

PROCUREMENT AND RISK MANAGEMENT

Case Study

MANAGING THE STATE'S RISK

Max Smith

Deputy Director General Works, Queensland Department of Public Works
max.smith@publicworks.qld.gov.au

ABSTRACT

As the Queensland Government's principal adviser on building matters and procurer of State buildings accounting for expenditure exceeding \$1 billion annually, the Department of Public Works has had, by necessity, to develop effective ways of managing the risks inherent in these activities.

While some jurisdictions have legislation for this purpose, the Queensland Government uses policy as the primary vehicle to facilitate the management of its procurement responsibilities, both generally and with respect to building procurement in particular.

This paper details the public sector-wide policy mechanisms administered by the Department of Public Works in Queensland to manage the State's risks in procuring and managing its government buildings.

Among other things, it touches on the procurement objectives of the State Purchasing Policy and how these are translated in the areas of building procurement and management. The paper provides an overview of the key features of the State's Capital Works Management Framework, Maintenance Management Framework, Government Office Accommodation Management Framework and other selected project and program management systems, processes, tools and contracts developed and administered by the Department of Public Works.

The major risk factors associated with building procurement relate to timely delivery of projects; keeping costs within budgets; providing built assets that meet the service delivery requirements of our agency clients; and meeting the Government's requirements to facilitate a competitive and sustainable supply market.

The key strategies being used to manage those risks include: a policy framework to facilitate a consistent approach to building procurement across the public sector; market analysis and industry consultation, relationship based contracts with risk/reward sharing, documented procurement strategies for high risk and significant projects; early involvement of contractors and specialist subcontractors; use of project reviews to support continuous improvement; and use of ICT applications to enhance risk assessment and management.

Keywords: Procurement, Risk, Queensland, Public works

1.0 INTRODUCTION

The paper provides insight to the challenges and responsibilities facing major clients in the construction industry.

Large clients such as the Queensland Department of Public Works have the ability to influence the way that buildings are procured and with this comes a broad responsibility to the community and industry to improve the outcomes of projects for all stakeholders.

Managing the state's risk to achieve the best possible building procurement outcomes for Queensland provides a significant challenge for the Department of Public Works.

2.0 THE QUEENSLAND CONTEXT

The state of Queensland is the second largest of the six Australian states in terms of land area; covering more than 1.7 million square kilometres. Queensland is larger in land area than most countries and is more than three times the size of France.

Queensland has a population of four million people representing 18% of the total population of Australia. Its warm sunny climate attracts both visitors and migrants. Queensland has been the fastest growing state for more than 35 years. This population growth trend places considerable demands on services and infrastructure.

The primary responsibility for the delivery of key services such as health, education, law and order, lies with the state government.

To cope with the demand for government services, the state of Queensland by necessity has had to invest heavily in new buildings and infrastructure.

Capital outlays in the current financial year amount to almost \$8 billion, which represents an increase of 32% over the previous year.

The annual capital works program of the Queensland Government is substantial and forward planning forecasts indicate that such demand will continue for the foreseeable future.

3.0 THE ROLE OF THE QUEENSLAND DEPARTMENT OF PUBLIC WORKS

The Department of Public Works provides building construction procurement services to Queensland Government agencies and also has a broader role in protecting the best interests of the Governments building capital works program through policy and research and development activities.

The Works Division within the Department provides integrated capital works, building asset management planning, maintenance and operational services, built asset policy development and research, and accommodation and related services to the Government and client agencies. The division includes units responsible for managing the Government's office portfolio and employee housing, Government office accommodation management, Building Policy, Built Environment Research and major state projects, as well as two significant commercialised business units, Project Services and QBuild.

Project Services is the Queensland Government's in-house building design and professional services business unit, with over 600 people engaged in the management and delivery of around \$700M annually in public sector building capital works and is a major player in the Queensland building industry.

QBuild is the Queensland Government's building construction, maintenance and facilities management services business unit. QBuild offers a suite of facility management products and services to assist Queensland Government in the management of their building assets at each stage of the asset lifecycle. Their services include 24 hours a day, 7 days a week maintenance support. QBuild has offices and depots throughout Queensland.

Project Services has an annual trading turnover of \$77M in fees. QBuild's annual works and services trading turnover is \$550M.

4.0 POLICY MECHANISMS AND SYSTEMS

4.1 CAPITAL WORKS MANAGEMENT FRAMEWORK (FOR GOVERNMENT BUILDING PROJECTS)

The planning and procurement of Government building projects is governed by a policy framework called the Capital Works Management Framework (CWMF) ¹. Approved by Executive Government in June 1999, the Framework is the Queensland Government's key policy instrument for managing risk in the procurement of government buildings. The Framework covers the initiation, development and implementation of building projects and programs undertaken by the Queensland Government, and applies to all government departments. It comprises a broad policy document supported by guidelines and policy advice notes covering specific aspects.

This policy framework for managing risks in building procurement describes the operating environment and the capital works management process, particularly in terms of regulatory requirements and best practice procedures. More specific requirements relating to each of these areas are addressed in guidelines and practice notes that explain the capital works management process and assist in its application.

The aim of the Capital Works Management Framework is to ensure that there is a whole-of-Government approach to the planning, management and delivery of State Government building projects. A consistent approach not only assists agencies in improving the planning and delivery of projects and industry in terms of consistent, transparent behaviour, but, in the long run, also maximises value for the Government dollar and contributes to more effective service delivery.

Unlike almost all other Australian jurisdictions, the CWMF is a mandatory whole-of-government policy applying to all Queensland Government building projects. It provides unique policy coverage of key risk factors in building procurement.

The Department is currently undertaking a review of the Capital Works Management Framework including an increased focus on issues such as integrated planning, sustainable development, whole-of-life costing, and improvements and innovation in the use of information and communication technology in the management of the Government's capital works program.

4.2 MAINTENANCE MANAGEMENT FRAMEWORK (FOR GOVERNMENT BUILDINGS)

The Maintenance Management Framework (MMF)² is the Queensland Government's key policy instrument for managing risk in the strategic asset management of public buildings. It focuses on managing the maintenance of government buildings, and seeks to provide a consistent approach to the planning, management and reporting of building maintenance from a whole-of-Government perspective. The framework applies to all government departments, and consists of a policy document supported by guidelines and policy advice notes.

Queensland's total portfolio of building assets across Government agencies to whom the Maintenance Management Framework applies is estimated at approximately 70,000 buildings valued at \$15 billion.

The Maintenance Management Framework is being reviewed in parallel to the Capital Works Management Framework and will have an increased focus on issues such as sustainable development, whole-of-life costing, and information and communication technology improvements to the way government manages its built assets. The review will be directed towards updating the Framework to align with legislation and policy developments that have occurred since the framework was established, as well as enhancing the overall value of the policy and supporting guidelines.

As with the CWMF, the Maintenance Management Framework also applies to all Queensland Government agencies as mandatory, whole-of-government policy. It addresses key asset management risk areas, such as:

- specifies minimum government requirements for the management of maintenance;
- facilitates appropriate levels of maintenance of building assets;
- facilitates effective management of risks to government;
- facilitates effective maintenance at agency level;
- facilitates the collection of necessary information for monitoring the maintenance, condition and performance of building assets at a whole-of-government level; and
- facilitates the collection of adequate information at the operational level, for undertaking maintenance including the ability to review policies and strategies, analyse life cycle costs, plan for replacements and upgrades, and improve the efficiency and effectiveness of maintenance.

4.3 PREQUALIFICATION SYSTEM (PQC)

In addition, the Department of Public Works manages a Prequalification (PQC) System for building contractors and consultants. Prequalification applies to prescribed categories of building industry consultants directly commissioned on government building projects and all building industry contractors seeking to undertake government building projects valued at more than \$250,000.

The PQC System supports the Capital Works Management Framework and Maintenance Management Framework by providing a comprehensive central register of prequalified building industry contractors and consultants. The PQC System provides clear and consistent performance requirements and guidelines for the selection of building industry service providers for government building projects.

For building contractors, the PQC System identifies a contractor's compliance with contractual and legislative requirements, capabilities, commitment to continuous improvement and experience against prescribed criteria. Prequalification involves self-assessment against the prequalification criteria relating to experience, systems, people and

business together with statutory and referee checks undertaken by the Department. Successful Applicants are awarded one of four PQC Levels ranging from effective work practices (1) to leading edge practice (4). Projects are similarly risk rated on a scale of 1 to 4. Contractors' capabilities are then matched with the project risk rating.

The financial requirements for contractors to achieve prequalification are stringent and are in addition to those already required to achieve a building licence in the state of Queensland.

For building consultants, the PQC System facilitates the process by which the consultants are assessed against predetermined criteria as a basis for differentiating their capability with respect to particular types of commission associated with government building projects.

The PQC System contains records of registered consultant entities and office details, information on past performance on commissions and the types of commissions each consultant is prequalified to undertake. It also provides a comprehensive assessment of each consultant's capabilities and commitment to continuous improvement against prescribed criteria.

The application for consultant prequalification incorporates a self-assessment component by which each consultant is assigned to one of four PQC levels from 1 to 4 and matched against the risk rating of the proposed commission, complementing the approach used for contractors.

The PQC system applies to all Queensland Government Building Projects.

4.4 STATE PURCHASING POLICY

All government procurement in Queensland is subject to the State Purchasing Policy ³ which aims to ensure that the benefits of Government purchasing are maximised. The Policy has three equally ranking objectives:

- to advance Government priorities;
- to achieve value for money; and
- to ensure probity and accountability for outcomes.

Agencies are required to ensure that competitive local business and industry is given a full, fair and reasonable opportunity to supply the Queensland Government.

Taking advantage of the opportunities that arise to meet the Policy objectives requires agencies to:

- use a wider definition of 'value for money' that includes requirements to consider the contribution of the procurement to advancing State Government priorities;
- plan procurement to achieve the objectives of the Policy;
- understand the nature of their procurement and the key markets from which they buy as a basis for identifying opportunities to advance Government priorities; and
- be accountable for the outcomes of their procurement.

The State Purchasing Policy encourages agencies to maximise the benefits of their purchasing based on an understanding of the nature of what they actually buy. It allows agencies to apply different strategies consistent with the objectives of the Policy to different categories of goods and services. This means that agencies can seek out and capitalise on various opportunities to meet the objectives of the Policy.

4.5 OFFICE ACCOMMODATION MANAGEMENT FRAMEWORK

The Office Accommodation Management Framework (OAMF) ⁴ has been developed by the Department of Public Works (DPW) for the primary purpose of supporting agencies in all aspects of their planning, acquisition, management and utilisation of office accommodation. The OAMF supports the use of best practice methodologies in accommodation management and establishes a structured approach to accommodation planning, space management, fitout, accommodation use and accommodation change.

The Office Accommodation Management Framework applies to all Queensland Government agencies and is based on four operating principles:

1. Agency CEOs are responsible and accountable for their agencies' utilisation of office accommodation and office accommodation services within this Framework;
2. Office accommodation and services are to be provided and utilised on a commercial, market comparable and user-pays basis;
3. Whole-of-Government needs take precedence over single agency's preferences when significant benefits to Government are to be realised or when significant cost savings can be achieved. Accordingly, office accommodation in government-owned buildings must be used in preference to acquiring additional accommodation leased from the private sector; and
4. Agencies are to be represented in office accommodation matters by one authority, the Queensland Department of Public Works, and must not compete in the marketplace. DPW is the managing authority for all government office accommodation (both owned and leased from the private sector) including office accommodation leased between other agencies.

5.0 MARKET CONDITIONS

According to research commissioned by the Department, the immediate short term outlook for the construction industry is one of continued strength in Queensland construction activity.

The extended growth in both residential and non-residential building activity experienced in Queensland has meant construction capacity utilisation rates are still at levels above those required for the stability of construction costs. This has continued to lead to competitive bidding to attract labour; longer working hours affecting productivity and quality; shortages in key building trades causing project delays; and a decline in quality as lower skilled labour is attracted to the industry.

The Queensland Government's procurement of building projects has been noticeably impacted by the high level of construction industry activity over the last 12 - 18 months with a lack of competition for tenders for construction projects.

The current market conditions are characterised by an overheated, inflationary and resource-starved construction industry. This has seen many owners and developers (including government) change their approach to project delivery in an effort to maintain a competitive pool of contractors and suppliers.

The Department of Public Works has recognised three main drivers of change:

1. Market Volatility
 - Contractors sustaining significant losses
 - Contractors demanding more certainty of outcome (less risk taking)
 - Resource shortages
 - Uncertainty in the subcontractor and supplier chains
2. Government's obligation to support a competitive sustainable construction industry
3. The need to deliver a large building works program
 - In competition with its own broader infrastructure program.
 - In competition with significant private sector building and construction activity.

This set of circumstances requires that the Department, on behalf of all Queensland Government agencies, carefully consider these factors when designing and selecting appropriate delivery systems and when interfacing with the industry.

6.0 NEW PROCUREMENT INITIATIVES TO MANAGE RISK

6.1 CONSULTATIONS WITH INDUSTRY

To better understand and adapt to market conditions, the Department of Public Works has increased its consultation with industry. This acknowledges the importance of partnership with industry and demonstrates a desire to better understand the commercial drivers that motivate tendering behaviour.

6.2 RELATIONSHIP ELEMENTS

Department of Public Works has been trialling relationship elements and incentives in building contracts with varying success and is continuing to learn from its experiences. Rather than develop entirely new procurement systems, existing contracts have been adapted or modified to include the relationship elements.

The department remains committed to relationship contracts rather than adversarial contracts and believes that relationship elements and incentive drivers can work and maximise the opportunity for better than 'business as usual' results for all parties.

6.3 PROCUREMENT STRATEGIES AND TENDER EVALUATION PLANS

Under the Capital Works Management Framework, projects identified as high risk and significant require a documented procurement strategy which must be reviewed by the Department of Public Works. The Department's Contracts Committee undertakes this review for each of these projects with the relevant agency and the project manager to ensure that all key risk areas have been addressed and the optimum procurement strategy has been selected. The Contracts Committee is a peer group of departmental officers with considerable experience in project delivery. The committee must be consulted and agree on the choice of building contract and the tender evaluation criteria and weightings.

The Department advocates documenting a tender evaluation plan for all high risk and significant projects. The tender evaluation process should be transparent, fair and equitable

and should involve the finalisation of a comprehensive tender evaluation plan prior to calling tenders.

The evaluation plan is an internal document that lays out the steps in the evaluation process including:

- Full details of the criteria and weightings
- An explanation of the assessment methodology
- Details of the steps in the evaluation process
- Guidance regarding the scoring regime
- Details of what the tenderers are requested to address

6.4 RISK SHARING

Alterations to standard contracts have an increased focus on the sharing of risk and take greater account of the cost of allocating risks to other parties. Current market conditions mean that building contractors can be more selective and choose not to tender on projects where, in their view, the contract allocates too much risk to the builder.

6.5 FINANCIAL INCENTIVES

Various incentive schemes have been considered and will continue to be trialled. These generally work on a painshare/gainshare basis.

6.6 EARLY INVOLVEMENT OF CONTRACTORS AND SPECIALIST SUB-CONTRACTORS

Recent improvements to the managing contractor form of contract now incorporate the early engagement of the head contractor which enables valuable input in planning the delivery of projects.

In some cases, the Government may work with the preferred contractor to develop the scope and budget based on initial documents prior to formal engagement upon agreed terms. This may also involve specialist trade sub-contractors to assist in design.

6.7 DISPUTE RESOLUTION

The Department in recent years has been pursuing new dispute resolution mechanisms that aim to deal with issues before they become disputes, thereby avoiding the need for litigation.

6.8 PERFORMANCE MEASUREMENT

The Department has developed a system for measuring the success of building projects. This system contains performance indicators that measure project outcomes at the end of a project. This provides a mechanism for continuous learning and improvement.

The performance measurement system also includes performance indicators that measure critical success factors to provide an assessment of project health during the delivery phase.

6.9 RISK ASSESSMENT AND MANAGEMENT SYSTEMS (RAMS)

The Department of Public Works has developed two powerful tools for proactive managers to reduce risks, optimise budgets and achieve results.

- RAMS 1 – a tool for operations and facility managers
- RAMS 2 – a tool for project managers

RAMS is an IT application that ensures that risks will be identified and assessed, closely monitored and controlled, ensuring effective management and reduced risk. Further details about the applications are available online at www.projects-services.qld.gov.au ⁵

6.10 OTHER STRATEGIES

Other strategies developed or being developed to improve project outcomes during overheated market conditions include:

- more rigorous reviews during the planning and procurement of high risk and significant projects with the aim of tailoring the delivery system to the market conditions;
- improving documentation and review processes for price escalation allowances so that budgets more adequately reflect unstable market conditions;
- introducing categories of estimates that clarify the basis on which the estimates have been prepared so that stakeholders can use them appropriately;
- redesigning the department's standard forms of contract to take account of the overheated market and rising prices;
- tailoring contracts to suit the particular circumstances of the project with equitable risk sharing with contractors;
- encouraging contractors to work with Government to sustain a competitive tender market;
- releasing quarterly forecasts of building cost escalation to Government departments to increase awareness of current market conditions in the industry; and
- consulting with industry on how they would like to do business with Government in these circumstances and making changes provided the public interest is protected.

7.0 CONCLUSION

Large clients such as the Queensland Department of Public Works have the ability to influence the way that buildings are procured and with this comes a broad responsibility to the community and industry to improve the outcomes of projects for all stakeholders.

This paper has identified the various mechanisms developed or being developed by the Department to manage risks in procuring government buildings. It highlights that the Department is constantly piloting new and/or enhanced ways of managing these risks in order to achieve better value for money outcomes, through policy, research and industry collaboration.

The Department lays no claim to having developed the perfect solution, and doubts that such a solution could exist in the changing environment of the building and construction industry. What is important, however, is its absolute commitment to being proactive and responsive to the procurement environment and working with its stakeholders to find appropriate ways of managing the risks associated with government building procurement.

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