Business Case is the Owner's estimate for investment decision making, but may not reflect a best-in-market outcome. Moreover, the Business Case budget may have a high degree of uncertainty and low/medium accuracy reflecting the degree of information and expertise used without the benefit of the TOC development phase.

A competitive NOP selection process provides market-based benchmarks by which performance and abilities can be gauged. In this sense, the competitive process involves a simpler task in the BCAR of demonstrating a VfM tender outcome compared to a non-price competitive process.

12.3 Approval for material changes from the Business Case

Government is interested in understanding the outcome of the selection process and its alignment to the approved Business Case, including achieving the investment in community services benefits. Whilst TOC development processes often develop project solutions that the Owner considers will deliver superior VfM to that contemplated in the Owner's VfM Statement, changes that materially depart from the approved Business Case will require approval by the government to ensure alignment with the investment rationale in the Business Case.

Government approval of a Business Case is also in terms of the estimated capital works budget. The BCAR will need to address any departures from those estimates, and if the departures are significant, to provide options for addressing these, including cancelling the project delivery.

12.4 Rejecting the Project Proposals if necessary

The Owner must remain prepared to not accept any Project Proposal if none satisfy the tender selection criteria and/or the objectives and requirements of the Business Case and the Owner's VfM Statement.

13 Cost management obligations under the PAA

This Chapter introduces the concepts of cost management required during the delivery phase. Owners will understand that their obligations and accountability for the expenditure of funds by an alliance are far more onerous than is the case under a traditional risk allocation contract.

13.1 Owner Participation in Alliance Cost Management post PAA

The Guide outlines the importance of Owner participation in project delivery and highlights its obligation to hold the project accountable with good governance arrangements and supporting practices.

In the context of the expenditure of public funds, the alliance has a particular obligation to ensure they are expended prudently, properly and wisely including addressing public accountability scrutiny and issues that may arise for the Owner.

Owners should strive to have a deep knowledge and understanding of cost management and procurement practices used by the NOPs and how they may impact on Owner's obligations under government procurement standards. Due to the transparent nature of cost reimbursement in alliance project delivery, Owners should seek to provide the alliance with a commercial manager who understands public sector standards of expenditure. Two specific areas for the attention of the Commercial Manager are:

- · managing the supply chain; and
- guardianship of public funds.

Managing the supply chain

The Owner Participants should ensure that they are aware of the various options available to alliance teams to select procurement and delivery processes for the project and the implications these decisions have for the TOC and more importantly the ongoing management of the project to completion.

There are numerous matters affected by options available to the construction market that require careful consideration by the Owner.

Procurement options, e.g., hire or buy

The estimated cost to install bridge beams with a crane will be different between the two strategies of (a) hiring a crane on an as needs basis, where it arrives with an operator and is supported by the hire company that owns it, versus (b) buying the crane for the exclusive use of the alliance where the responsibilities of ownership are the Participant's responsibility (i.e. servicing, maintenance fuelling, mobilisation, etc). In the latter case, these issues have to be funded and costed in the TOC if the decision is made during the TOC development phase. The Proponent will have the necessary skills to assess whether buying the crane and incurring the costs of ownership and operation is better Value-for-Money than renting the unit where it is presumed these costs are amortised in the hire rate supplied by the company that owns it.

This decision can be made upon assessment of many issues including; the market status for hired units at the project site, the required utilisation of cranes over the life of the project, the value afforded to security of ownership, and the total resultant cost of either option.

Sometimes, an alliance makes a decision to buy because of the security afforded by owning the plant, or because a technical issue demands a certain item of plant is required that is not readily available for hire.

Generally, the more common items of plant are hired as this is most cost effective. Owners should be wary of recommendations by Proponents to buy plant that is readily available for hire on the market and local to the project. Usually this recommendation is supported by a high utilisation rate, e.g., many beams to erect over a long period of time.

On the other hand, there will be many valid cases where the Proponents will recommend purchase of plant or equipment during TOC development and therefore use quoted or estimated costs for all aspects of ownership in the TOC.

This should include a consideration of what happens to the unit upon completion of its work. If it is to be sold, then a pre-estimate of the salvage value needs to be included in the TOC as a negative cost. If this is agreed, then it is reasonable for the actual proceeds to be shared between the alliance Participants, including the Owner, and all parties share in the pain or gain of the sale price versus the estimated salvage value.

If no consideration is given for salvage then the risk of salvage is not shared and any proceeds belong to the Owner who paid for the item in the first place.

This example is one of many issues raised during TOC development that have a material effect on the TOC and the management of the alliance during delivery. Other issues include but are not limited to:

- self-perform work (direct controlled labour) vs subcontract (specialist companies);
- internal plant hire (owned by a Participant) vs external plant hire;
- hire plant vs buy plant then salvage (benefits vs costs of ownership);
- · direct labour vs labour hire; and
- · market competition vs sole sourcing supply.

Guardianship of Public Funds

Unlike traditional delivery methods (hard dollar), alliances (cost-reimbursable) involve the expenditure of funds in a public and transparent way. In this situation, Owners should ensure that spending by the alliance is aligned with acceptable public sector standards.

As a guide, the following examples (which are taken from actual alliances) would be considered inappropriate expenditure:

- reimbursement of fees for postgraduate university study to members of the alliance;
- Christmas parties for staff, workers and their partners that exceed government department standards;
- 'excessive' prizes (such as boats and cars) to alliance personnel for contributing innovative ideas; and
- expenses for travel, accommodation and dining/entertainment that exceed public sector standards.

Appendix A: Generic Cost Estimating Checklist

	Estimate is escalated to year of expenditure dollars for each elements of the project.
	Process includes risk-based assessments of unknown and all uncertain costs.
	Estimate is well documented.
	Estimate has been independently validated.
	Estimate is consistent with project scope.
	Estimate includes all initial preliminary engineering costs and final design costs.
	Estimate includes all land access costs (excluding land acquisition).
	Estimate includes all third party (e.g. utility, railway) costs.
	Estimate includes all traffic management costs.
	Estimate includes all construction costs.
	Estimate includes construction contingencies.
	Estimate includes site indirects.
	Estimate includes community consultation cost (excluding compensation)
	Estimate includes a management contingency.
	For projects under design, estimates include a design contingency at each stage of design.
Other	items may be added depending on the project's characteristics.

Appendix B: Case Study—Full Price

This case study was prepared by Alchimie Pty Ltd of East Melbourne, Victoria and their contribution, and that of their client and project partners, to this Guidance Note is gratefully acknowledged.

Explanatory note to the Case Study:

This case study is presented as an illustration of certain past project practices, in this case before the publication of the National Alliance Contracting Policy and Guidelines, and in a jurisdiction outside the ambit of this policy and guidelines.

This case study includes views and commentary from Owner and NOP perspectives without any attempt to ensure consistency. By including any case study in the Guidance Note, the Commonwealth Department of Infrastructure and Regional Development does not assert the success or otherwise of the case study project, or that every aspect of the project was exemplary. The matters presented here were selected to provide a good practice example of the issues dealt with in the Guidance Note.

The Manukau Harbour Crossing Project Auckland, New Zealand

With the vital target of opening ahead of the Rugby World Cup 2011, New Zealand Transport Agency (NZTA) issued an RFP on 20th March 2007 instigating the Manukau Harbour Crossing Project (MHX). This project duplicated the existing Manukau Harbour Bridge and upgraded the adjoining motorway sections and its interchanges. The works form a critical link in Auckland's Western Ring Route – identified as one of seven Roads of National Significance.

The new \$230 million duplicate bridge, together with the existing bridge completed in 1983, now provides 10 lanes of traffic directly over the Manukau Harbour - four lanes of general traffic in each direction, plus two bus shoulder lanes. Some 80,000 motorists use the route daily, with travel time reductions of up to 20 minutes in each direction between the airport and the city during peak times. The resulting efficiencies and access to the airport are expected to provide a strong boost to the economy, both regionally and nationally.

The key challenges for the MHX project were:

- Geotechnical piles founded on weak sandstone and with 60m depth of very soft soils in the Hopua Crater
- Traffic management maintaining existing traffic flows while constructing additional bridges and traffic lanes, and revising interchange layouts
- Environmental and community environmental concerns arising from working on the harbour, and in particular the Onehunga foreshore
- Consenting (ie regulatory and planning approvals) risk impact on designation and resource consents and therefore on start and completion dates. There was significant resistance from the Onehunga community (The Onehunga Enhancement Society, 'TOES') around the encroachment of the Gloucester Park interchange into the harbour.

The Project was delivered by an alliance comprising NZTA²¹, Fletcher Construction, Beca Infrastructure and Higgins Contractors.

Justification for chosen selection process

The project's scale, risks, stakeholder interest and focus on non-cost success factors (including time) were the reasons an alliance delivery approach was chosen.

A dual TOC selection process was adopted because, in the view of NZTA, this offered the greatest likelihood of maximising and demonstrating Value for Money.

This project was the first time NZTA utilised the dual TOC selection process.

Level of documentation provided by the Owner

In addition to the RFP, documents provided to the Proponents included:

- Draft IPAA²² (and draft PAA later in the TOC phase)
- Set of draft KRAs (without KPIs and without a developed Performance Framework)
- Outline programme for TOC Development Phase²³
- Incomplete Specimen Design ("reference design")
- NZTA's estimate of project cost
- Outcomes of investigations and road safety audits relating to the Specimen Design
- Details of the methodology that the Evaluation Panel would use for evaluating Final Proposals

The information provided to proponents resulted in two conforming and satisfactory Project Proposals at the end of the TOC Development Phase.

Owner's resources utilised during the selection process and capabilities

The overall approach during the TOC Development Phase was to provide a single core team ("NZTA Support Personnel") to attend the interactive workshops and collaborate with both proponents. In addition, a single NZTA employee ("NZTA Nominee") was provided for each proponent, and embedded in that team, to act as an interface. The resources (internal and external) provided by NZTA included:

- <u>NZTA Support Personnel</u> attended interactive sessions during the TOC Development Phase, as appropriate to the programme of interactive sessions that the proponents requested (and also outside these sessions through defined communication channels).
- <u>NZTA Nominees</u> for each proponent, one person from NZTA was nominated to be embedded and work full time within their teams during the TOC Development Phase as they developed their proposals. This person provided the link between the proponent team and NZTA during the TOC Development Phase.

²¹ NZTA was formed in 2008 from two entities, Land Transport New Zealand and Transit New Zealand. Transit New Zealand had initiated the project.

²² The Interim Project Alliance Agreement (IPAA) serving as the formal legal agreement documenting the rights and obligations of NZTA and the Proponents during the Development Phase of the procurement process. It is equivalent to an Alliance Development Agreement. The PAA (Project Alliance Agreement) covers the delivery phase, superseding the IPAA.

²³ The term "TOC Development Phase" is used interchangeably with "Development Phase" in this case study.

- Interim Project Alliance Board members two senior NZTA personnel. An interim
 Project Alliance Board (the PAB, equivalent to the ALT) was formed for each of the
 proponents during the TOC Development Phase. Each held two meetings.
- <u>Evaluation Panel</u> a panel of four members who also attended each of the interactive workshops.
- <u>Advisors</u> a range of external advisors, covering legal, financial, probity, technical and commercial matters.
- Road Safety Audit Team (external) conducted an audit and assessment of each proponent's concept design during the TOC Development Phase.
- NZTA also provided an engineer to assist with risk modelling and conveying an understanding of the KPI messages to the wider team.

For the PAB, NZTA provided senior staff who were able to speak on behalf of NZTA and who provided valuable input during the Development Phase. However, due to their senior level positions within NZTA, they were, from time to time, diverted onto other issues and/or left and had to be replaced. As a result, the time commitment provided by the Owner's PAB nominees did not mirror that of the proponents' PAB nominees and as a result the process didn't fully achieve the expected collaborative interactions and conversations.

By comparison with single TOC processes (whether partial price or non-price), the Dual TOC process was not overly more resource intensive.

The proponents indicated that they experienced difficulties in effectively engaging client staff during the TOC Development Phase. This was accentuated by the very short timeframe for preparing the project proposal. However, during the Delivery Phase these difficulties dissolved.

Structure of the selection process (activities undertaken by the Owner and opportunities for Proponent differentiation)

Selection was a three-stage process:

- EOI phase this four week phase served to register proponents' interest.
- SIA (Statement of Interest and Ability) phase in this two month phase, those
 parties who had completed the EOI stage were invited to provide a response
 addressing their experience and track record, as well as technical and management
 skills. Responses were assessed on non-price criteria. The proponents' affinity for
 working collaboratively was assessed within the above criteria.
- RFP Phase Two proponents selected from the SIA phase were invited to participate in this phase – the TOC Development Phase – culminating in the submission (by each proponent) of a Project Proposal. The RFP was issued in March 2007, with proposals due by July 2007, four months later.

The non-cost attributes (evaluation criteria) used to assess the Project Proposals were:

- Relevant Experience
- Track Record
- Technical Skills
- Resources
- Management Skills
- Methodology

In differentiating the two proponents participating in the TOC Development Phase, the Evaluation Panel used the information provided in the Project Proposals to estimate a "Net TOC". This figure, used for evaluation and comparative purposes only, was calculated by adjusting each of the TOCs (up or down) to reflect the following specific factors:

- A "Supplier Quality Premium" assessed against parameters stated in the RFP. The
 process as currently used is described in the NZTA's procurement manual
 (available at <<u>www.nzta.govt.nz</u>>) and provides a mechanism for considering noncost criteria.
- A Target Completion Date earlier than the "not to exceed" date specified by NZTA, with the adjustment calculated using an "adjustment amount per week" advised in the RFP.
- The difference in 'value' (whole of life costs, benefits and risks) between the quality of product offered by the proponents. For example, a superior urban design solution could have earned an adjustment of up to NZ\$200,000.
- The difference between the proposals in relation to the risk-adjusted cost associated with performance against KRAs (other than Time, which was covered by the adjustment for Target Completion Date)
- Risks transferred to NZTA, where different from the risk allocations outlined in the draft PAA.

The proponent submitting the proposal assessed as having the lowest "Net TOC" would become the Preferred Proponent.

Through the process described, all elements of the project were developed in the competitive environment except the risks associated with resource consents (eg from Local Councils in respect of land use). NZTA progressed the resource consents independently and advised the outcomes to the proponents, with the understanding that in the event that any differences between the actual conditions and the expected conditions had a significant cost impact, NZTA would consider issuing a variation to amend the TOC.

In terms of whether the dual TOC proved cost-effective, NZTA is convinced that it did. During the TOC development phase, the two shortlisted proponents identified, explored and assessed a range of potential solutions, in the full knowledge that they were effectively in a competition to generate a solution with the lowest "Net TOC".

The primary costs to NZTA – for the dual TOC process compared to a single TOC process – are discussed below (generally without actual figures or percentages, in view of confidentiality and of the material variability that is to be expected between projects):

- (i) the amounts paid to the two shortlisted proponents compared to the amount that would have been paid to a single proponent; NZTA paid both proponents a sum intended to cover 50% of bid costs.
- (ii) offsetting the cost for two establishment audits rather than one, the audit scope was smaller because there was no need to validate margins (which were bid competitively by the proponents).
- (iii) whereas an independent estimator is generally considered essential for a single TOC process (to ensure the estimates are founded on realistic costs and rates), such a role is unnecessary in a dual TOC process due to the competitive pressure. However, such savings were somewhat negated by the need to engage an independent estimator to work with NZTA in the "target adjustment" process used to compare the Project Proposals.
- (iv) legal costs were marginally higher, due to the need for refining two IPAAs and two draft PAAs, but not by a large amount (noting that the interests of probity, the two IPAA documents would be unlikely to differ materially).
- (v) Owner Team personnel time/costs were significantly higher in comparison with what would be expected under a single TOC process, though not double. However, the

- difficulty in making available the appropriate skillsets for the duration required should not be under-estimated.
- (vi) the costs for probity advisers were higher than for a single TOC process, since the effective duration of the selection process (the primary period of demand for probity resources) was far longer than for a single TOC process. (However, this additional cost is minor in the totality of the project establishment costs.)

Overall, improvements and cost reductions incorporated in the winning proposal, when compared to NZTA's Specimen Design (the reference design, albeit incomplete), indicated increased value for money which more than compensated for the additional costs of the dual TOC process. For example, whereas the reference design contemplated a significant cost for landfill charges, the winning proponent devised a solution which extensively recycled waste from the existing highway. Similarly, innovative pile-cutting equipment developed for the project achieved productivity rates that had not been anticipated in the reference design.

Matters deferred until after the selection process

A key matter negotiated after selection of the Preferred Proponent was the KRA Performance Regime. NZTA had identified their critical result areas in the RFP, and required the proponents to put forward a performance regime in their Project Proposals. The proposed performance regimes were to be based on the owner-stated KRAs and would be considered in the evaluation process. Note that the size of the performance pool was small (as a percentage of TOC) in comparison with what may be regarded as usual; its size was fixed in the RFP and not open for negotiation.

The KPI measures proposed by the Preferred Proponent were revised and agreed through negotiation. The resulting measures provided the opportunity for the alliance to strive for (and be rewarded for) certain additional benefits not previously identified (such as the earlier opening of some peak hour traffic lanes). The NOPs liked this approach because it allowed KPIs to be simple, practical and meaningful; capable of being driven down through the whole team, not just the management team. However, the approach ensured the Owner retained their "final say".

KRA Performance Regime

The Guidance Note recommends that the Owner develop the KRAs and the KPIs as part of the Commercial Framework prior to engaging the market and finalise such negotiations during the competitive process. This ensures that the KRA Performance Regime actually drives the behaviours and outcomes that the Owner requires.

Activities undertaken by the Owner to review and compare proponents' offerings

The formula-driven approach to arriving at a 'Net TOC' included adjustments for the very factors that – in the opinion of NZTA – define value. The lower of the two Net TOCs would therefore, by definition, represent the maximum prospective value for money.

The estimate for the 'specimen design' prepared by the NZTA served as a comparative TOC, providing information from which to verify VfM. The estimate proved helpful to the proponents as a cross-check, and in NZTA's opinion did not influence the proponents' development of the TOC.

NZTA did not engage an Estimator for the selection process, relying instead on the competitive forces of the process.

Reimbursement of proponent costs

NZTA estimated the cost for a proponent to participate in the TOC Development Phase, and offered each proponent 50% of this figure. The sums paid to the two proponents totalled approximately 0.5% of the NZTA's cost estimate based on the specimen design.

In making the above payment for the proponents' proposals, the NZTA acquired the intellectual property (IP) and was free to pass the unsuccessful proponent's IP on to the alliance. In practice, the alliance used none of the IP purchased from the losing team.

Interaction between the Owner and the Proponents

The RFP invited Proponents to submit (for approval by the Evaluation Panel) a programme identifying the interactive workshops they would find necessary during the TOC Development Phase in addition to an "inception" session and two other NZTA-specified sessions. The inception session was a full day session whilst the others ran for half a day each. The Proponents set the agenda for the interactive workshops and nominated those of the NZTA Support Personnel whose participation would be most helpful. They also ran the workshops.

The interactive workshops covered relationships, risk management, value engineering and technical issues. The Evaluation Panel used these workshops to observe the performance of each Proponent's key personnel and to assess their suitability for participating in the alliance.

Owner's perspective

From the Owner's perspective, the structured process worked efficiently, in the sense that it was helpful in enabling the proponents to obtain a better understanding of what NZTA wanted, keeping the proponents on track and not exploring avenues that could be easily ruled out.

During the selection process each proponent demonstrated collaborative relationships and innovative thinking, appreciating that this was an important area in which they could differentiate themselves from the other proponent.

NOPs' perspective

The NOPs felt that although the content and timing of the interactive workshops were up to the proponent, the NZTA advisors still wanted to exercise a degree of control over content and attendance, particularly in the early part of the TOC Development Phase. This was perhaps to gain assurance that the NOPs "knew what they were doing" and that value was being generated. Later in the TOC Development Phase, once the interactive process had bedded down, this control was perceived to relax.

The defined communication channels used during the TOC Development Phase allowed the proponents to reasonably correspond openly with NZTA on key issues during this period in a relatively collaborative manner. However, further improvements could have been achieved if:

- there was further clarity on probity requirements;
- NZTA applied sufficient and capable resources to the project during the Development Phase; and
- more time was allocated for the preparation of Project proposals during the Development Phase.

The proponents trusted NZTA's judgement to maintain appropriate confidentiality. Proponents were able to have "commercial in confidence" discussions on issues they raised, as well as on a key issue (accepting the risks of the statutory consents) that was raised by NZTA during the TOC Development Phase.

In terms of effectiveness, the interactive process achieved clarity of scope and a good understanding of risks.

Innovations

The interactive workshops process led to some innovations through the proponents' challenging of a NZTA perspective. It led, for example, to a revision in NZTA standards where a proponent demonstrated that there had been inconsistency in its application.

Whilst numerous innovations were adopted, some innovations that were proposed during the Development Phase could have been progressed further and potentially been included in the TOC if the NZTA personnel were more experienced and the RFP provided better clarity on how these could have been evaluated in terms of the potential value that could be expected.

During the Delivery Phase a number of innovative solutions were identified and adopted that increased the TOC but had a VFM benefit that appealed to the Owner.

Innovations

The Guidance Note recommends that the Owner uses effective resources and structures during the selection process to incentivise the bidders to bring forward potential innovations or opportunities prior to finalisation of the TOC to optimise VfM.

Early Works

No early works were undertaken prior to the execution of the PAA.

On the other hand, due to the excellent relationship established by the Alliance with the two local authorities, a 'soft start' of preparation works was allowed before various (local authority) designations, outline plans and resource consents' had been signed and issued for the construction work.

The Alliance's achievements

Opening the new bridge ahead of the Rugby World Cup 2011 was a key target, and one by which the success of the project would be judged. In this regard, opening some 7 months ahead of target was an exceptional achievement.

Some benefits were delivered early, including the opening of one strategically identified lane some months ahead of the rest of the project that provided early relief to traffic congestion. The Alliance was also completed under budget. With construction waste being a huge contributor to New Zealand's increasingly stretched landfill resources, another important outcome was the alliance's recycling of 2600m³ of red chip barrier material from the existing highway.

The Manukau Harbour Crossing Alliance has won several awards, including:

2009

- Certificate of Merit, New Zealand Contractors' Federation (Auckland branch) Environmental Awards
- Overall winner, AB Equipment Trophy, New Zealand Contractors' Federation (Auckland branch) Safety Awards and winner for the Projects over \$10m section
- Landscaping Award, New Zealand Concrete Society (for the sculpted rock wall on the Walmslev Road motorway off-ramp)

2010

- 2010 Winner of the Alliancing Team of Excellence Award at the Alliancing Association of Australasia (AAA) Excellence Awards.
- Merit in the HR Institute of New Zealand (Auckland) 2009 awards for a team building exercise to capture ideas from all members of the team
- The Fletchers 2009 "Bloody Good Idea" award for development of a new pile cutting machine

Further awards were achieved by sub-contractors. For example, in the 2010 NZ Ready Mixed Concrete Association Awards, the Technical Excellence Award was won by Firth Industries - who provided technically sophisticated concrete solutions to the project.

Appendix C: BCAR Template

Note to Owners completing the BCAR:

The purpose of the BCAR is to:

 demonstrate to government that the tender outcome is aligned with the requirements and objectives set out in the approved Business Case and the Owner's VfM Statement at a fair cost.

This template is provided to assist Owners with the drafting process. It can be expected that the Owner will make modifications and additions to this template to cater for the individual characteristics of the Project.

Sign off

<place before Executive Summary>

The author(s), their manager, and/or responsible departmental officer to sign off

Proposed	Contact Details:
Author	
Name:	E-mail:
Signature:	Phone:
Position:	
	Date:
Supported	Contact Details:
Senior Responsible Officer	
Name:	E-mail:
Signature:	Phone:
Position:	
	Date:

This report has been prepared in accordance with Guidance Note No 5. The report reconciles the Project scope, service level and Project TOC with the corresponding items in the Business Case and the Owner's VFM Statement. Furthermore, it explains areas of significant variance in terms of improved performance, innovation, changes to the risk profile or other changes.

Enquiries regarding the report are to be directed to:

<INSERT>

1. EXECUTIVE SUMMARY

- Provide a summary of whether the Project Proposal submitted by the Preferred Proponent will achieve the objectives set out in the Business Case, specifically:
 - the Business Case project capital objectives;
 - the Owner's functional/performance requirements and specifications as set out in the Owner's VfM Statement;
 - government policy objectives;
 - risks identified in the Business Case;
 - the alliance structure in terms of commercial and legal arrangements;

- the Business Case budget allowance for the alliance i.e. the best price for the right scope; and
- confirmation that the best acceptable Proposal complies with government objectives and approvals.

2. BACKGROUND

Description of activities to date.

3. BUSINESS CASE CAPITAL/PROJECT CAPITAL OBJECTIVES

This section should address the following:

- Provide a brief description of the capital objectives ('capital solution') as set out in the Business Case.
- Provide a description of the 'Problem', 'Benefits' and 'Solutions' proposed in the Business Case
- Explain how the preferred tender Proposal will achieve the 'Benefits' and 'Solutions' proposed in the Business Case.
- Identify any key changes in relation to the 'Benefits' and 'Solutions' in the Business Case with the preferred tender Proposal.
- Identify the cost impact of the changes to the 'Benefits' and 'Solutions' with the preferred tender Proposal.

The analysis can be summarised as per this table:

Element of Scope of Work in Business Case	Element of Scope of Works in TOC	Reasons for change and how change could be managed	Cost impact of change (operational and/or capital expenditure)	Approved by Owner (Y/N)

4. OWNER'S VfM STATEMENT

This section should address the following:

- Provide confirmation the VFM Statement provided to the Proponents is aligned with the approved Business Case. If not, what are the differences and what is the impact of these?
- Are there any changes between the tender Proposal and the Owner's VfM Statement?
- The cost impact of changes to the Owner's functional/performance requirements and specifications. Explain how do these represent VfM to the Owner?

The analysis can be summarised as per this table:

Requirements/ elements in the Owner's VfM Statement	Element of Scope of Works in TOC	Reasons for change and how change could be managed	Cost impact of change (operational and/or capital expenditure)	Approved by Owner (Y/N)

5. GOVERNMENT POLICY OBJECTIVES AND APPROVALS

This section should address the following:

- Explain how the procurement and tender strategy align with alliancing policy intent and guidelines including probity.
- Explain how the Owner has applied good commercial practices to the selection, development, procurement and implementation of alliance contracts.
- Explain how the preferred Proposal complies with government policy and principles that generally regulate public sector procurement

6. RISK ALLOWANCES

This section should address the following:

- Provide a brief description of the risks identified in the Business Case and identify any differences with the risks accounted in the Project Proposal.
- Provide a description of the proposed risk sharing arrangements between the Owner and the proposed alliance.
- Identify any project-related expenditure to cover risks that was not included as part of the
- Confirm whether appropriate resources and capabilities are in place for the Owner and the Proponent during the development and establishment of the alliance as well as during the delivery of the project.

7. COMMERCIAL AND LEGAL ARRANGEMENTS

This section should address the following:

- Report on the negotiated Commercial Framework including the NOPs fee and Risk or Reward Regime.
- Report on the legal framework proposed for execution
- Explain how the negotiated commercial and legal arrangements is designed to suit the project's risk and cost profile.

8. ACHIEVING THE RIGHT TOC

This section should address the following:

Selection and TOC development process

Provide a description of the processes the Owner has undertaken to validate that the
outcomes and the Project Proposal (including the TOC) developed represent VfM, i.e.,
Owner's comparative TOC, Owner's Estimator to compare the Proponent's Proposal,
competitive selection process, etc.

How did the TOC development achieve the 'right price' for the 'right scope'?

Innovations

• Report on identified innovations/opportunities of solution options in physical materials, resources and delivery has impacted the price

TOC

- Provide a brief description on the alignment of the total cost of the alliance project, advised in the Business Case, against the final TOC and other actual or forecasted Owner's costs which form part of the capital project.
- Provide reasons for any discrepancy between the Business Case estimate and the alliance TOC estimate.
- Provide a brief description of the Owner's costs outside the alliance.
- Identify any costs shifting between the TOC and those costs outside the TOC.
- Provide a description of the underpinning pricing assumptions used by the Proponents to develop the TOC and how these compare with the assumptions used in the Business Case.
- Provide a description of any constraints or conditions impacting the TOC, i.e., market conditions, tight timeframes for completion, type and complexity of the Project, resources constraints, quality of information etc.

A capital project cost summary reconciliation should be provided in a tabular form as follows, with additional information should be provided outside the table as required.

Project Capital Cost Alignment

Cost Structure Item	Business Case Budget Cost Estimate	Alliance TOC Estimate	Current Cost Estimate	Difference	Reasons for Difference
Direct Costs					
Indirect Costs					
Base Estimate					
Contingency (risks)					
NOPs Fee					
Escalation					
Alliance Costs					
Alliance gainshare					
Alliance performance pool					
Other					
Owner's Alliance Costs arising from the PAA					
	T				
Land acquisition					
Planning					
Consultants					
Other capital costs outside the PAA but associated with the alliance project					
Owner's Capital Costs (outside PAA but associated with the Alliance project)					

Notes:

- 1. If there has been more than one approval of the Business Case and/or the TOC originally approved for the project, provide details of all approved versions/revisions of the Business Case and/or the TOC.
- 2. All costs are to be reported in nominal dollars.

Appendix D: Acronyms

AOC Actual Outturn Cost, on completion of the project

BCAR Business Case Alignment Report

D&C Design and Construct

DTF Department of Treasury and Finance, Victoria

ECI Early Constructor Involvement

EOI Expression of Interest

OE Owner's Estimator

KPI Key Performance Indicator

KRA Key Result Area

MCOS Minimum Conditions of Satisfaction

NOP Non Owner Participant

OCT Owner's Comparative TOC

OP Owner's Participant

OR Owner's Representative

PAA Project Alliance Agreement, at the beginning of the alliance

TOC Target Outturn Cost, estimated by the alliance

VfM Value-for-Money

(as specified in the Owner's VfM Statement associated with the Owner's Business Case)

WBS Work Breakdown Structure