ABSTRACT. The purpose of the procurement governance framework is to drive behavior towards achieving the procurement objectives of the government. The Procurement Governance Framework defines and allocates accountabilities, communications, standards and major practices, and institutional responsibilities for public procurement. e-GP system designed and implemented in line with the framework complements attaining the expected outcomes. This paper intends to study and outline the components of Procurement Governance Framework, and discuss the design and implementation aspects of e-GP Systems for its success through seamless integration with the Procurement Governance Framework.

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INTRODUCTION

The management information required to ensure that public procurement is efficient and productive in converting budgets into results is central to the planning, monitoring and management of the modern State. These information requirements cannot expect to be delivered within a paper environment. In reality, the procurement paper environment is unable to adequately deliver almost any of these requirements.

According to Malta, Schapper, Calvo-Gonzale, and Berroa (2011) today’s public procurement environment is quite different from that of even just a few decades ago. Modern governments are now complex service organisations and major economic players. Procurement has shifted to being more focused on complex infrastructure and services, often involving complete service solutions, high risk and high value, with just-in-time supply lines, and requiring high level skills required for the preparation of specifications, market research, financing and contract management. Problems inherent in traditional paper-based procurement processes include, in addition to a lack of management information, inefficient procedures, high compliance costs for suppliers and departments, simplistic and ineffective procurement methodologies, and a profound lack of transparency.

Governments around the world are taking the introduction of e-Government Procurement (e-GP) System as the solution to tackle with the complexities of today’s procurement requirements of the governments, which is turn is taken as the magic tool for transparency, equal treatment, value for money, and modern intervention for the good governance in the public procurement sector. It is found that such implementations of e-GP are initiated either solely as the IT project for automation of few of the procurement processes, or taken as part of the reform projects focusing on the compliance requirements of the existing manual procurement laws. E-GP implementations should be based on the core principles of procurement, and built around the procurement governance framework which provides a clear blue print of procurement guidance for its design and implementation.
The Procurement Governance Framework defines and allocates accountabilities, communications, standards and major practices, and institutional responsibilities for public procurement. e-GP system designed and implemented in-line with the framework complements attaining the expected outcomes. The Procurement Governance Framework and its importance for the successful implementation of e-Government Procurement (e-GP) will be discussed in this paper.

BACKGROUND

Governance has become a frequent concept used in different fields and it is not a new concept. U.S. governments spend a combined seven trillion dollars, Canadian governments 360 billion dollars and U.K. governments over 500 billion pounds. Consistent and professional procurement practices across governments can positively impact the effective expenditure of public funds (Principles and Practices of Public Procurement, 2012). As political leaders draw increasing scrutiny and voter pressure to demonstrate fiscal responsibility, public procurement sector must ensure the good governance for the best value of tax money. Result-driven procurement management is an increasing concern of all governments. E-Government Procurement (e-GP) backed by well-articulated procurement governance framework help address the effective public expenditure management.

Governance

The word ‘governance’ is associated with words like government, governing and control (Klakegg & Williams, 2009). Control here means being able to decide, define limitations or delegate authority. Governance is a term that carries different meanings. Its rise to prominence stems from the difficulties of hierarchical coordination by firms or the state (Miller & Lessard, 2000). The concept of governance has been used widely in different context and fields. The needs of accountability and transparency have initiated the idea of the term governance not only in the organization, corporate but to the individual project as well. Rhodes (1997) defined governance as a “non-hierarchical form of steering, where state and nonstate actors participate in the formulation and implementation of public policy”. This means that both accountability and transparency
should be implemented so that each stakeholder could participate in the formulation of the policies (Aliza, Stephen, & Bambang, 2011). Given that this paper is focusing on one of the crucial public sector, the public procurement, therefore it is good to understand governance from the definition by OECD. OECD (2005) described public governance as the formal and informal arrangements that determine how public decisions are made and how public actions are carried out, from the perspective of maintaining a country’s constitutional values in the face if changing problems, actors and environments. Public or the citizens is the important stakeholders to the public sectors.

The term “governance” has migrated to the center of an overlapping set of concepts deployed across a broad range of settings, from academic theories, to advocates for change, to practitioners (Ramesh & Fritzen, 2009). Most discussions of governance can be conceptualized in terms of how authority, resources, and power are distributed among the public, private and “people” sectors, and across various levels of government. The concept of governance is so multifaceted for three reasons: it rose to prominence against a backdrop of myriad contemporary political and ideological changes and pressure; it has been substantively deployed and defined in a number of contradictory ways, and in support of varied agendas; and the study of its “transformation” is associated with a broad array of methods that do not necessarily generate coherent findings. Viewing governance in these three cross-sectional views allows discussing the governance in the public procurement sector, and the importance of such governance framework to support the successful implementation of e-government procurement (e-GP).

Principles of procurement are inherent to the governance framework for the implementation of e-GP. Governance framework should be designed without having to confront the difficult questions of how the principles are interrelated and whether there are any trade-offs among them that must be weighed. A broad manner of talking about public procurement governance framework for the successful implementation of e-government procurement makes it largely synonymous with management and administration of public procurement through electronic tools and technologies. Specific
techniques or approaches for linking public procuring entities, bidding community, and levels of government are described and given various interpretations as to their effectiveness.

The governance in public procurement with its instruments like public procurement acts, rules, and regulations influence the governance in the bidding community as well. Policy makers should take public sector transparency into consideration when designing and implementing public procurement reforms aimed at the procurement sector keeping the relationship between stakeholders including bidders and buyers, ignoring such interrelationships between public and private sector governance may reduce the relevancy of reform policies. Another important factor in public procurement governance is the institutional structure. The institutional patterns and structure, such as the degree of decentralization or centralization of the state structure, or funding and resource utilization authority in the procurement sector matter to the success of the e-GP system implementation.

The governance pattern of managerial incentives and human resource management also play core role in the e-government procurement. So the policy design is a critical arena in which proposals for challenging governance parameters play out. Examining policy for governance in public procurement is also promising because it challenges analysts to look beyond processes presumed to reflect good governance towards the assessment of actual outcomes “on the ground” as the litmus test of good governance.

Administrative reform is one of the outcomes of e-GP implementation. It should come as no surprise that public procurement reforms with the introduction of e-GP for improving administrative performance and streamline the bureaucracy often redistribute power within the political system, as well as the benefits and costs among members of society.

The Practices for Public Procurement are founded upon the Values of Public Procurement necessary to preserve the public trust, protect the public interest, and ensure fairness for the public good. Those Values are: Accountability, Ethics, Impartiality, Professionalism, Service, and Transparency. According to Aliza, Stephen and Bambang
The governance framework should ensure the accountability and transparency of the decisions made in awarding the right contract to the best contractor. Public procurement governance framework is a subset of state governance focusing on the public procurement.

PROCUREMENT GOVERNANCE FRAMEWORK

The search for effective methods of combating corruption has led to an increasingly wide recognition that corruption is fundamentally a problem of governance (Hellman, Jones, Kaufmann, & Schankerman, 2000). The introduction of e-Government Procurement (e-GP) into the public sector does not automatically create better or more governance unless it is based on the governance framework addressing the principles of procurement.

Benefits of e-GP for public administrators include lower costs, improved quality of purchases and increased productivity. Further, e-GP encourages transformation of procurement procedures, facilitates transparent public decision making and is a deterrent to lack of compliance and corruption. In the business sector, e-GP can provide easier access to the public sector market, reduction in market surveillance costs, time savings, more transparent evaluation of tenders, and reduction in market entry costs. By allowing fair and equitable access to government contracts for a wider range of companies, e-GP contributes to reduction of monopolies or selection of competition and efficiency in quantitative terms, it is estimated that if online procurement is generalized, it can save the government up to five percent of expenditures and 50 to 80 per cent on transaction costs for both buyers and suppliers.

Ease of public access to government-generated data greatly depends on the jurisdiction’s use of technology-oriented operations. Procurement should integrate and utilize technology systems to enhance transparency (Principles and Practices of Public Procurement, 2012). Transparency entails more timely information to more people; a procurement transaction paper trail; document management; disclosure and analysis of outcomes; and audit and sanctioning. Equality and fairness means that the procurement
process is neutral to location and time. In e-GP transparent rules and processes level the playing field, and simplified procedures reduce the gap in ICT skills and knowledge. Local businesses and small and medium enterprises (SMEs) are encouraged to participate because standard procedures simplify bidding; built-in features target SMEs; and business networking, and subcontracting is promoted.

Best practice establishes procurement in terms of the application of methods and resources that produce the best social and economic outcomes from public financial resources, within a value framework that is ethical, non-discriminatory and transparent. These should be the objectives for the procurement. It should be noted that these objectives are focussed on measurable outputs and results rather than procedures. To give operational effect to these procurement objectives through e-GP system, a governance framework is required and should include:

- **Procurement Framework** - Establishment of a framework of objectives, principles, procedures, accountabilities, legislation and guidelines;
- **Procurement Planning** - A procurement plan methodology;
- **Risk Management** - Establishment of a risk management framework;
- **Procurement Evaluation** - Performance monitoring and evaluation framework;
- **Institutional Roles and Individual Competency** - Professionalization and accreditation for governance and performance;

**Procurement Framework**

The accountabilities under the Act must be aligned with good practice. The procurement Act should unambiguously establish the higher authorities to be the accountable authorities in relation to the application of government procurement policies and legislation, and the regulations should require them to ensure compliance with the Rules and related government policies when engaged in duties related to procurement. Accountability means that officials are responsible and for the actions and decisions that they take in relation to procurement and for the resulting outcomes, and secondly that their actions and decisions are transparent. Accountability
should be cascaded through the organisation and enables innovation and improvement. Accountability includes the achievement of results. Accountability needs to flow downwards as well as upwards. Delegation imposes an upward accountability to ensure that the delegate is trained, managed and competent. In the case of e-GP, accountability and the delegations should be implemented through the clearly defined workflow with authority escalation across vertically and horizontally.

**Procurement Plans**

Comprehensive annual procurement plans are the foundation of the procurement framework. It is considered normal governance practice for an organisation’s procurement framework to require procurement plans to be developed for each case of significant procurement. E-GP should provide easy to use templates for creating and following the procurement plans.

**Procurement Risk Management**

Central to the governance, planning and management of public procurement is the concept of risk management. In many ways, public procurement is risk management. Most of the e-GP systems do not directly address the risk management issues. There is a requirement for the governance framework to have a risk management approach.

**Procurement Evaluation**

Evaluation is a process that applies at all levels of a project or contract, as well as the legislation itself. It would be beneficial for reporting to, inter alia, include comprehensive spend analysis, and indicators that assess the performance of the legislation itself.

**Institutional Roles and Individual Competency**

The roles and responsibilities of procurement institutions should be defined in procurement framework and reflected in the e-GP System. Individual competency is extremely important in the success of e-GP system implementation. The roles of the institutions and individual competency are assessed in terms of their alignment with best practice accountability in e-GP system.
PROCUREMENT GOVERNANCE FRAMEWORK AND E-GP

Procurement governance framework that is focused on the good governance principles discussed above will not be changed by e-GP, rather, the effect of e-GP will be to greatly enhance compliance to these principles, as well as improve efficiency, value-for-money and economic development.

The potential for technology to enhance governance and transparency has been reported widely for the past ten years. Technology greatly enhances access to management information, for the purposes of planning, market research, market solicitation, contract administration, as well as audit.

Tools for the governance of different procurements should be different. For example, the mechanism is different for high value complex procurement exercises. Key transparency features here include enhanced public access to up-to-date policies, information on bidding programs, standardised documentation and lodgement of bids, progress of tender evaluation, and announcements of outcomes. Thus for high value exercises, transparency is strengthened primarily through direct public disclosure of all stages of each procurement exercise, while for low value procurement, transparency is strengthened primarily through greatly improved audit capabilities.

This enhanced transparency from the application of technology to this function delivers directly what numerous regulations seek to do indirectly and often tenuously. Procurement regulation usually aims at ensuring transparency through due process by stipulation of procedural steps. The outcome of this is, as already noted, often a lack of transparency because of obfuscation by comprehensive rule sets. Technology bypasses much of this by delivering very low cost audit paths and highly accessible activity records: transparency is delivered more directly. Much of the cumbersome volume of regulations is irrelevant to the technology. The regulation versus performance issue becomes substantially circumvented.
In terms of efficiency the opportunities for technology to streamline procurement come through at many levels both for suppliers and buyers in the payment cycle, financial management integration, approvals, reporting, etc. The degree of manual processing in simple procurement which can be streamlined with a well-designed and functional government technology system can be appreciated through an understanding of all of the elements that make up typical supply chain processing which includes search, requests for quotations, authorisations, financial reconciliations and much more.

For complex procurement, the efficiency equation is more related to the quality and relevance of management information instead of manual processing. Performance in terms of value-for-money outcomes can be affected by improvements in management information facilitated by technology, but these benefits can only be fully realized where the application of technology is accompanied by adequate skill sets of procurement managers. Thus, efficiencies provided by online access to catalogues and pre-negotiated contractual arrangements will be negated if the contractual arrangements themselves are inadequate.

Thus the effects of technology on this environment are at three levels. Firstly, by significantly enhancing the capacity for transparency for simple procurement, technology helps reconcile the tension between performance and conformance. Secondly, by reducing the cost of transactions for simple procurement, it directly contributes to efficiency objectives of management. Thirdly, it has the capacity to strengthen management information and thereby increase the effectiveness of more complex procurement, provided that the skill levels of management are in place. It can also significantly reconcile centralised policy determination with devolved management.

Operational Provisions in Procurement Governance Framework

E-GP requires some operational rules to manage information flows in the technological environment. For example rules need to be provided through the governance framework for:

- Inconsistencies between electronic and hardcopy documentation
from government agencies, and from the private sector;

- The malfunction of government facilities before closing time set for electronic bid lodgement;
- Electronic bid opening protocols;
- Electronic contract development for template and document consistency and economy;
- Mobile technology options;
- IT Security Policy
- Backup Policy
- Archival Policy

For all of these and other matters there are well-established international practices that are to be included in the governance framework. Other circumstances arise to improve the application of policy, such as in relation to common government policy of requiring 3-5 quotes for small value procurement. Upon adoption of e-quoting, the best of the entire set of vendors offering the required product should be selected (100% sampling). The electronic mode allows for evaluating quotations from any number of suppliers without adding any cost or affecting the timelines of procurement.

Governments may consider whether they want supplier access through Internet cafes and mobile phones to increase access where connectivity is weak. Some operational practices should be reviewed in a technological environment. For example, practices on bid submission closure times should be re-visited. Usually, bid closure time is during business hours and at times when Internet traffic is heavy. In countries where connectivity is poor this increases the risk of non-delivery. The policy can equally be set for midnight or any other hour when traffic is low.

The value of e-GP derives from people, process and technologies that secure goods and services in support of internal partners in the development and delivery of products and offerings. Governance framework needs to guide the e-GP plan. An e-GP plan needs to take in to consideration numerous issues. One is to decide whether to set up single agency procurement or multi-agency
procurement and payment. For multi-agency procurement and interagency integration, interoperability must break down silos between agencies. Policy intervention is worth considering lowest cost procurement or value procurement. Other common issues and important components to e-GP are: fairness to suppliers; best of breed demonstration to private sector; increase procurement leverage; drive cost savings for industry and government; transparent procurement and corruption minimization; transformation; supplier relationship; transform strategic sourcing process; and best of breed procurement terms and conditions.

**CONCLUSION**

Mere institutional and procedural regulations overlook the more important aspects of procurement and are inconsistent with the principles of procurement. The governance framework in many jurisdictions is largely one of adherence to regulated procedures. There is insufficient focus on the framework principles, which guide procurement in all areas of decision-making that requires professional judgment. The procurement objectives are presented in the legislation but have little or no bearing on the accountabilities required by the Act. There is almost no coverage of risk management, which is primarily what much of procurement is about, and there is little on procurement planning except for references mandating corporate procurement plans.

It is recommended that the governance of procurement be supported by information technology such as to strengthen governance, efficiency and economic development. It be recognised that e-GP should not be designed in ways that circumvent best practice governance, but rather should strengthen the application of government policy and internationally recognised best practice procurement principles discussed above.

Best practice procurement is results-focussed with processes that are principles-based. The role of the legislation and regulations is directed towards establishing accountability in terms of results and management standards rather than procedural compliance. Procurement process simplification through the governance process
reengineering help developing e-GP systems effectively used, and increase the acceptance level.

The objectives of public procurement in terms of principles including value-for-money, transparency, non-discrimination, competition and ethical behaviour, should be the performance indicators or success factors for public procurement.

The procurement principles are fundamental to guiding the procurement procedures, procurement accountability and management, and performance assessment. The principles are not just there just to be ‘feel-good’ ideals. It is important that these principles not simply be listed, but rather should be elaborated upon in operational terms such that practitioners can understand the policies and be held accountable for compliance against these. Within this environment the legislation and regulations should be focused on the standards (rather than administrative procedures) against which the principles must be maintained and evaluated.

**REFERENCES**


