EFFECTING PROJECT GOVERNANCE THROUGH ADOPTING AN ONLINE TENDERING APPROACH

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**Abstract**

Increasingly potential Public Private Partnerships (PPP) partners are entering into and transacting business arrangements that necessitate the acceptance of risks. Technology solutions have the potential of minimizing risks and maximizing rewards. Corporate governance is becoming increasingly important for both Private and Public sector proponents. The difficulty faced by potential partners is the need to establish and maintain communication during various stages of the project lifecycle in accordance with appropriate standards of probity and transparency. Risks exist in establishing the relationship between potential partners and include the sensitivity of communications between proponents and proof as to the form, timing and receipt of information by parties. One alternative may be the adoption of an online tendering system that captures the requests for bid information, proponent responses, meetings and subsequent invitations to potential partners during specific stages. This paper explores the benefits and challenges that have to be addressed when adopting electronic systems.

**Keywords:** Public Private Partnerships, risk management, bidding, requests for proposal, corporate governance, online tendering

1. **Introduction**

Research in the area of Public Private Partnerships has received considerable attention in both research and professional journals over recent years. Examples of this focus include research concentrated on the accounting treatment of Public Private Partnerships (PPP)/Private Finance Initiative (PFI) situations or case study reviews of PPP successes and failures (Froud, 2003). Many of the previous studies have sought to explore the rationale for public private arrangements and the stated desires of governments in embarking on the exercise. Risk and reward sharing mechanisms have received considerably less attention however a body of work is growing in this area (Fone and Young, 2000; Leitch and Motion, 2003). From a practical perspective the issue of risk management and setting the correct level of incentives remains an area that for the next few years many organizations will struggle with as they seek to formulate the most suitable response and model for the specific Public Private situation they may be embarking on.

Electronic commerce has received considerable attention in recent years and a number of books, journals and articles have appeared recounting the development of the phenomenon and the virtues (Schneider, 2002; Turban *et al.*, 2004). The majority of the literature avoids the issue of contracts, tendering and the processes to adopt. Far less has been written on the area of online tendering and often what does exist is marketing white papers prepared by technology vendors that extol the virtues of their product while overlooking the challenges that need to be overcome. There have been notable exceptions that have sought to develop virtual systems (Halaris *et al.*, 2001).

So why implement an online solution? Surely these types of measures are the domain of the public sector only and they don’t have relevance to the private sector. The enactment of the Sarbannes-Oxley Act 2002, House of Representatives after the Enron collapse to cover perceived deficiencies
in Corporate America has raised the need for the adoption of demonstrable measures by the private sector. Industry will increasingly adopt standards in procurement behaviour that will need to be transparent and accountable to both shareholders and regulators. The Sarbannes-Oxley Act also has implications for foreign firms seeking to conduct business with United States firms and there is the likelihood the standards become a de-facto standard for another nations. That being said, there have always been companies and public sector entities that have acted ethically and in the best interests of the community or stakeholders. What is different is the ability to demonstrate the practice and maintenance of the requisite standards.

While the focus of this paper has been directed at PPP, the concepts and recommendations developed within are relevant to any procurement activity being conducted under stringent corporate governance standards. The title could have been alternatively “Using and electronic commerce solution to capture Request for Proposal bids” and this certainly would have been understood by a large number of conference participants. During the course of the paper an attempt has been made to be inclusive of those terms that vary internationally but have been A brief conceptual overview of the traditional approaches adopted in PPP projects is outlined along with the possible project risks that may arise. Alternatives such as the inclusion of electronic solutions are raised and the areas and standards of corporate governance they address are discussed. During a PPP lifecycle the need and level of communication between parties varies. The nature of how this can be conducted electronically is explored. It will be demonstrated how the benefits of adopting an online tendering solution can be gained along with the project challenges in implementing these solutions.

2. What is Online Tendering?

Tendering can be described as the efforts by one entity for the delivery, provision, construction, refurbishment or demolition of goods, services and/or infrastructure through a specified and defined arrangement that creates legal responsibilities and obligations with another entity. The process either seeks the best and most effective offer or compliance to a pre-determined schedule of rates. Tendering usually involves the submission of offers in a physical format at a pre-determined time to a specific location.

Online tendering is used to define the tendering process where that process uses an electronic medium to advertise tender requirements, make available documentation through a download facility along with the ability to upload tender response files to the entity seeking responses. An online format includes the ability to download a tender response and conduct tender evaluations without the need to print the tender documents. Advanced system may also include the ability to create electronic contracts between the parties.
3. Traditional PPP project procurement

Realising and recognising the need for the project

Initial risk analysis & viability evaluations

Obtaining approvals to proceed

Developing initial documentation

Call for Expressions of Interest

Evaluation of submitted information

Decision to shortlist

Best and Final Offers sought

Evaluation of offers

Clarification of offer and information requests

Relationship workshops

Decision submitted for approval

Instrument of Agreement formulated with risks and rewards outlined

Initial discussions with experts and specialists in field

Justification through public sector comparator

Submission of Expressions of Interest

Best and Final Offers furnished

Supplementary information requests

Instrument of Agreement signed between parties

*Figure 1: PPP procurement process*
Project proponents, usually the Government sector, adopt a number of different approaches. There are a number of variations and it is not intended to provide an exhaustive list but rather an indicative outline of possible steps.

For the majority of stages outlined above, an online tendering application can be incorporated into the communication process to record the nature of the offer and the responses received. Databases can capture the documentation forwarded to interested parties, along with any responses offered. The online tendering application can be used to capture the release of addendum or subsequently released information.

4. Online Tender Box Functionality

Current applications in production or test environments must include or have the majority of the following functionality:

- the ability to advertise Requests for Tender/Requests for Proposals/Expression of Information;
- the ability to download Tender documents in a format that meets the tendering entity business and Industry requirements;
- the ability for tenderers to respond online with tender responses in any desired format;
- an ability to handle an open format requirement for drawings, diagrams and specifications as specified in the Request documentation;
- the ability to time lock responses and use Tender Box software ‘keys’;
- the use of encryption technologies to protect tender documents;
- the ability to use the Tender Box to selectively send Requests for Quotes to select suppliers such as those on Preferred Supplier or Panel Arrangements;
- the ability to advise of the issuance of addenda;
- the ability to capture a copy of the Tender files, addenda files and copies of all response documentation;
- an ability to download tender response documents into record database management systems;
- the ability to electronically advertise Public Private Project Expression of Interest for staged responses and then close the first stage and advertise the successful parties to proceed to the next stage of the PPP process;
- the ability to link to Tender evaluation tools;
- the ability to convert data received in XML format into Word, HTML or other formats;
- a response compilation tool that links the requirement document with the tenderers proposal document for online evaluation.
5. Minimum Security Architecture

Figure 2: Possible tender box architecture
Different organizations will have varying requirements for security architecture that any application will be required to traverse (Callaghan, 2002; Willcocks et al., 2002). At a minimum, there is a need for a number of firewalls and the use of proxy servers to direct Internet requests to the internal database. It is important that adequate standards and precautions exist to safeguard the confidentiality and integrity of any files held. The system becomes a virtual probity auditor or verifier of information. This necessitates security that robust network architecture and external security measures, along with a backup strategy for data. Encryption is an important area that requires attention, it also requires double encryption techniques combined with an MD5 hashed ‘checksum’ facility.

6. Risk Areas That Require Attention

Issues involving risk and uncertainty are constant companions on PPP projects. The proposed tendering process was devised to overcome several of these issues. In an online environment the traditional risks and uncertainty are still there but some are either replaced or additional risks and uncertainties arise. Li et al. (2004) raise an extensive number of risks that might eventualise on a PPP project and, yet, there are no specific references to the conduct of the tender process nor probity concerns to the enactment of these relationships. The bureaucratic and extensive nature of the consultative process has however been identified as an issue for private firms (Leitch and Motion, 2003).

Specific areas that require attention prior to the adoption of a large uptake of using online tendering applications include:

- Robustness of the application and computer network hosting the application;
- The need to communicate extensive project documentation that was previously in a hardcopy format;
- The existence of enabling legislation to accept electronic transactions;
- The ability of the application to offer a staged tendering and communication process with outcomes advertised and visible to the public; and
- Overcoming the human or ‘soft’ aspects of project and contract administration.

A National Audit Office investigation into concerns raised by the William Pears Group indicates that a complete inventory of project information could not be produced immediately (NAO, 2004). An eTendering application that captures information both dispatched and received can overcome the uncertainty as to what information was used to form the PPP documentation. The same investigation dealt with concerns surrounding the timing and sharing of information between parties. An online tendering application would also have overcome these issues and can serve to address:

- concerns as to when communications are commenced between parties;
- concerns as to what information has been provided between parties;
- concerns as to the form of communications between parties;
- concerns that the process has been conducted unfairly.
7. Comparative Advantages

So what is the advantage to using an electronic tendering solution to capture PPP project information? In business there is usually the call made for any application delivering quantifiable benefits in the form of cost savings or advantages. The current PPP practice to provide secure communication facilities to capture project information in the form of secure data rooms involve considerable costs in the form of ensuring that all information is captured and recorded. An online tendering solution can capture all information that is associated with an Expression of Interest or Request for Proposal and record that information on a database.

Costs savings may take the form of reduced hours to record information as the online tendering solution records times and information both forwarded and received. Costs associated with preparing a submission for a project are often costly and time consuming, with several persons responsible for collating and producing documents that are designed to capture the reader through marketing appeal just as much as actual project related content. In evaluating responses then tender evaluation panel members can be dispersed and maintain productivity on other project specific activities. The ability to evaluate online and possibly across spatial boundaries negates a number of costs.

Timing advantages can also be enhanced for both parties as responses can be received at any time prior to the required closing times. Closing times can also be extended with the capability of addenda being forwarded to registered and interested parties.

8. Possible Solutions and Challenges

Proprietary software solutions can limit the ability of a solution to meet the wide ranging needs of industry. While certain software providers have gained dominance, it will be those who offer an ability to accept responses in a required format without imposing a cost burden on all potential suppliers not just large scale organizations.

Information technology security standards have increased in recent years and will continue to dictate the ability of electronic solutions to respond to industry requirements.

Legislative changes are often necessary to facilitate the ability to transact electronically and a number of jurisdictions have enacted enabling legislation. These efforts are often frustrated by the existence of specific contracting, procurement or tendering regulations that mandate specific actions based upon levels of expenditure or well established work practices.

Existing paradigms around work practices are often the most difficult challenge and the ‘soft’ issues have to be confronted. The question, in developing the business requirement statements or specifications, is that often those subject of the changed tendering process are either reluctant or have difficulty in grasping the conceptual changes that will arise from the future changes in their work area. Staff employed in the contracting area are often very structured individuals who follow an existing pattern of work and experience great frustration and uncertainty when the ground rules for how they are to conduct their business changes. In the course of their normal duties there is an expectation of reward for displaying risk adversity and the construction of clauses that reduce or obviate those risks.

A rigidity of paradigm often exists in the areas of:
- how Tender documents should be constructed
- how Tender documents should be communicated to the potential suppliers
- the capability of suppliers to respond to an electronic tender
• the form and content of responses from suppliers
• their ability to read and interpret responses in an electronic format

The last point is also associated with a belief that the cost of printing Tender responses has been shifted from the supplier to the tendering entity rather than changing the format of the tender request documents. A number of Tender Evaluation Panel members have sought paper copies of a suppliers responses due to the inability to read responses on screen and formulate judgements on a potential response. Linking to online evaluation tools is one option while another improvement is to offer Tender package compilation and response tools. These tools provide on screen links between a tendering entities requirements and a suppliers responses to that requirement throughout that document.

Procurement personnel need to be given a vision of where the application is proceeding to and how the eTendering solution can help them reach it. This paper has sought to explore some of the issues involved in moving to an online tendering solution and how PPP projects can benefit from adopting the functionality that currently exists.

9. Conclusions

In conclusion, Industry and governments will continue to bedeviled with the need to communicate during the various stages of a PPP project while negotiating the thorny issues of transparency and accountability. Governance pressures necessitate the ability to demonstrate fairness, equity and best value. An online tendering application can be utilized to best advantage to achieve these objectives.

Successful implementation requires efforts are directed to a range of areas including technical infrastructure, enabling legislation, user acceptance and changes to project documentation. Benefits can accrue to organizations that adopt online tendering systems and are both in tangible and intangible areas. Applications must be open, comprehensive and offer advantages in functionality to both entities seeking requests and those offering responses.

The challenge is to integrate existing online technology standards with PPP project requirements under stringent probity standards and practices. It is however a challenge that is not insurmountable and capable of being applied to existing and future PPP projects. Over the next couple of years increasingly more sophisticated online tendering applications will be developed and will become an accepted mechanism for exemplary PPP governance.
References


