



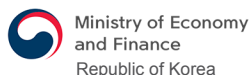
GOVERNANCE

EQUITABLE GROWTH, FINANCE & INSTITUTIONS NOTES

GovTech Procurement Practice Note

Summary Note

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Why Is This a Major Issue?

Government services are the lifeblood of the citizens and businesses that fuel a country's growth. The delivery of services—or lack thereof—has a direct impact on the economy and citizen well-being. Governments and international institutions have recognized the criticality of GovTech in improving government service delivery and have moved to institute both smart and resilient city programs. As ongoing digital transformation efforts modernize the public sector, the appropriation of public funds via procurement or open competitions is even more critical. Because citizens rightly hold digital government services to the highest standards, a robust procurement process is crucial to achieving successful outcomes. However, many governments, businesses, and regulators historically have taken a cautious approach to technology, delaying, or even inhibiting its adoption out of fear of job losses and in the process, hindering entrepreneurship and the scaled development of technologies. A well thought out GovTech procurement strategy can provide the right programming and mitigation strategies to allow the government to develop and use all the leading and disruptive technologies more confidently.

The *GovTech Procurement Practice Note* provides guidance for countries to confront these challenges, to assess and implement potential GovTech solutions, and to fill the knowledge gap regarding a usable and replicable approach to exploring and procuring GovTech to improve government services and core information systems.

Improving Public Procurement

- Allows citizens to hold government accountable
- Involves development of e-government procurement
- Requires strategy to address knowledge gap, job loss fears, misconceptions about technology

What Major Challenges Exist?

Governments face several key challenges in the GovTech procurement process including the following:

- Excessive controls on spending and burdensome procurement procedures can lead to delays that inhibit the adoption of new technologies.
- Governments may be locked into fixed, long-term contracts with obsolete technology systems that impede commercial partnerships with new software providers.
- There is a significant digital skills gap, as recent Accenture research has found that 59 percent of agencies in Europe have trouble finding people with the right skills to support innovation.
- Sales cycles are lengthy, as selling technology to government and the public sector requires sourcing leads, submitting proposals and organizational and financial data, and waiting for official and public comments and frequently delayed outcomes.

Major Challenges

- Excessive controls on spending and burdensome procurement procedures
- Lack of existing technology infrastructure and resource capacity
- Inadequate industry knowledge about public sector operations
- Complex interoperability requirements for legacy systems
- Constraints in identification of data sources for proper current state assessment
- Vendor lock-in regarding obsolete systems impede new partnerships
- Digital skills gap
- Limited ability to budget for systems maintenance



How Can GovTech Strengthen the Procurement Process?

In addition to establishing procurement principles, the World Bank has also documented the key stages to follow in the procurement process: identification, analysis, requirements, source, implement, and check. These act as helpful guidelines for both those new to procurement and for procurement specialists, government officials, and international experts. Although this process may be implemented to purchase the most common products and services, a more robust and specialized framework may be implemented for GovTech that is more customized to the unique characteristics of procuring technology for governments.

The *GovTech Procurement Practice Note* therefore proposes a five-step GovTech procurement framework that provides a strategic and holistic plan for the design, procurement, and implementation of GovTech solutions, with key activities and deliverables for each step. But prior to undertaking a GovTech acquisition, it is imperative to establish a business case for the project that considers the following items: (i) anticipated project benefits and business value including how it aligns to country priorities; (ii) projected costs and proposed high-level implementation plan; (iii) project assumptions, dependencies, and key stakeholders; (iv) project risks and potential mitigation strategies; and (v) expected outcomes if the project is not funded.

Standard Procurement Stages

- Identify Needs
- Market Research and Analysis
- Requirements Definition
- Sourcing Strategy
- Implementation
- Monitoring and Evaluation

What Does the Five-Step GovTech Procurement Framework Involve?

The framework utilizes elements from the standard procurement process but tailors' activities specifically to GovTech acquisition.



STAGE 1: TECHNOLOGY ASSESSMENT AND GAP ANALYSIS -

A technology readiness assessment is a systematic analysis of an organization's ability to successfully implement transformational processes or change. The assessment identifies the potential challenges that might arise when introducing new technology and any accompanying procedures, structures, and processes within a current organizational context. As part of a readiness assessment, a gap analysis is performed to identify gaps or risk areas that should be addressed and remedied before or as part of the implementation plan.



STAGE 2: REQUIREMENTS DEFINITION -

When defining technology requirements, there are four foundational items that should be considered:

(i) Business Model—Government Owned and Operated, Government Managed Service, Public-Private Partnership (PPP); (ii) System Implementation Approach—Software as a Service (SaaS), Commercial Off the Shelf (COTS), Custom-Build), (iii) System Security, and (iv) Hosting Solutions. After addressing each of the foundational items for consideration, a requirements document should be compiled. The document should capture all the requirements in a format that can be shared with vendors for their review and response. When implementing any of the three business models, the government is solely responsible for elaborating a plan that ensures sustainability. While sustainability and operational efficiency requirements can be introduced into bidding documents and vendor contracts, long-term sustainability outcomes rely on political and leadership commitment to change management efforts with a long-term outlook and focus on project and organizational sustainability. It is important to demonstrate to leaders what will work and the gaps to be solved via the introduction of new GovTech technologies.



STAGE 3: PROCUREMENT STRATEGY DEVELOPMENT -

Procurement strategy development begins with market research. Market research involves the collection, recording, and evaluation of data about a specific market that offers a desired product or service. The primary purpose of market research is to inform the decision-making process, leading to a gain in competitive advantage, reduced risks, and increased productivity in a future investment. Conducting market research also contributes to the definition and refinement of product or service requirements and to a better understanding of the available vendors and their offerings. Due to the technological complexity typically associated with a GovTech initiative, it is imperative that the project team engage with the market early and often to amplify the procurement opportunities for market leaders to help craft GovTech solutions with optimal outcomes. Equally critical to any public procurement initiative is the need to adhere to well-established regulations, policies, and procedures aimed at preserving procurement principles, such as fairness and transparency, and to avoid conflict of interest. Established private sector procurement practices such as competitive dialogue and pre-procurement market engagement are critical to developing the right solution requirements and the appropriate procurement strategy approach. GovTech solutions may also require non-traditional procurement strategies, such as competitions, funded research programs such as the Small Business Innovation Research (SBIR), or PPPs to promote new technologies and provide a government-sponsored avenue for micro, small, and medium enterprises to participate in GovTech procurement opportunities.

The 5-Step Procurement Framework

- Technology Readiness Assessment and Gap Analysis
- Definition of requirements
- Development of procurement strategy
- Implementation and execution
- Ongoing management and technology evolution



STAGE 4: IMPLEMENTATION AND EXECUTION - The implementation and execution of GovTech procurement begins with the preparation of tender documents, proceeds to execute a sourcing event, continues with negotiations and vendor selection, and concludes by integrating and embedding vendors with the system. After the acquisition is executed, the focus shifts to supplier performance monitoring.



STAGE 5: ONGOING MANAGEMENT AND TECHNOLOGY EVOLUTION - Ongoing support, maintenance, and development is critical to long-term implementation and service offering. Contract management is therefore an important lever for a procurement strategy to ensure the long-term results of any GovTech solution. As GovTech solutions progress through the procurement process, it is recommended that solutions focus on total cost of ownership (TCO) over the life of the project and incorporate rigorous service-level agreements (SLAs) to qualify and evaluate suppliers as well as manage mission-critical service performance.

What Are Enablers for the Procurement of GovTech?

A critical enabler of GovTech solutions is an appropriate legal and regulatory framework that enables adherence to international standards on open government and data transparency, while recognizing country specific constraints posed by national security and data privacy laws. Sustained political and leadership commitment are key to both the creation and evolution of these frameworks as well as providing the financial resources to allow for both the build and sustainable maintenance of GovTech systems. Policymakers have dual responsibility to create an environment suited to both GovTech innovation and conducive to significant change management that must occur to take advantage of the benefits of public sector modernization.

E-Government Procurement (eGP) is a specific technology sub-category of GovTech that is applied to manage and automate public procurement processes. eGP can be a tool to improve the project procurement process through the structured management of capital expenditure requests and approvals throughout the duration of a project and their systematic integration with the supporting budget and documents. The use of such eGP tools as request management and approval authorities can further project monitoring and oversight, leading to better management decisions and preventing procurement cost overruns.

Furthermore, correctly identifying requirements helps to empower successful outcomes. To this end, procurement requirements can be as classified conformance or performance specifications. Conformance specifications are used where a thorough understanding of the requirements already exists, and there is little desire for a supplier to innovate. Performance specifications are used where the understanding of what is required in terms of outcomes can be described, but it is less certain as to the best process or method to deliver the requirements, or there is a desire for suppliers to innovate. For the procurement of disruptive technologies, which by definition are new and innovative, performance specifications should be used wherever possible to maximize the possibilities for innovation as developed in a Design Thinking approach.

Enablers for GovTech Procurement

- Sustained political and leadership commitment
- Legal and regulatory framework that meets international standards of open government, data privacy
- Accurate requirements
- Conducive environment for innovation



What Role Do Disruptive Technologies Play?

Disruptive technologies will fundamentally change the way in which public procurement value is realized over the next decade. Existing supply chain delivery mechanisms will be enhanced by drone delivery—for example of medicine to inaccessible locations, supply chains will be increasingly and securely monitored via Geotagging, and contracts and payments will be made transparent via blockchain. The value creation for developing countries is unlimited and, to capture this value, countries need to understand when and how best to implement disruptive technologies based on their unique operating environments. A GovTech strategy focused on disruptive technologies in procurement should use the GovTech procurement framework to promote procurement system improvements and innovation. Countries and purchasing organizations can apply the framework to assess and implement potential procurement and contract management solutions using blockchain, drones, GPS tagging, AI, robotic process automation (RPA), big data, GIS mapping, and other technologies.

The procurement of disruptive technologies involves more complex approaches than traditional tendering methods. Using Design Thinking, which moves tasks through a complex business problem, the World Bank's Information Technology Solutions (ITS) Technology and Innovation Lab and the Global Governance Practice (GGP) procurement units collaborated to test the possibility and feasibility of using blockchain to increase the transparency and efficiency of eGP systems. Activities included problem framing and preparation of a disruptive technology research plan, followed by case analysis and delivery of a prototype solution, which can then be used to develop procurement requirements.

Disruptive Technologies

- Multiple uses including drone delivery of medicine
- Unlimited value creation for developing countries
- Procurement uses performance specifications to maximize innovation developed in Design Thinking approach

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