Strategy for Implementing of Electronic Government Procurement (eGP) in Uganda

July 2014-June 2019

FOREWORD

Public procurement offers the largest business opportunities in Uganda. The business case remains compelling in terms of savings and other benefits like transactional efficiency savings, standardization of the procurement practices, and price reductions.

Public Procurement like other Public Finance Management functions has undergone a number of reforms resulting into the need for an electronic Government Procurement System. This strategy serves to achieve the following three objectives:

(i) improved Governance through enhanced transparency and accountability;
(ii) effectiveness through management information and efficient processes; and
(iii) economic development through competitiveness and improved investment climate.

Improved transparency which is vital in public procurement can be achieved through the implementation of e-procurement systems. More procurement information needs to be in the public domain. Transparency is important in ensuring that procurement contributes to economic growth through encouraging competition and providing for the inclusion of the Small and Medium-sized Enterprises (SMEs) participation in public procurement.

The application of ICT is believed to have a potential to revolutionize government operations and consequently improve efficiency in Government service delivery; the Government of Uganda adopted a national E-Government framework for the implementation of e- governance in various Sectors of Government including procurement. Public procurement is a key aspect of public administration that links the public financial system with social economic outcomes, and as such is a major determinant of the quality of community services and infrastructure. Therefore, effective governance of procurement is pivotal to public trust in Government and is a barometer for the quality of public administration, making it a priority target for strengthening.

The E-procurement system when implemented will reduce transaction costs for both Government and the Providers and will streamline the procurement processes. The system will also make procuring for routine transactions more productive and expected to free procurement professionals to focus on the more strategic activities of the Procuring and Disposing Entities (PDEs). The savings realized can be re-invested in front-line services.

Therefore, Government of Uganda has identified e-procurement as an essential element in e-transactions, having a role both in accelerating the transition of the Ugandan economy to an information society; and contributing to the attainment of the

Government objective of modernizing the public service through the development of new, innovative and more efficient procurement processes.

This strategy has been carefully crafted to take care of the exploration, development and implementation of an e-procurement system, through piloting, an appropriate e-procurement solution, before the eventual roll out to embrace the entire public sector in Uganda. There will also be seamless integration with the existing e-government systems where applicable.

Finally, I wish to thank the World Bank for extending support towards the development of this strategy. I therefore, call upon all stakeholders to embrace this key document that will enable Government deliver taxpayer value, support innovation, stimulate growth, and most importantly, deliver efficiency in service delivery.

Hon. Maria Kiwanuka
MINISTER OF FINANCE, PLANNING AND ECONOMIC DEVELOPMENT
REPUBLIC OF UGANDA

ACKNOWLEDGEMENTS

I am delighted to present to you the E-Government procurement strategy. The development of this strategy was informed by among other things a survey that was conducted in Uganda by the National Information Technology Authority – Uganda (NITA-U) in 2012 and later by the World Bank in 2013. The survey revealed that there is significant interest in e-Procurement by businesses and Government Ministries, Departments and Agencies (MDAs).

The development of the strategy took into consideration the different existing systems of the Government of Uganda that would compliment any e-Government procurement system. As much as possible, the Government intends to harmonize the existing technology based systems to avoid unnecessary duplication. The existing legal framework related to application of electronic systems was considered in the development of this strategy and by and large, the legal framework is supportive of this system.

The development of this strategy would not have been possible without the efforts of a number of people and agencies. In this regard, I would like to recognize the contribution of the Steering Committee that was chaired by the Deputy Secretary to Treasury and the FINMAP Team that made resources available for these teams to function. I would also like to acknowledge the efforts of the members of the Technical Committee which I chaired.

Furthermore, the contribution of our Development partners, in particular the World Bank Group which provided the Consultant that drafted this strategy is much appreciated.

As I conclude, I wish to reiterate the Government's commitment to continuously strengthen the efficiency of the public procurement system as part of the broader public financial management reforms to enable the attainment of the country's development objectives.

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Table of Contents

List of Tables

List of Figures

ABBREVIATIONS & ACRONYMS

BOQ	Bill of Quantities
BPR	Business Process Re-engineering
CPV	Common procurement vocabulary
DRS	Disaster Recovery Site
EOI	Expression of interest
ETS	Electronic tendering system
EU	European Union
FAQ	Frequently Asked Questions
FMIS	Financial Management Information System
GDP	Gross domestic product
GOU	Government of Uganda
ICB	International Competitive Bidding
ICT	Information and Communications Technology
IMF	International Monetary Fund
IT	Information Technology
JV	Joint venture
KPI	Key Performance Indicator
M&E	Monitoring and evaluation
MDB	Multilateral Development Banks
NCB	National Competitive Bidding
NOA	Notice of award
OECD	Organisation for Economic Cooperation and Development
PAC	Project Advisory Committee
PE	Procuring entity
PIC	Project Implementation Committee

PKI	Public key infrastructure
PMIS	Procurement management information system
PMU	Project Management Unit
POC	Proposal opening committee
PPDA	Public Procurement and Disposal Authority
PPP	Public private partnership
PSC	Project Steering Committee
REOI	Requests for expressions of interest
RFP	Request for proposals
RFT	Request for tenders
SLA	Service level agreement
SOR	Schedule of Rates
TOC	Tender opening committee
UN	United Nations
UNSPSC	United Nations Standard Products and Services Code
UNCITRAL	United Nations Commission on International Trade Law

CHAPTER 1: EXECUTIVE SUMMARY

1.1. Introduction

The governance of procurement is pivotal to public trust in Government and is a barometer for the quality of public administration, making it a priority target for strengthening in Government. In Uganda, the procurement reforms started in the late 1990s, resulting into among other things the shift from a cumbersome centralized procurement system to a decentralized and participatory procurement system at the Procuring and Disposing Entity (PDEs). The reforms in procurement sector thus far, have realized some success. However, serious challenges persist including corruption, non-compliance with the procurement Act and Regulations, un-standardized procurement processes across Procuring and Disposal Entities, continuous delays in delivery of supplies and services, and wastage of resources through uncompetitive and closed purchases.

1.2. Problem Statement

Problems inherent in the current semi-automated (largely paper-based) procurement system include inadequate management information, inefficient procedures and high compliance costs for suppliers and departments. It employs simplistic and inferior procurement methodologies, with a profound lack of transparency and is further characterized by:

i. Uncoordinated purchases across government with different departments having different contracts and different prices for the same goods from the same market;
ii. High process costs associated with tendering and testing the market;
iii. Outdated market intelligence;
iv. Maverick spending (off contract);
v. Inefficient payments processes;
vi. Ineffectual audit function
vii. Error-prone contract management tracking; and
viii. Complex procurement tracking.
ix. Limited in scope concessions.

1.3. Justification

Government seeks to continue strengthening the Public Financial Management systems by adopting electronic-Government Procurement (e-GP) to provide a platform for:

(i) increased transparency in procurement procedures and practices;
(ii) improved efficiency in procurement, by minimizing the procurement cycle time, maximizing value for money, and fostering accountability;
(iii) improved confidentiality, integrity and authenticity of transactions between the procurement entities and the suppliers; and

(iv) developing a common database and electronic trail of procurements (the Procurement Management System, which is a component of the e-GP) to facilitate proper monitoring, reporting and planning of public procurements.

The potential savings from the implementation of e-Procurement framework have been estimated by the OECD to be in the range of 5-8%1 of the procurement value. Uganda spent approximately 55% (about UGX 6.6Trillion) of the Government budget in 2013/14 through procurement. This implies that with e-procurement implementation, savings in the range of UGX 330 – 530 billion would be made per year.

The government initiative towards the introduction of e-Government Procurement (e-GP) in Uganda can generate significant efficiency gains in public procurement sector as it has done in other countries. The e-GP system improves transparency, accountability, procurement management, documentation, compliance and performance audit capabilities around the procurement function. It also improves good governance in public sector procurement. Other benefits include transactional efficiencies through process re-engineering, and promotion of domestic businesses in government buying, and many downstream effects in improving the investment climate.

1.4. Progress of e-GP Implementation

Government with support of Development Partners initiated the process of implementing e-GP in Uganda. Resources were secured for initiating a number of start-up activities were initiated including:

(i) establishment of the e-GP Steering and Technical Committees;
(ii) development of the e-GP strategy;
(iii) development of the e-catalogue;
(iv) e-GP guidelines;
(v) business process re-engineering and;
(vi) establishment of the PMU.

1.5. Structure of the Strategy Document

This strategy comprises of the following: introduction, situation analysis and readiness assessment, National and International Context, brief overview of e-GP System, Strategic Objectives, Critical success factors, risks profile and mitigation measures, Key monitoring indicators, work plan/roadmap and the budget.

A survey that was conducted in Uganda by the National Information Technology Authority – Uganda (NITA-U) in 2012 and later by the World Bank in 2013 revealed that there is significant interest in e-Procurement by businesses and Government Ministries, Departments and Agencies (MDAs). Procurement based on procedural

[1]OECD/DAC (2003).Mainstreaming the Procurement Function into the Public Expenditure Policy and Effectiveness Dialogue (OECD/DAC). World Bank Roundtable, Paris, 22-23 January. [On-line]. Available at www.oecd.org

compliance, professional skills, transparency and accountability were the major issues expressed in the surveys. It is also clear that e-GP initiative has high-level support from the Ministry of Finance Planning and Economic Development and from the Ministry of Information and Communications Technology. e-GP has been identified as priority reform in the e-Government Strategy Framework of the East African Community (2005), the Uganda e-Government Policy Framework and the e-Government Master Plan of the National Information Technology Authority – Uganda.

1.6. Vision, Mission and Objectives

The vision for the adoption of e-Government Procurement in Uganda is "***an e-procurement system that promotes value for money and good governance in public procurement***". The mission is "***to attain transparency, accountability, efficiency and competition in public procurement by leveraging Information and Communications Technologies***". The broad and high-level objectives are aimed at achieving (i) improved Governance through enhanced transparency and accountability; (ii) effectiveness through management information and efficient processes; and (iii) economic development through competitiveness and improved investment climate.

1.7. Proposed e-GP System

The e-Procurement system shall be a web-based system that encompasses the total procurement lifecycle, all procurement modalities, and record all procurement activities. The purpose of this system is to maintain efficient, complete and up-to-date public procurement information for all public agencies of Uganda. It will also provide tender opportunities to all potential national and international bidders. The e-Procurement system will therefore provide Procuring and Disposal Entities (PDEs), bidders and other relevant stakeholders like the Solicitor General, Auditor General, Banks and their branches, e-Payment service providers, and other stakeholders with secure access to an integrated range of procurement systems and services. The general public will get access to all the public information, i.e. annual procurement plans, invitation to bids, best evaluated bids, contract award details, contract completion reports, debarment/blacklisting/suspension lists, procurement performance statistical and analytical reports, and other information of public interests, published by Public Procurement and Disposal of Assets Authority (PPDA) and PDEs.

1.8. Key Recommendations

a) A comprehensive Business Process Reengineering (BPR) is carried out before scoping the e-Procurement system to capture a complete set of indicators from the different stages of procurement activities, which will inform procurement compliance, performance, risks, efficiency, and other aspects of procurement practices.

b) The e-GP solution should seamlessly integrate with existing e-Government systems such as the Integrated Financial Management System (IFMS) and duplication of functionality must be minimized. The integration with the IFMS is critical given that a significant part of the procurement cycle currently depends on the IFMS for, amongst others, requisition process, registration of suppliers and the payment of suppliers.

c) The e-GP system shall be integrated/interfaced with other National systems such as the, e-ID, Business registration and trade, e-Tax and VAT System, e-catalogue. It will be inter-operable with existing and future systems in compliance with the Interoperability Framework issued by NITA. To facilitate interoperability with other legacy systems, an e-Government Interoperability Framework (e-GIF) will be adopted.

d) The e-Procurement system shall support and provide a facility for digitally/electronically signing of all the documents, forms and communications or other alternative methods in the absence of PKI based digital signature for the authentication and encryption. The system shall be implemented in accordance with the provision of the National Information Security Framework of Uganda.

e) The recommended implementation model is not to develop a system from scratch, but rather to adopt a unitary, customized off-the-shelf solution which is readily available on the market. Accordingly, government will have rights to modify, update and use as well as control its own e-procurement system. This approach is cost effective and also comes with a lot of experience from other national systems and from other jurisdictions. This implementation model will be in accordance with the Strategy for Rationalization and Harmonization of Information Technology Initiatives and Services in Government.

f) The implementation of e-GP System will be in phased rollout model as opposed to phased module activation model. This means that the initial system developed shall cover all methods of procurement and stages of the procurement process and all the required functionality to enable piloting of a complete system. Phases of rollout would be divided into two phases: (i) Pilot in selected MDAs, and (ii) Wider rollout throughout the country.

1.9. Conclusion

In conclusion, this Strategy for e-Procurement has been shaped by national priorities, national law, public institutional structures, and international experiences. Successful implementation of e-GP will depend on factors such asinstitutional, legislative, functional, technical and the business model, the readiness of the agencies in terms of willingness and commitment of leadership in the organization to take up e-procurement,

the level of use of ICT by the procurement process related personnel, and appropriate implementation and support environment. The project will be implemented over a three year period which is estimated to cost US dollars 5.8 million.

2.0 Policy Reforms

Uganda continues to undertake reforms to enable more effective public sector management and improved service delivery. The procurement reforms started in the late 1990s, resulting into among other things the shift from a cumbersome centralized procurement system to a decentralized and participatory procurement system at the MDA level. As part of this reform initiative, a regulatory authority, the Public Procurement and Disposal of Public Assets Authority (PPDA) was also created and mandated to monitor and regulate public procurement. A number of efficiency gains have been realized through improved transparency and integrity.

The reforms in the procurement sector thus far, have realized some success. However, serious challenges persist including corruption, non-compliance with the procurement Act and regulations, un-standardized procurement processes across PDEs, continuous delays in delivery of supplies and services, and wastage of resources through uncompetitive and closed purchases. Poor management of procurement invariably reduces development outcomes and is likely to reduce foreign direct investment (FDI). These effects were already reported by the International Monetary Fund (IMF) (1998), which identified national consequences in terms of (i) over-spending on capital, (ii) under spending on asset maintenance, (iii) poor quality infrastructure, and (iv) reduced government revenues. The IMF concluded that poor governance of procurement can result in infrastructure that reduces national growth - investment becomes a disinvestment. The poor quality and under-spending on maintenance also implies that existing infrastructure has lower economic productivity. For these reasons, strengthening governance in public procurement has been described as the single most significant option for development in many countries.

To improve efficiency in use of public resources, Government seeks to continue strengthening the Public Financial Management systems. Government therefore plans to adopt the electronic-Government Procurement (e-GP) to provide a platform for : (i) increasing transparency in procurement procedures and practices; (ii) improving efficiency in the procurement process, by minimizing the procurement cycle time, maximizing value for money, and fostering accountability; (iii) improving confidentiality, integrity and authenticity of transactions between the procurement entities and the suppliers; and (iv) developing a common database and electronic trail of procurements (the Procurement Management System, which is a component of the e-GP) to facilitate proper monitoring, reporting and planning of public procurements. e-GP is a modular system which allows staged/phased development.

An e-procurement system facilitates the sale of supplies or purchases using an electronic internet based system. An e-procurement system can streamline all aspects of the

procurement process (from planning to contract monitoring and payment) while applying tighter controls over spending and product preferences. Implementation of e-procurement automates the internal and external processes associated with the procurement process including supplier selection for some types of procurement, and opens the way for new efficient procurement methodologies that can increase market access and competition. The new procurement system will therefore allow PDEs to electronically select items to be procured from the desktop, initiate an electronic approval process, and also create, submit, and receive purchase orders, delivery orders, and other related documents electronically.

From a regional perspective, e-Procurement has been identified as one of the flagship project in the East African Community (EAC) e-Government Strategy Framework (2005). The Kenyan Government is currently in the process of implementing a similar system.

2.1 Problem Statement and Justification for e-Government Procurement System

The governance of procurement is pivotal to public trust in Government and is a barometer for the quality of public administration, making it a priority target for strengthening in most Governments.

Public procurement is also a key aspect of public administration that links the public financial management system with social and economic outcomes, and as such is a major determinant of the quality of community services and infrastructure, and the effectiveness of the Government. This function cuts across almost all areas of planning, programme management, and budgeting.
For these reasons, strengthening governance in public procurement has been described as the single most significant option for development in many countries.

2.2 Business Need/Case

Problems inherent in the current semi-automated (largely paper-based) procurement processes include incomplete management information, inefficient procedures, high compliance costs for suppliers and departments, simplistic and inferior procurement methodologies, and a profound lack of transparency. Persistence with manual procurement processes also slows the up-take of productive information technologies in the economy generally, and is further characterized by:

i. Uncoordinated purchases across government with different departments having different contracts and different prices for the same goods;
ii. High process costs associated with testing the market;
iii. Outdated market intelligence;
iv. Maverick spending (off contract);
v. Inefficient payments processes;
vi. Ineffectual audit function

vii. Error-prone contract management tracking; and
viii. Complex procurement tracking.

In this clogged environment, many opportunities for improved social and economic outcomes are elusive partly because the relevant management and planning information is inaccessible.Furthermore; many opportunities for improved social and economic outcomes are invisible because the relevant management and planning information is inaccessible. Many of these issues can be partly or largely addressed though the effective use of information technologies, or e-Procurement.

2.3 Expected Benefits

The following benefits are expected to arise with implementation of e-procurement:

a. **Transactional benefits:** The Organization for Economic Cooperation and Development (OECD) estimates savings from implementation to be in the range of 5-8 % of the procurement value. Uganda spent approximately 55% (about UGX 6.6 Trillion) of the Government budget in 2013/14 through procurement. This implies that with e-procurement implementation, savings in the range of UGX 330 – 530 billion would be made per year.

b. Value for Money

i. E-procurement allows for increased discounts, because larger markets are made accessible.
ii. Further Savings arise from:
   - Savings made due to reduced cost of procurement stemming from more efficient internal administrative processes
   - Reduced transactional costs on bidders which translate into lower prices quoted.
   - Increased competition amongst bidders since the bidding process is open to all potential providers.

c. **Efficiency Gains:** Efficiencies will be for both Government and the private sector.

i. Reduction of the procurement cycle time due to the automation of certain phases.
ii. Since the manual processes are eliminated, there is easy access to the market and tender opportunities, easier bidding processes etc.
iii. Timely payments to suppliers using electronic payment of invoices. This leads to better control of cash flow and efficient contract management which can lead to lower price quotations.
iv. Standardization - since e-procurement is majorly template-driven, it makes all transactions standardized and traceable. In addition, there are reduced errors in process and documentation for buyers.

v. Dematerialization – reduction in archival and storage costs, paper consumption due to use of email and reduced need to use hard copies thus providing environmental and financial benefits.

d. Accountability

i. E-Procurement strengthens Accountability by enhancing transparency and improves access to management and audit information from a central source.

ii. Tender documentation and outcomes of the procedures (winning suppliers, rankings, and final offers) are automatically posted online and available to all.

e. Transparency

i. Where technical/qualitative evaluation is done using a tabular format where the technical parameters are accurately defined and a score is given to every possible alternative suppliers can clearly understand in advance how they will be evaluated, this leads to an increased strategic accuracy of the offers.

ii. Performance Measurement: E-Procurement also provides more significant and timely procurement information that creates the potential for regular analysis and reporting for many stakeholders on different aspects.

iii. The low cost efficient access to accurate, timely and comprehensive management information in e-procurement provides intelligence on spending patterns, inventory, performance and compliance enables strengthening of control, oversight, efficiency and planning capabilities as well as competition.

f. Governance

i. E-procurement can improve public governance, as it lets geographically remote PDEs actively cooperate, for example in the realization of a bundled tendering procedure, such as framework agreements.

ii. It is also easier to share best practices, due to the availability of information and documents online.

iii. The data collected in e-procurement systems will assist with mandatory reporting obligations, audit and accountability requirements, as well as internal reporting to assist with on-going development of its procurement strategy.

The governance of procurement is pivotal to public trust in government and is a barometer for the quality of public administration, making it a priority target for strengthening in most governments**.** Public procurement is also a key aspect of public

administration that links the public financial management system with social and economic outcomes, and as such is a major determinant of the quality of community services and infrastructure, and the effectiveness of the Government. This function cuts across almost all areas of planning, programme management, and budgeting.
The OECD[2] has estimated that:

- Total procurement accounts for 14.48% to 19.96% of Gross Domestic Product;
- Public procurement in one form or another accounts for 70% of Government expenditure.

It has also been recognised by the OECD[3] (2007) that "*public procurement is the government activity most vulnerable to waste, fraud and corruption due to its complexity, the size of the financial flows it generates and the close interaction between the public and the private sectors*".

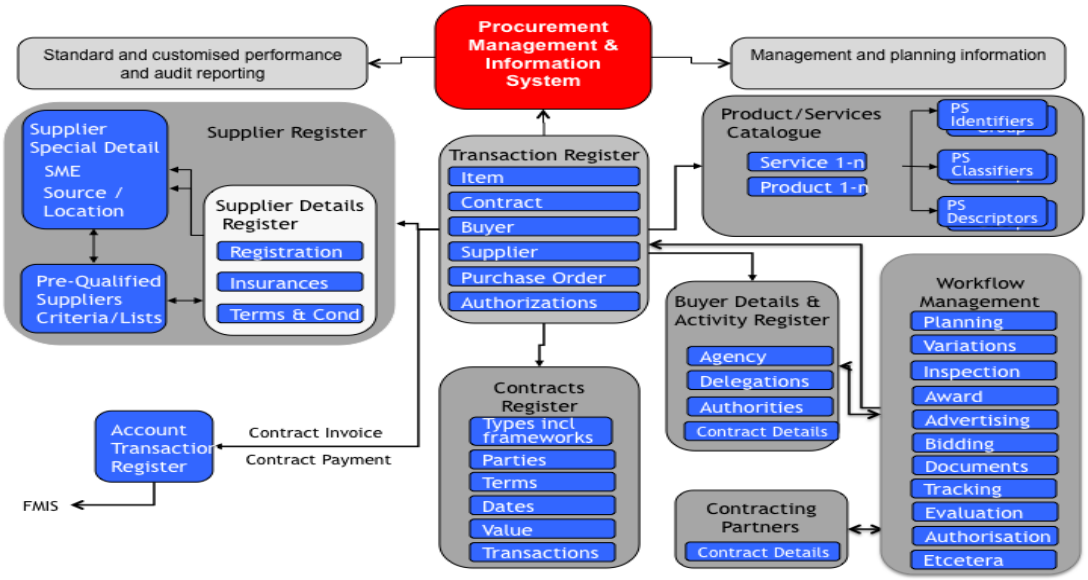
Procurement policy regulates the public sector's interactions with domestic and international markets in ways that directly impact national efficiency and competitiveness. Public procurement is a common vehicle for business and industry development policies, and most regional and bilateral trade agreements have significant provisions aimed at granting reciprocal access to domestic government procurement markets.

2.4 Overview of the e-Government Procurement System

E-Procurement is made up of various functions that, as concepts, are largely stand-alone, but need to be integrated in order to serve procurement management of the Government.

[2]OECD JOURNAL ON BUDGETING – Vol. 2, No. 3 – ISSN 1608-7143 – © OECD 2002
[3]www.oecd.org/document/5/0,3343,en_2649_34135_41883909_1_1_1_1,00.html

Figure 1: Information Registry and PMIS



The e-Procurement system shall be a web-based system that encompasses the total procurement lifecycle, all procurement modalities, and record all procurement activities. The purpose of this system is to maintain efficient, complete and up-to-date public procurement information for all public agencies of Uganda. It will also provide tender opportunities to all potential national and international bidders.

The e-Procurement architecture will provide PDEs, Bidders and other relevant stakeholders like Solicitor General, Auditor General, Banks and their branches, e-Payment service providers, and other stakeholders with secure access to an integrated range of procurement systems and services. The general public shall get access to all the public information, i.e. Annual procurement plans, Invitation to Bids, Best Evaluated Bids, Contract award details, Contract completion reports, debarment/blacklisting/suspension lists, procurement performance statistical and analytical reports, and other information of public interests, published by PPDA and PDEs. The Ugandan e-Procurement System shall consist of the following modules and functionalities:

2.4.1 A Procurement Portal

The central portal shall act as a one-stop information portal on all public procurement within the country, including local government. All advertisements and publication for public procurement across the country shall be accessible from the Portal. The Portal should have transaction capabilities developed as per the national standards, which should be available for use by all government ministries. Functionality on the portal may include annual procurement plans of al MDAs, a list of bidding opportunities,

search and advanced search; procurement related circulars, Procurement legislations and handbooks, awarded contracts, a list of blacklisted providers.

Some of the transaction capabilities shall include user registration link redirected to SSL page for registration, capability to identify debarred bidders, procurement analytics, and statistics and reporting. The information transactions must be automatically tracked for subsequent use in auditing and review of individual transactions by any combination of purchasing individuals, organizations, suppliers, region, price, and type of good.

2.4.2 A Centralized User Register of all the users of e-Procurement System

In the registration modules, profiles of Suppliers/Contractors/Consultant registration, and also registration of Procuring entities and their users/officers, and their e-GP system access rights and authentication information are stored. The concept of single sign-on shall apply and the same information can be used across all procurement activities while its validity is current. The need for a common registry of suppliers has already been recognised in Uganda, where firms black listed in one area are continuing to work in other areas of government. Therefore, the registration module will consist of the following:

a. A ***Bidder Register***, which will record basic details of bidders interested in doing business with any part of the public sector.

b. A ***Buyer Register***, which will host the details of procurement entities participating in e-Procurement and their designated procurement officers.

c. **Other users register**, which will host the details of users from PPDA, Solicitor General, IGG, banks, etc.

It also should provide registration of other users like banks for payment collection, guarantee processing, making payments; mobile service providers, Solicitor General for contracts review, Auditors for audit control, and PPDA users for compliance and performance monitoring.

2.4.3 An e-Bidding system

This will facilitate the secure transmission of electronic bid documents, procurement plans, e-publishing/e-advertisement, e-lodgement, evaluation and e-contract award. The processes involved in e-bidding or e-tendering (demand aggregation, procurement plan preparation, e-publishing/e-advertisement, invitation for tenders, REOIs, RFPs and other procurement methods, downloading of tender documents, submission of bids, bid opening, evaluation, draft contract review, and publishing the award of contract) are performed electronically. Additionally, contractors will be able to submit their bids electronically from their own premises in anonymity.

E-bidding is a relatively simple set of functions. The technically most demanding element of this function is the security demands of online bid lodgement, although potentially all elements have strong security requirements. The establishment of e-Bidding procedures is usually accomplished progressively or, if management reforms to documentation, security protocols and departmental technology interfaces permit, these stages can be combined.

The operations and qualities of the e-Bidding service should be consistent with the standards set by the Multi-lateral Development Banks (MDB). The World Bank and other development partners have set minimum standards and qualities that must be met if e-Procurement systems are to be applied to the loans, grants or credits that it provides.

2.4.4 Direct purchasing, e-Framework Agreements, e-Auction and e-Quoting system.

This component is important for efficiency gains are e-purchasing, including e-framework agreements. E-purchasing is more important than e-bidding for small businesses. The acquisition of low value, high volume, and commonly used goods, works and consulting services by direct quotation in the open market or from pre-qualified suppliers, and payment for the purchase constitutes the e-Purchasing activity. E-Purchasing functionality is relatively complex because there is a need to integrate workflows and transactions, as well as manage a wide variety of purchases and information flows including banking for many buyers and many sellers. E-Purchasing requires greater involvement of the Supplier community in working with online catalogues. E-Purchasing brings ease of purchase and reduces the transaction costs significantly; without which many framework agreements cannot be implemented. The e-Auction module also should provide the functions for the disposal of assets or sell-off excess from government entities or award licenses or permission through real-time online auction. It should also facilitate the aggregation of assets for disposal.

This method is for use for low-value goods and services, for which bids and auctions are not appropriate; instead, a list of sources of supply is used for such purchases. This level of purchasing is expected to account for the bulk of the volume of transactions.

2.4.5 E-Payments System

This module facilitates online payments for the suppliers for the goods/service procured through the e-Procurement system by the public procurement entities.All payments in the procurement process should ideally be handled electronically. This includes payments made by Bidders to the government and contract payments from the government to Suppliers. Throughout the procurement process, there are payments to be made by suppliers and government, which when handled manually, are inefficient. When e-Payment is fully implemented, the following payment types will be electronically handled in the e-Procurement system:

a. Receipt of bidding document purchase fees and user registration fees and decided by the government.
b. Payment to contractors for delivering the works/goods/services.
c. Receipt and management of electronic Performance Bank Guarantee.
d. Other fees for value added services from the e-Procurement Portal.

From the outset of implementation, the receipt of registration fees / transaction fees and the receipt and refund of bid and performance securities should be handled electronically. Payments made through direct debit or by credit / debit cards might facilitate this.

In the e-GP system, state and commercial banks also becomes strategic users to collect fees, make payments and transfers, and provide service for the bidders on granting guarantees and securities. For any financial transaction related to e-Procurement, bidders uses bank service. Bid and Performance Securities should be prepared by banks with the negotiation with the bidders, and the banks itself submit, update and manage the guarantee information in the system.

A central pooling account can be set up in a principal bank to electronically handle the registration / transaction fee receipts (non-refundable) and securities and their refunds. The selected bank can be required to integrate its e-Payments solutions with the e-Procurement system. There should be provision for contractors to transact such funds through a set of banking instruments approved and specified such as:

a. Credit card / purchase card / debit card
b. Internet Banking
c. Electronic Funds Transfer (EFT)
d. Over the Counter.

The e-Payment system design should ensure that vendors are not required to open an account with a particular bank and they may receive and make payment in whichever bank they have their accounts. Other modes may also be considered provided that the following requirements can be met without manual intervention:

a. Payment acknowledgement: A unique irrefutable reference number is generated as acknowledgement for the payments made by contractors.
b. Payment reconciliation: The reconciliation process reconciles the payment received in the central pooling account with that specific service request for which the payment was made (using the reference number for the service request).
c. Payment timelines: The e-Procurement system should be able to ascertain that the payments have been received, within a reasonable period of time (maximum 2 working days).

A pre-requisite for electronic contract payments should be interoperability between the financial system and the e-Procurement system. Initially, e-Procurement system shall

provide functional dashboard to the banks and financial institutions, which are ready to provide e-Payment services under the e-Procurement system. Banks shall collect and manage fees for user registration, bidding document download, lodging complaints, also issue and manage bid security to Bidders and keep the original bid security in custody until PDEs request banks to release.

2.4.6 IFMS Interface

Figure 1 shows an interface with the Integrated Financial Management System (IFMS). The interoperability of the e-Procurement system with other management systems is an important part of gaining full benefits from the technology. There are clearly close relationships between procurement activities and budget management and planning, including terms of progress payments, forward scheduling and contract commitments, inventory, and performance assessment and reporting. The efficient exchange of information should not be obstructed by differences in platforms or standards between the leading government entities. This issue underlines the principle of establishing whole-of-Government Interoperability Framework (GIF).

An efficient interface between the Procurement Management Information System (PMIS) and the IFMS is important because the IFMS system plays an important role in the procurement cycle. The PMIS needs to be accessible with two way data exchange between many buyers and many sellers, and includes the numerous operational considerations and authorisations for procurement that are likely to change on a daily basis.

Deployment of the IFMS currently running on the Oracle E-Business Suite Release 12.1 to give the required functionality both for buyers and suppliers is feasible. It is therefore important to give all potential suppliers of the PMIS a full view of the IFMS system inventory and configuration so that they can exercise creativity in crafting the best solution for a seamless integration.

2.4.7 E-Procurement Management and Monitoring Information System (e-PMMIS)

While the initial portal strategy has often been regarded as the centre-piece of e-Procurement it adds relatively little value until accompanied by the information and management systems associated with procurement workflow, control and budgeting. The work that is undertaken to consolidate the e-PMPMIS is closely related to the management systems for procurement in each agency.

The development of the e-PMPMIS becomes a central part of the e-Procurement agenda with all standardised documents as well as guides and polices, legislation being available online in real-time to the internal management activities of departments and interacting with the workflow processes of contract construction and contract management and with

reporting. E-PMPMIS should be operational from the very beginning of e-GP Implementation.

The PMIS must include workflow and permission / authorisation trails, and all information transactions in any part of the procurement process including contract management, contract planning, and interactions between stakeholders. Standard documents are required – these already exist in Uganda but include substantial analogue elements. A BPR process shall be engaged at an early stage of this programme. There can also be a simple capacity to facilitate demand-aggregation in order to obtain better prices through returns to scale.

Further reduction in public procurement expenditure can be achieved by integrating Inventory Management systems with the e-PMPMIS so that, for example, while inventory may be decentralized, this should not mean that its management should not be coordinated – there should be scope to identify stock surpluses in one part of a ministry before reordering takes place in another part of the same government. All important events and data will be linked to the Audit log module and e-PMPMIS for analyses, reporting and performance assessments.

2.4.8 Workflow Management System

The Workflow Management System contains the workflow engine in its core and workflow rules stored in an Authority register. All the procuring entities modules will have an intelligent link with the workflow engine. The workflow automation module handles the flow of documents while preparing a tender, or a contract. The authorised personnel should use a workflow module for transferring draft tender documents and other documents through the document approval processes in each procuring entity with comments/ changes, and to seek approvals. All the activities in the workflow will be stored in an audit log. Workflow activities will be based on an Authority Register, which stores the user permissions to carry out authorised procurement activities. If a user lacks authority to perform an activity, the workflow engine will automatically refer the activity to a higher authority.

Audit trails of all user activities under the defined workflow shall facilitate the accountability of the users, officers and others which carrying out procurements using e-Procurement system. Audit trails could be assessed by the authorized users for system audit to ensure smooth operation of e-procurement system and its functions, and also could be shared with the court, auditor general and other relevant authorities with proper authority and purpose of access certified by the government.

2.4.9 E-Contract Management System

The processes involved between the issuance of a work order or contract and completion of the work are handled electronically in the contract management module, which is a

sub-system of the workflow management system. With the contract management module, a government agency is able to maintain an overview of the works in progress, goods supplied, any contract variations, and services rendered. Once part of a contract is completed, then payment to the supplier is more quickly arranged and transacted. The system will have automated bring-ups according to the contract schedule. These bring-ups will trigger quality and delivery verifications, bank transfers, and any re-scheduling of the bring-ups. When in place for a period of time, the system also collects a repository of knowledge that can be used to measure the performance of a contractor as well as the performance of procuring entities in public procurement. Contractor ratings, debarment, de-listing, dispute management and other functionalities can also be linked. Contract Management functions should be started from the very beginning of e-Tendering. The system will also have the following capacities:

a. **Contract Variations** – to record and publish price variations to the awarded price per line item or quantity purchased. A full audit trail of the contract and price variations is recorded.
b. **Contract Extension** – the system should manage the contract extension process. Many contracts are let for an initial period with the option to exercise extensions for further periods. The system should provide an early warning report of contracts that are due to complete their current term. There can also be an automated report to show multiple extensions of the contract (this may arise for legitimate reasons, or may reflect poor practice).
c. **Contract Cancellation** – the system should manage the contract cancellation process and maintain an evidence trail for future review and legal proceedings.

2.4.10 Reporting and Analysis

Importantly, the e-PMMIS is essential for comprehensive spend analyses, which should be undertaken monthly or quarterly or at least annually on a departmental/ministerial and whole-of-government basis. Spend analyses reviews what is bought, who are the buyers, and the transaction values, volumes and trends. This analysis provides the basis for the implementation business case and a list of baseline measures from which Key Performance Indicators can be developed. Areas of such analysis should be flexible by user but can be guided by the PPDA[4] and could include:

a. Analysis of attainment of e-Procurement Strategic objectives by a set of well defined performance indicators.
b. Procurement Performance of PDEs through a set of indicators classified to cover all areas of core principles of good governance in public procurement (Efficiency, accountability, value for money, Equity, Fraud and Corruption Control, compliance, etc.)
c. Transaction analysis - the number & value of transactions.
d. Requisitioning activity - identification of the main buyers within an agency

[4]Automatic reporting to the PPDA can be included

e. Supplier analysis - the number of transactions per supplier
f. Off-contract spending – the number of suppliers used for the provision of similar goods/services, and if a local and/or central contract is in place for specific supply.
g. Priority adoption lists – for users and suppliers, and timescales for their adoption.
h. Payments – the current payment methods.
i. Payment errors – a measure of potential cost savings.
j. Late interest payments – a measure of potential cost savings.

Although a consistent architecture applies, some e-PMMIS functionalities need to be readily customised department by department because they reach into mainstream management delegations and processes. These and other requirements are addressed in Figure 5, which provides a guide to the scope and modules of the e-PMMIS.

2.4.11 Help Desk

The Help Desk module provides the entire e-procurement system with consistent advice, user-friendly graphics, site navigation, content presentation, localization and context-based help. It is essential that the Help Desk is closely familiar with procurement in Uganda, and is not simply a technical function. It should also provide user manuals, videos and FAQs for assisting users on using the e-procurement system efficiently. For Uganda the Help Desk is de facto a primary training function.

It is essential that the PPDA have a good understanding of the functionality for each of these in the system, otherwise Uganda will be acquiring functionality that may be incongruent with the current regulatory framework. The systems also need to be able to interoperate with other databases and relevant government services such as business registries, the IFMS, E-tax, and other systems within the financial sector like banks. As the primary access mechanism for the e-Procurement services and systems will be via the Internet, users within the public sector will require access to Internet/Government secure intranet to participate in e-Procurement. The Internet quality of service should be within reach in most circumstances required by e-Procurement- Uganda has sufficient infrastructure for major functions (not reverse auctions), including via mobile phone/ tablet technology for major centres.

2.4.12 Procurement Frameworks

E-procurement has the capacity to change some of the traditional procurement modalities, and the PPDA needs to gain a good understanding of this and regulate accordingly. One of the major changes in procurement framework would be the introduction of e-Framework Agreements.

a. e-Framework Agreement

the report on the Procurement Performance Measurement System (PPMS) for pilot and lot I (60) PDEs FY 2011/12 about the procurement performance indicators underscored the needs of strategic procurements like the Framework Agreement.
According to the report, a total of 1,594 framework contracts were signed in the financial year 2011/12. Framework contracts reduce lead procurement times and increase efficiency in delivery of services. Therefore all Entities should have at least one framework contract. The framework contracts represent a total value of UGX. 38,845,413,440, this represents a percentage of 2.21% of the total value of all contracts entered into by the PDEs.

The PPDA Act and Regulations provide for seven methods of procurement. The highest number of procurements in the financial year 2011/12 was under micro procurement, which represented 74.6% of the total number of procurements. In the 2010/11 FY micro procurements represented about 67.3% of the total number of contracts. In terms of value the total value of all micro procurements was UGX 12,686,426,408 representing 1.1% of the total value of contracts.

Currently the total number of procurements under micro procurement is high given the fact that micro procurement is a non-competitive method of procurement. Micro procurements can be decreased through use of strategic competitive method of procurement – the framework contracts, which are entered into after a competitive method of procurement. According to the report, the framework contracts entered into the PPMS system represent only 7.86% of the total number of contracts. An increase in the percentage of framework contracts will lead to a decrease in number of micro procurements.

Potential savings from the implementation of e-Procurement have been estimated to be in the range of 5-8%5 of the procurement value. When combined with the greater procurement coordination and management information and control that are facilitated by e-procurement costs have been reported to range between 5% and 20%. The increase in competition from e-Procurement may yield substantial savings, through providing greater visibility and ease of access to the government market. If right combination of procurement methods applied using e-Procurement, it can yield not only the benefit of savings but also significantly in efficiency, optimized use of public resources, and standardization in procurement across the government agencies. Framework Agreement conducted and managed electronically adds significant contribution to that aspect of strategic procurements for the government and its taxpayer citizens. While most of the PDEs in Uganda experienced in some forms of framework agreement based procurement, initiative of e-Procurement through the introduction of e-Framework

[5]OECD/DAC (2003). Mainstreaming the Procurement Function into the Public Expenditure Policy and Effectiveness Dialogue (OECD/DAC). World Bank Roundtable, Paris, 22-23 January. [On-line]. Available at www.oecd.org

Agreement (e-FA) would demonstrate the quick gains to stimulate the implementation of full-fledged e-Procurement. The e-FA contributes to the substantial cost savings, efficiency gain and standardizing price and processes across the government starting with the procurement of common goods.

b. E-Catalogues

e-Catalogues plays very important role in e-Procurement. E-Catalogues are built under the classifiers and identifiers. Classifiers for goods, works and services are required for e-Procurement as well as for budget organizations. Classification codes are required to allow analyses to roll-up data into summary form for reporting and analysis. For example, a financial report may present procurement expenditure in terms of ten broad categories of items, such as Fuel, IT, vehicles, etc. Thousands of line items are summarized and drilled into in as much detail as necessary. The United Nations Standard Products and Services Code® (UNSPSC®) and the Common Procurement Vocabulary (CPV) are two most widely used catalogue classification standards in e-procurement systems in different countries. Countries use the classification standards most appropriate for the country in-line with the country context.

Economic Classifier is different from Classifiers for Goods, Works and Services. Economic Classifiers are used for management of budgeting, planning, financial auditing, and account keeping of procurement expenses, and are required for tracking the budget allocated for specific procurement, requesting release of fund from the authority (from Ministry of Finance), and keeping the accounts for auditing purposes. Economic Codes Classifiers are usually prepared by Ministry of finance and published in gazette for common use by all in the countries.

In e-Procurement systems, e-catalogue is required for all of its processes, i.e. bidders choose their category of business while registration, procuring entities use e-catalogue for preparing bidding documents (especially preparing BOM, BOQ) in all of the procurements including framework agreements, preparing requisitions, call-off requests, and reporting purposes to make right strategic procurement. Catalogues are a basic standard for this type of procurement. The process goes from the publication of items online by suppliers, to the electronic selection, order, reception and payments by the purchasing entity.

A framework agreement catalogue should contain the item name, item code, a description of the item, unit of measurement, supplier name, supplier part number (if any), etc. The framework agreement catalogue may allow for differential pricing by further specifying the freight charges (zone-wise), taxes, discounts for specific users, etc. for delivery in various locations.

Catalogues for e-Procurement require the inclusion of classification codes as well as identifier codes. Classification codes are required to allow analyses to roll up data into summary form for reporting and analysis. For example, a financial report may present procurement expenditure in terms of ten broad categories of items, such as IT, vehicles, etc. Thousands of line items are summarised and drilled into in as much detail as necessary. In the paper environment, classification codes are less important simply because there is little opportunity to access, aggregate and analyse the data where this resides in paper format in numerous filing cabinets.

It is also necessary to have a further entry for each item that allows for a common word description as well as a picture. The classifier should be an international code - the Common Procurement Vocabulary (CPV) or the UNSPSC. This helps promote international consistency for trade facilitation and is also consistent with most customs codes. The item classification scheme should uniquely classify works, goods or service procured. It will classify the identified items in a hierarchical format to enable 'drill-down' and 'roll-up' analysis.

Catalogues should allow easy searching through keywords, part numbers as well as standard classification systems. Tracking of purchase orders and requests for information should be possible while purchasing through credit cards and other arrangements should be supported.

3.0 Analytical Tools for Situational Analysis and Readiness Assessment

In the development of this strategic plan, three tools were used for environmental analysis. These included the Political, Economic, Social, Technological, Legal and Environmental (PESTLE) analysis; the Strength, Weakness, Opportunities and Threat (SWOT) analysis; and the Multi-Lateral Donor Organizations (MDB) e-GP Readiness Assessment Survey Questionnaire which was adapted to the Ugandan context.

3.1 PESTLE Analysis

The results of this analysis are shown in Table 1.

Table 1: PESTLE Analysis

Political	Political support and sponsorship; Political stability; Supportive policies such as e-Waste policy, e-Government Policy, IT Policy, etc in place;
Economic	Low inflation rate High interest rate Positive economic growth prospects Stable exchange rate
Social	Young population amenable to the adoption of online services Introduction of computer education in the curriculum for primary and secondary schools; Ongoing programme to build computer labs in all Government-aided schools
Technological	Existence of National Backbone Infrastructure (NBI)
Legal	Cyber laws are in place i.e. Electronic Transactions Act, Electronic Signatures Act and Computer Misuse Act; Existence of PPDA Act 2003 as amended, regulations and guidelines Data Protection and Privacy Bill is being drafted
Environmental	Slow pace in implementation of the e-Waste Policy

3.2 The SWOT Analysis

The SWOT analysis revealed results as presented in Table 2.

Table 2: SWOT Analysis

Strengths	**Weaknesses**
1. Existence of procurement structure across Government 2. Basic office automation to support current procurement process is in place 3. Private sector is enthusiastic about the benefits of e-procurement and is ready to make any necessary minimal improvements to be able to use the system 4. Supportive legislation in place 5. Existence of national backbone infrastructure **6.** The cost of bandwidth has fallen from about USD 600 to USD 300 due to Government intervention	1. Lack of e-Government Interoperability Framework; 2. Delays in the establishment of Government Cloud; 3. Delays in implementation of Public Key Infrastructure (PKI); 4. Lack of data protection and privacy law; 5. Proliferation of standalone system that do not 'talk' to each other; 6. Relatively high cost of internet bandwidth despite Government intervention; 7. Unstable internet connectivity 8. Limited use of internet around the country
Opportunities	**Threats**
1. Proliferation of internet connectivity around the country using mobile technologies; 2. Private sector is predominantly connected to the internet 3. Development partners willing to fund e-GP; 4. Existence of success stories of e-GP; 5. Possibility of funding through PPP; 6. Collaboration with existing or planned initiatives in the East African Region e.g. e-Procurement was identified as one the flagship projects in the EAC e-Government Strategy Framework; 7. Availability of customization e-GP solutions on the market	1. Prospects for cyber attacks 2. Over reliance on donors for funding 3. Possibility of supplier lock-in 4. Reputational risk if the system fails

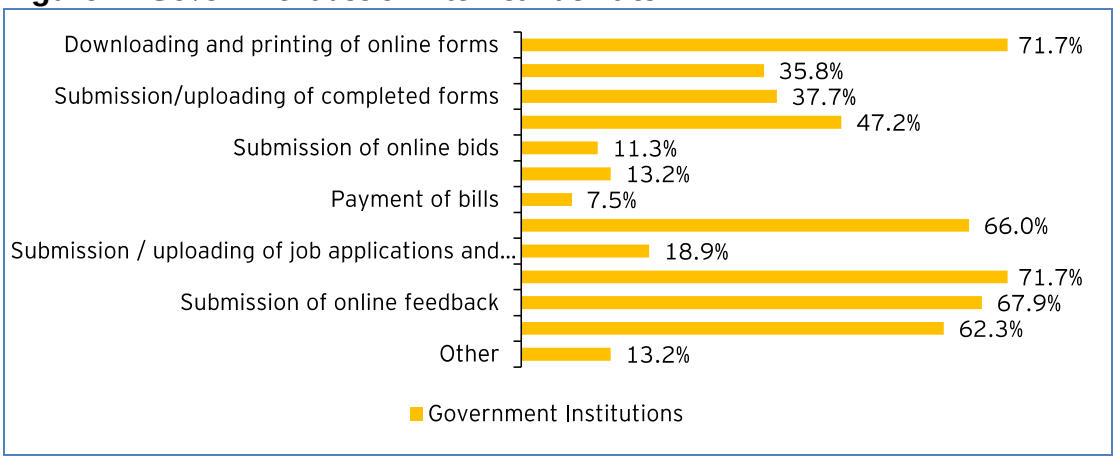
3.3 e-GP Readiness Assessment

A comprehensive Electronic Government Readiness Assessment Survey was undertaken by NITA[6] in 2011-2012, and it presents the ICT picture, especially in terms of ICT infrastructure and connectivity status, of Uganda in general.

This report does not attempt to replicate that study; rather the readiness issues are contextualised in relation to e-procurement. Notably, that Survey reported the overall e-government readiness in Uganda in terms of the following: "97% of respondent government institutions have websites. Access to information regarding the mandate and services provided by each of these institutions is therefore readily available. This reflects that Uganda from an e-Governance development perspective is at the emerging stage, which is the first of the four "online service development" stages. These statistics show a readiness for the creation of a single government information portal allowing for links to all government institutions to be hosted on the portal, so that businesses and citizens can access all government sites via one website". It was also noted that many such sites only have static information, but that this will improve when e-services are more common.

The level of online services provided by government institutions shows significant trends towards technological enablement: "61% of the respondents indicated that they provide services online; of those that provide such services, 72% allow end users to download and print online forms, 72% allow end users to view FAQs, 68% allow submission of online feedback, 47% allow the viewing, downloading and printing of tender documents, 36% allow end users to complete interactive online forms and submit/upload completed forms". Notably there are already some basic e-procurement services in terms of electronic tender documentation as Figure 2 depicts.

Figure 2: Government use of Internet Facilities



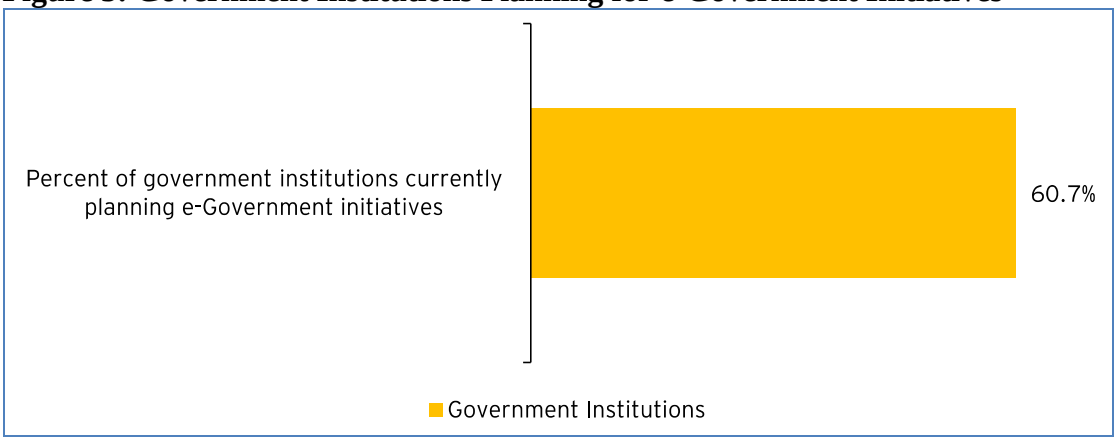
Source: NITA 2012

Significantly, the readiness survey found that "there is a desirable cultural shift within central government institutions to embrace the use of technology to enhance service

[6]Electronic Government Readiness Assessment Survey – NITA December 2012

delivery to businesses and citizens. Further sensitization on the benefits of e-Government within government institutions will go a long way to increasing this statistic to a more desirable percentage".

Figure 3: Government Institutions Planning for e-Government Initiatives



Source: NITA 2012

An additional comment can also apply from international experience in relation to readiness for e-procurement: Public procurement typically accounts for 14-20% of Gross Domestic Product. This means that public procurement is one of the largest, if not the largest, business opportunity in any country. Where governments have engaged with e-procurement, much of the private sector, even where initially ill-prepared, becomes, often within a few months, Internet-enabled and capable users of online business services. This experience[7] is not surprising, and reflects the nature of business behaviour. This means that regardless of how *unready* government suppliers are, they rapidly become adept at this new environment. This also reflects a further conclusion, that regardless of what a survey might find in relation to the priority for e-procurement, it is likely that e-procurement will be the single most transformative initiative in the e-government agenda – few other initiatives can in the space of a few months drive online technologies into 14-20% of the economy. This illustrates one of the important distinctions sometimes made in relation to e-readiness, which is whether a factor is an *enabler* or a *driver* of technological change, and the experience is that e-procurement is a driver of change.

3.4 e-GP Readiness Assessment Survey

Supplementary to the e-Government Readiness, an e-GP Readiness Assessment and a Procurement Performance Benchmark Study (Annex 2) were carried out with the focus on enabling drivers for the success of e-Government Procurement at the instigation of the Ugandan Public Procurement and Disposal Authority (PPDA) and the expert

[7] Australia, Albania, Portugal, Nepal, India

assistance from the World Bank during the November, 2013 – February, 2014. Multi-lateral Donor Organizations (MDB) e-GP Readiness Assessment Survey Questionnaire was updated to capture the Ugandan country context. Twenty-nine (29) respondents, procuring entities, bidding community, private sector associations, government oversight and regulatory agencies and other stakeholders participated in the survey, and also 35 stakeholders (PDEs, Ministries, professional associations, Internet and other service providers, oversight agencies, etc.) were consulted face-to-face.

The e-Procurement Readiness Assessment identifies nine key components for

e-procurement readiness as follows:

(i) Government leadership – Institutional and political support

(ii) Human Resource Management – Training of public officials and bidders

(iii) Planning and Management - Planning and management, Business Process Reengineering

(iv) Policy –e-GP guidelines, interoperability and outcomes

(v) Legislation and Regulation – e-legislation, authentication

(vi) Infrastructure and Web Services – Internet, mobile, and ICT support

(vii) Standards – Government interoperability framework

(viii) Private Sector Integration – User and developer capacities

(ix) Systems – existing e-procurement developments

It is essential to appreciate that key issues within these aspects must be addressed regardless of how e-procurement is developed or acquired.

E-GP Readiness Assessment was based on four levels of readiness as outlined in Table 3.

Table 3: Subcomponent Readiness Levels

Level of Readiness	Description
1	No evidence **that the subcomponent is in place and no evidence it is supported.**
2	Little evidence **that the subcomponent is in place and little or no evidence it is supported.**
3	Some evidence **that the subcomponent is in place and some evidence it is supported.**
4	Adequate evidence **that the subcomponent is in place and adequate evidence it is supported.**

Several building blocks for the implementation of e-Procurement in Uganda are already in place. From discussions with Government officials and other stakeholders in Uganda, numerous observations were made. Stakeholders also provided feedback and recommendations for the implementation of the e-Procurement in the country. Much of this other feedback relates to the transparency objective of e-procurement, and will depend on the leadership in the government and the capacity of the PPDA to assert authority for compliance.

Based on the assessments, Uganda is, in general, ready for e-procurement in both the public and the private sector. The private sector is enthusiastic about the benefits of e-procurement and is ready to make any necessary minimal improvements to be able to use the system.

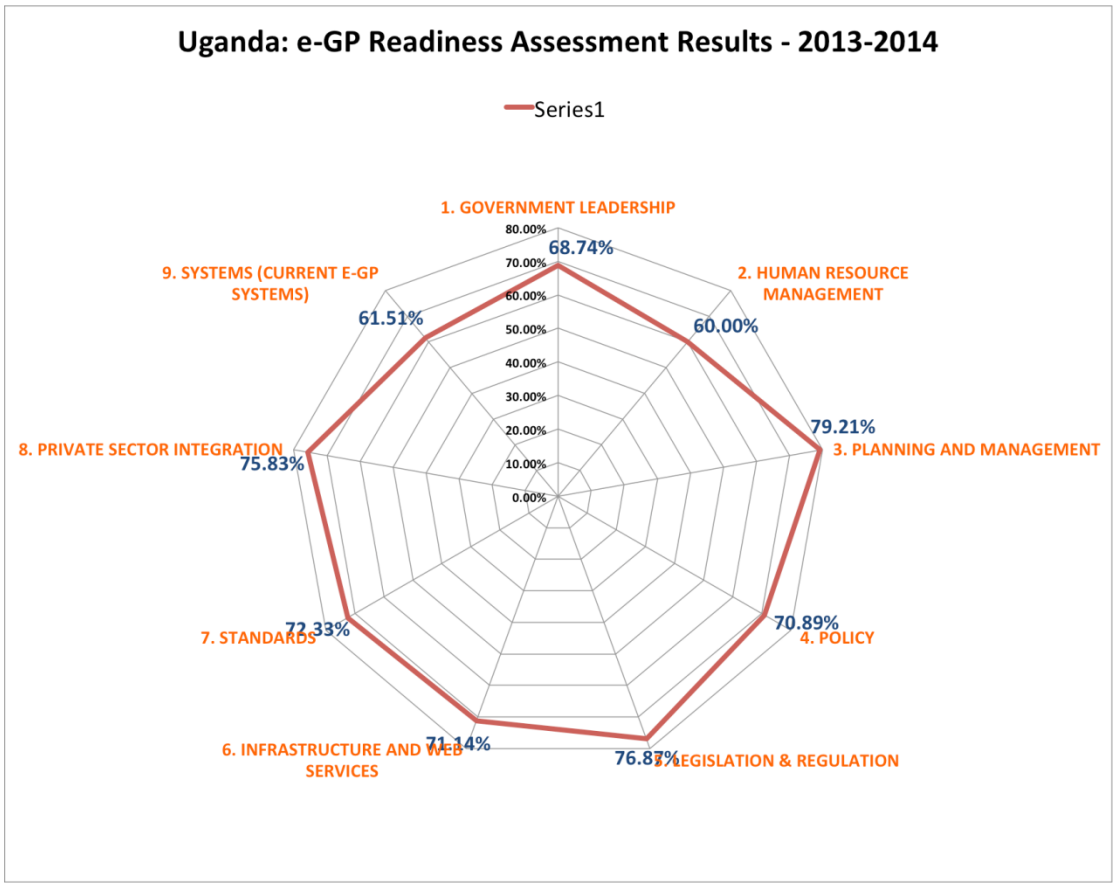
The overall level of e-GP readiness (LoR) on nine (9) components was assessed as satisfactory level of 2.84 (i.e. 70.88%), which is adequate for the introduction of e-GP in Uganda, which are listed in Table 43 and the corresponding relative picture is shown in the radar picture Figure 4.

Table 4: e-GP Readiness Score

No.	e-GP Readiness Components	Score	LoR	Rank
1.	Government Leadership	68.74%	2.75	7
2.	Human Resource Management	60.00%	2.40	9
3.	Planning And Management	79.21%	3.17	1
4.	Policy	70.89%	2.84	6
5.	Legislation & Regulation	76.87%	3.07	2

6.	Infrastructure And Web Services	72.56%	2.90	4
7.	Standards	72.33%	2.89	5
8.	Private Sector Integration	75.83%	3.03	3
9.	Systems (Current E-GP Systems)	61.51%	2.46	8
10.	**Overall readiness score**	**70.88%**	**2.84**	

Figure 4: Uganda e-GP Readiness Assessment Results – 2013-2014



An analysis of each of the components is discussed in the sections below.

3.4.1 Component 1: Government Leadership

Almost all-international experience is that the foremost essential element for e-procurement implementation is government leadership, including high level government endorsement of the e-procurement strategy, a national vision and objectives for e-procurement, and authorisation and resourcing of the implementing lead agency to drive the required changes. The inclusion of local government should be considered

optimal and is recommended, as the e-procurement strategy could be implemented in more innovative manner to address the local needs through the leverage of popular mobile technology and procurement practices. The component scores are shown in Table 5.

Table 5: Readiness Level of Government Leadership

No.	Degree of Readiness	Level of Readiness (LoR)
1	A strategy to modernize procurement and adopt e-GP is in place.	2.52
2	The government is involving a range of key public and private sector and community stakeholders to support procurement management and modernization	3.04
3	The government has nominated a Minister to be responsible for procurement modernization and change	1.71
4	There is a lead agency for procurement that has high level procurement policy, legislative, technical and management expertise and knowledge	3.59
5	The lead agency for procurement (where it exists) is adequately resourced to carry out its functions	2.71
6	The lead agency or Ministry responsible for procurement has an effective working relationship with the Ministry responsible technology and e-Government.	2.96
7	A government lead agency is managing the development and implementation of the e-GP System	2.93
8	The agency responsible for implementation of the e-GP system is the lead procurement agency	3.07
9	The lead agency has the resources to provide for the development, implementation and operations of an e-procurement system.	2.21
Average Level of Readiness		2.75

In Uganda there is significant interest in e-Procurement by businesses, and bureaucracy: procurement based on procedural compliance, lack of professional skills, transparency and accountability are the major perceived issues as expressed in the survey. It is clear that e-GP initiative has high-level support, and it is one the priority areas in the e-Government Master Plan of the National Information Technology Authority – Uganda.

Key observations from the e-GP Readiness Assessment:

a. There is support for e-procurement from Ministry of Finance and the PPDA at the national level. There is already a low level recognition and implementation of elements of e-procurement in procurement regulations and to a lesser extent in procurement practices. Initiatives towards e-Procurement are evident in the website, tender portal, Register of Providers and PPMS operated by PPDA. The

PPDA also is maintaining an online blacklist. UNRA, URA and few others have initiated the automation of the administrative processes of procurement, which clearly shows the interest of public sector as well.

b. The lead agency assembles the technical expertise, as well as ensuring coordination and collaboration across government. The PPDA is taking the lead in the implementation of e-procurement in Uganda and shall be responsible for the day-to-day implementation while the Ministry of Finance Planning and Economic Development shall be responsible for policy and implementation oversight.

The proposed system is to be centrally provided as the National common unitary e-Procurement platform. Separate developments of e-procurement within individual ministries or departments fragment the opportunities and was considered and discarded as fragmented development increases cost and raises risks that systems would not be interoperable or would not have common core data captured that would enable proper performance assessments and financial integration. Fragmentation also exacerbates security risks.

The lead agency for the e-procurement system must be able to lead reform, procurement policy and new methods for procurement that are enabled by e-procurement. PPDA's capacity should be enhanced with a competent project Support Team in order for it to effectively play this role, as the agency is currently not adequately resourced.

It would be desirable for this program and institutional arrangement to be sanctioned with a high level government directive cutting across all Ministerial portfolios with the objectives of:

- Ensuring transparency for all stakeholders;
- Reducing bureaucracy and improving efficiency of the government;
- Creating significant efficiencies and savings for businesses;
- Strengthening trust in government business dealings and improving the investment climate in the country;
- Mandating a government-wide framework for e-Procurement including an integrated system;
- Implementing e-Procurement operating and systems policies (e-GP Guidelines).
- Assigning clear mandate to the PPDA to be accountable for undertaking the management and implementation of the e-GP programme.

3.4.2 Component 2: Human Resources

In most country experiences, computer access and computer training is a crucial component of e-procurement implementation, both for the various layers of government

and for the private sector.In jurisdictions that have successfully adopted e-GP, there have usually been significant government efforts to make provision for the education and training of executives, managers and staff with procurement responsibilities. Education and training should also target private sector. Table 6 below identifies the sub components involved.

Table 6: Readiness Level of Human Resource Management

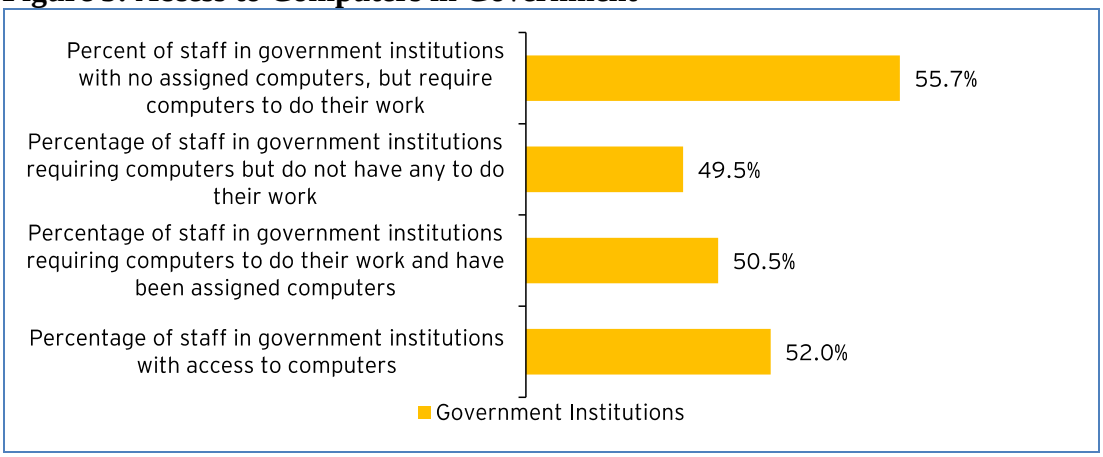
No.	Degree of Readiness	Level of Readiness (LoR)
1	There is an agency or function responsible for human resource management issues in relation to procurement.	2.64
2	An education and training program for executives, managers and staff in strategic and operational procurement is in place	2.25
3	Education and training related to government procurement is available to suppliers	2.37
4	The range of expertise required to plan and implement a strategic implementation plan for e-GP is available to government.	2.44
5	Actions have been taken to review the jobs and responsibilities of procurement managers and staff to ensure a viable career structure is in place and modernisation issues can be addressed.	2.23
6	There is a change management strategy in operation to assist procurement modernisation and change.	2.46
Average Level of Readiness		**2.40**

The survey feedback shown in Table 6suggests that there is a reasonably good level of IT literacy in government, and that staff preparedness for change is moderate, confirming that the strategy for e-procurement will need to be phased and lead by individual champion entities with better preparedness. Training programs are available for the government sector but little for suppliers. There is a low level awareness of the training requirements for this initiative, and ownership of a training strategy is not well defined. Change management is one of the essential activities, which should be started from the very beginning of e-GP programme. The change management could be handled easier as it has happened already in case of the implementation of IFMS in 89 Tier 1 Central Government sites including all ministries, commissions, institutions and projects. Similarly, roll-out of IFMS is planned in remaining central government votes Agencies, Referral Hospitals and Donor Funded Projects (DFPs) during fiscal year 2014/15 and 2015/16. Tier 2 IFMS systems have been implemented at 26 Districts and Municipal Council sites since 2009, and rollout to cover the remaining ones is planned in local. The level of change management carried out under IFMS implementation will be a strong enabler for the implementation of e-procurement in those organizations as the same human resources are also working for the public procurement. The IFMS

implementation program has built required resources in the government entities, so additional resources may not be needed immediately.

For Uganda, there are significant numbers of staff without access to computers in their workplace. The 2012 NITA survey reported that: 'on average 40% of staff in central government institutions has access to the Internet at the office. With 36.3% of staff in central government institutions having an assigned computer, this statistic suggests that all staff in government institutions with assigned computers have access to the Internet at the office; while the additional percentage with access to the Internet represents those with access to computers". Figure 5 illustrates access to computers in Government.

Figure 5: Access to Computers in Government



Source: NITA 2012

While the statistics for access to computers by procurement staff after the implementation of IFMS by the Ministry of Finance, may not be documented, it can be assumed that it is quite high given the fact that transactions on the purchasing module on the IFMS are managed by the respective Heads of Procurement who initiate requisitions. The pattern may vary between procurement officials in the *lead agencies*, versus those in lesser entities. NITA has taken many initiatives towards introducing e-government in Uganda, as a result of which it is expected to increase the IT readiness in public agencies.

The best training approach is through the system itself. The system must be so user-friendly that individuals prefer to use it rather than paper. The great majority of officials and businesses are not interested in the technicalities or power of the system to handle every option or contingency, but rather how the system will add value and simplify their activities. For these users the system should be such as to reduce training requirements rather than increase them.

3.4.3 Component 3: Planning and Management

Planning and management of procurement are governed by consistent legislation, informed procurement planning; standard data collection, processing, analysis, and feedback to national planning, reasonable performance and compliance indicators, standard bidding documents, and standard processes apply in procurement and contract management generally. There is adequate confidence that the procurement processes are well managed in the buying entities, and there is little or no spend analysis undertaken on a whole of government basis because of lack of relevant data collection and its processing.

Table 7: Readiness of Planning and Management

No.	Degree of Readiness	Level of Readiness (LoR)
1	A strategic plan, which sets deadlines, responsibilities and financing for the future development of government procurement (which may also include e-GP at the National and Regional level is available.	2.5
2	Any available plan for procurement has the support and involvement of key public sector, business and community stakeholders.	2.78
3	Clear procurement guidelines and procedures are well documented and easily available to government agencies and suppliers.	3.89
4	The procurement procedures and guidelines are consistently applied across government agencies.	3.71
5	Government agencies or a central agency assesses the feasibility and risks associated with major procurement projects.	3.07
6	Specialised procurement processes are developed for specialised goods, common goods and/or major capital assets.	3.19
7	Standardised and simplified documents are available to support the procurement process.	3.75
8	Contract outcomes related to service delivery and product/service quality are well managed and reported.	3.00
9	Consolidated procurement data on usage, trends, and performance is available to assist government decision-making (e.g. type and cost of consultants used by each government agency).	2.64
10	Management controls for monitoring compliance, probity, quality, risk management, efficiency and the performance of the procurement process in all government agencies is in place.	3.15
Average Level of Readiness		**3.17**

From the survey responses, there was no generally recognised pre-existing e-procurement strategy, but the Steering committee for the e-GP and Technical committees were formed to take these initiatives forward. The scope of e-Procurement is not well understood by several key stakeholders, although several lead agencies have a good level of interest in its key aspects. The PPMS gathers the procurement management information from procuring and disposal entities, but the data coverage is limited to data on usage, trends and performance. Data from PPMS is being used to assist government decision-making.

3.4.4 Component 4: Policy

The development of e-Procurement guidelines gives important direction to the procurement environment and its transformation. Uganda has already got reasonably good procurement legislation. e-Procurement guidelines also should include issues such as value for money, open competition, risk management, local business, job generation, economic development, public procurement performance, and integrity and ethics' full adherence to the procurement principles and national development agenda. The e-Procurement systems development should be also applied to interfacing to other corporate systems through interoperability policy governed by e-Government policy. At the same time procurement is still compliance based, and does not have clear guidelines on performance-based procurements. e-GP Guidelines give broad direction as to what outcomes government procurement should achieve. Results of the survey on policy are shown in Table 8.

Table 8: Readiness Level of Policy

No.	Degree of Readiness	Level of Readiness (LoR)
1	Procurement policies have been developed to achieve a range of outcomes in government procurement including 1) to 4).	3.29
2	Effectiveness of government procurement (e.g. value for money and transparency).	3.44
3	The purchase of specific goods and services (e.g. IT goods and services, environmental sustainability).	3.09
4	Business efficiency and development, small business issues, and regional economic development	2.83
5	Development of e-procurement systems using open architecture and software and common standards.	2.00
6	Procurement policy entity is available with authority to recommend change.	3.22
7	Procurement policies are readily available and supported by education programs and expert advice.	2.81
8	Procurement policy is linked to policies on e-Commerce, e-Government and industry development.	2.19

9	Procurement Policies are focused on performance and outcomes rather than procedure.	2.65
Average Level of Readiness		2.84

3.4.5 Component 5: Legislation and Regulation

Existing legislation in Uganda is adequate and supportive of e-procurement. Procurement policy related issues are the responsibility of the Ministry of Finance. The PPDA as the regulator for public procurement is adequately carrying out its mandate, and also the PPDA possesses the mandate to standardize procurement processes, functions, and prepare required Standard Bidding Documents (SBDs), classification standard of procurement goods, works and services, and framework for procurement monitoring.

New procurement methods, particularly framework agreements, are opened up by e-procurement that greatly simplify procurement functions and should act as an attractor towards greater use of this medium by government buying entities. The PPDA may require clarifying about the framework arrangements through user manual or guidelines. It is important therefore for the PPDA to develop an understanding and related guidelines of these issues.

Table 9: Readiness Level of Legislation and Regulation

No.	Degree of Readiness	Level of Readiness (LoR)
1	Specific procurement legislation exists for the existing procurement environment.	3.59
2	Specific legislation has been enacted to support the requirements of e-procurement (e.g. use of electronic documents).	2.31
3	Specific legislation is in place to link procurement law and practice with the requirements of international trade agreements.	2.72
4	An independent agency or agencies (Regulator) with clear, enforceable powers to regulate both the procurement policy and legislation and processes.	3.57
5	The regulator(s) is sufficiently resourced to carry out its role.	3.04
6	The government has comprehensive procurement information to assist the management of its procurement function.	3.22
7	The government has given an agency responsibility for setting standards for the national and international operation of the procurement function (e.g. item codes).	3.08
8	Some form of accountability monitoring is applied to agencies with devolved responsibilities for government procurement.	3.33
9	Procurement Laws and regulations are able to be changed in response to developments in technology and e-GP.	2.81

Average Level of Readiness	3.07

Uganda has some reasonable procurement law and e-signatures law. In many countries, e-signatures legislation is often a major barrier to implementation especially if it requires digital certificates combined with electronic documents. Survey responses do not strongly perceive the legislation to be an obstruction to e-procurement (see Table 9).Overall, the existing legislation in Uganda is broadly able to facilitate e-procurement.
In case of Uganda, the Ugandan e-signatures legislation can be adequate for e-procurement in Uganda. The Ugandan E-Transactions Act is consistent with good practice and should require no amendments to facilitate e-procurement. The exact use of e-Signature and process of authentication in case of e-Procurement transactions should be articulated in e-GP Guidelines.

3.4.6 Component 6: Infrastructure and Web Services

Uganda has coverage of network infrastructure with good accessibility that is quite adequate to support most functions of e-procurement. This coverage is mainly of major cities and is considered to be affordable in major cities.

Table 10: Readiness of Infrastructure and Web Services

No.	Degree of Readiness	Level of Readiness (LoR)
1	Internet networks are in place that can service major city users.	3.14
2	Internet networks (perhaps via kiosks or internet centres) are in place that can service regional users.	2.70
3	Buyers and suppliers have reasonable access to telecommunications systems	3.33
4	Available bandwidth is sufficient to provide internet service at sufficient quality and speed to support e-Government Procurements.	2.74
5	Buyers and suppliers can easily access Internet services in the major cities	3.22
6	Buyers and suppliers can easily access Internet services in regional areas.	2.86
7	Internet access is reasonably affordable in comparison to adjacent countries.	2.74
8	Maintenance and repair services are available to users at reasonable cost and time delays.	2.48
9	Sufficient expertise is available to government and suppliers to support and maintain the infrastructure and their software and hardware	2.65
10	Online procurements are already being operated by private sector	2.58

Average Level of Readiness	2.85

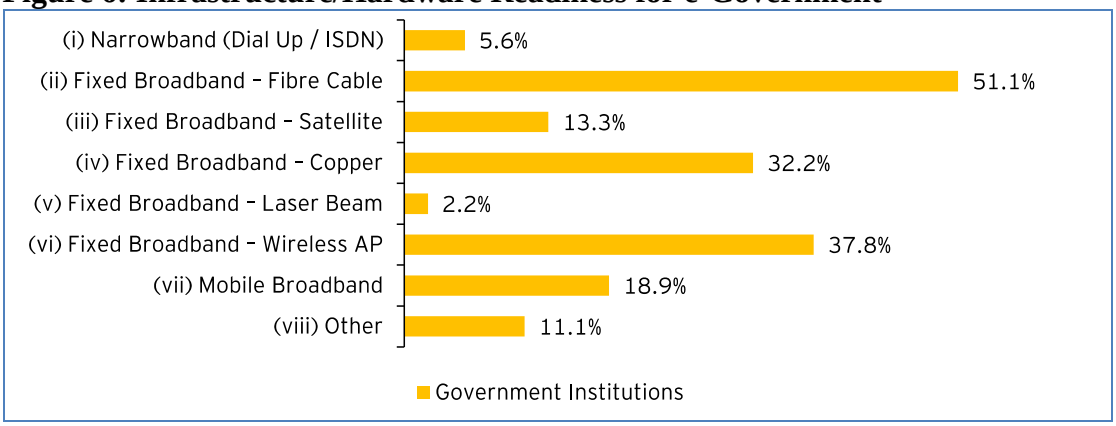
The Government of Uganda, through the National Information Technology Authority of Uganda (NITA-U) is implementing the National Data Transmission Backbone Infrastructure and e-Government Infrastructure Project (NBI/EGI) whose major aims are to connect all major towns within the country onto an Optical Fibre Cable based Network and to connect Ministries and Government Departments onto the e-Government Network.

The NBI/EGI is composed of two components, the National Data Transmission Infrastructure (NBI) and the e-Government Infrastructure (EGI). The NBI component is designed to connect all major towns onto the National Backbone through the laying of Optical Fibre cable. Under the NBI phase I and II, already 22 towns have been connected. Under Phase III, five (5) more towns will be linked. The EGI component is intended to connect all Ministries and some Government Departments into an e-Government Network to provide services such as videoconferencing, Data center service, Data and Voice communication. Already 17 MDAs have been connected with the e-Government Infrastructure under phase II (EGI). Of these about 10 are active in providing connectivity to the IFMS.

It is recognized that the implementation of IFMS in government entities has been successful and it has significantly improved the ICT infrastructure for the financial and procurement activities. For the private sector, even at national level, UCC, NITA and other private sector associations have established regional Internet Kiosks, and business centers. Procurement Units have computers on which the web based PPMS is deployed. Given that there are signs of an increasingly internet and mobile savvy population, it is important to ensure that the key functionalities of the system can be delivered via mobile phones, tablets and Internet cafes. Cellular network coverage in Uganda is 100%. If these delivery platforms are not the primary methods for the e-Procurement then it will represent a barrier to entry. Telecommunications infrastructure is mostly of secondary importance for e-Procurement – in many countries e-Procurement operates with relatively low coverage and connection speeds. In many cases, applications have been designed to operate by mobile phones or via Internet cafes. Of greater importance than the telecommunications network are the interoperability and middleware standards policies – the Government Interoperability Framework - with which e-procurement technical standards should be interoperable.

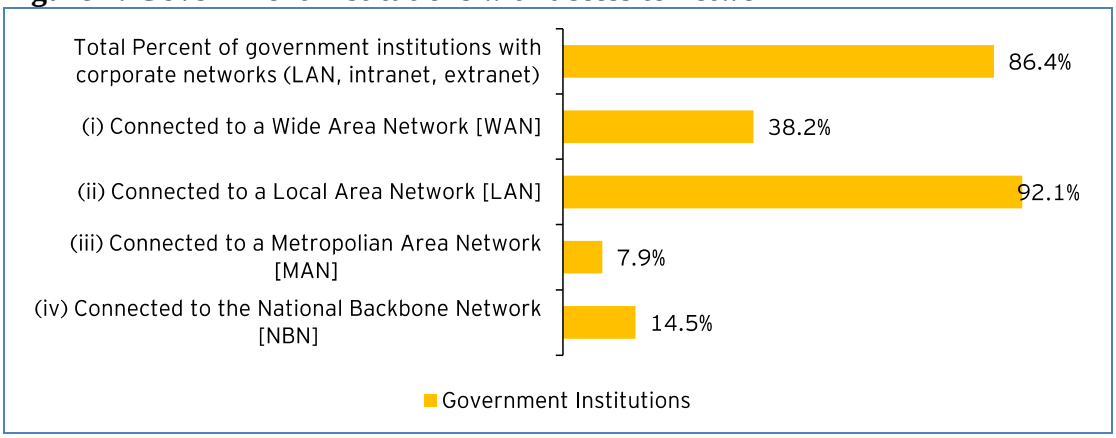
The NITA Readiness Survey has made a range of observations regarding the infrastructure / hardware for e-government. For example, the following graphs show the levels and characteristics of government connectivity:

Figure 6: Infrastructure/Hardware Readiness for e-Government



Source: NITA 2012

Figure 7: Government Institutions with access to network

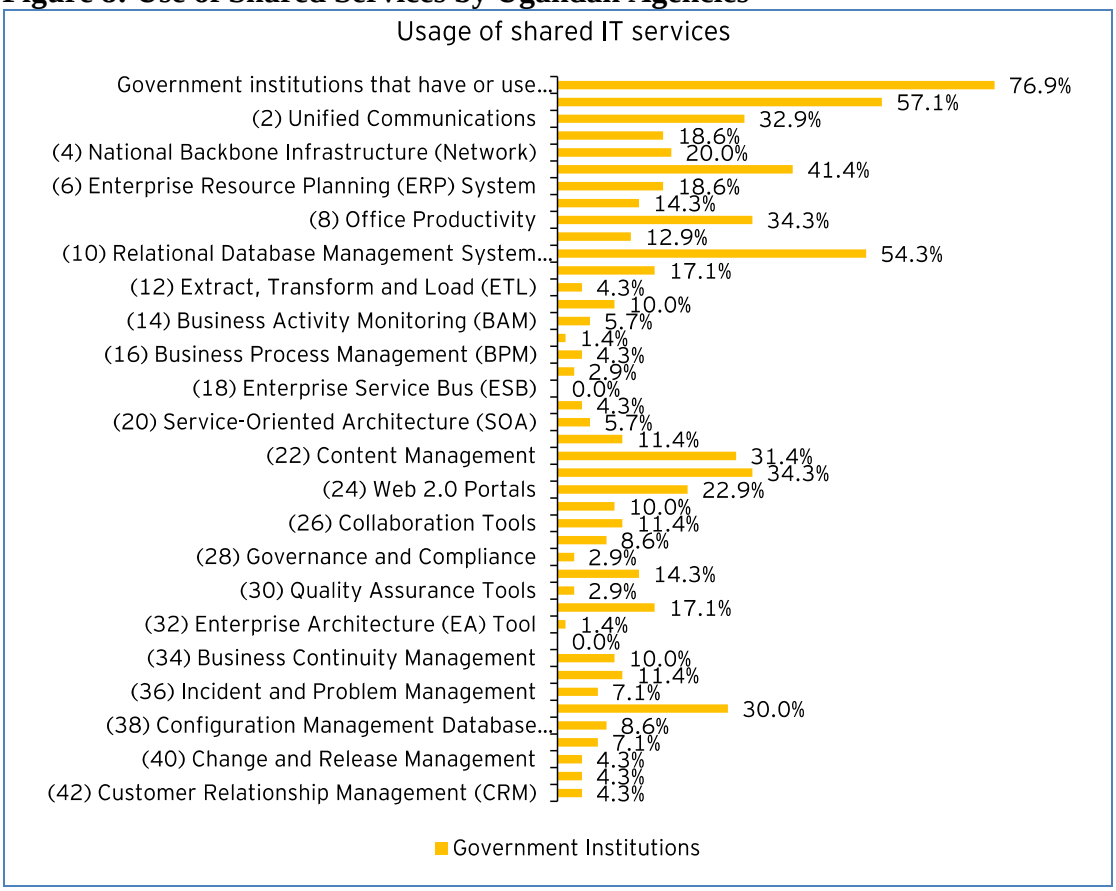


Source: NITA 2012

The survey has also made some observations regarding the use of cloud computing-based services. For example, 52% of respondents were not using cloud computing-based services and had no plans to do so in the next12 months in 2012. Of the 7% of respondents using cloud computing, none had approved policies for cloud computing Central Government institutions appear to be cautious in their adoption of cloud computing-based services due to the lack of clarity around security implications and measures. With the NBI/EGI Data Center now in place, it would be important for the government to determine the possibility of developing cloud based shared services for government institutions in order to enhance commonality in software used and to save hard drive space on individual computers which would enhance the performance of computers within government and enable a common environment for implementing e- Government initiatives".

The context of the foregoing conclusion on cloud computing is that the government, with the Data Centre in place, should make greater use of cloud-based shared services. This context implies that the development of private (rather than public) cloud services should be considered. For e-procurement, this is strongly supported by this Implementation Roadmap, which recommends the development of a unitary national solution, to be shared by all government entities, rather than fragmented services developed entity by entity.

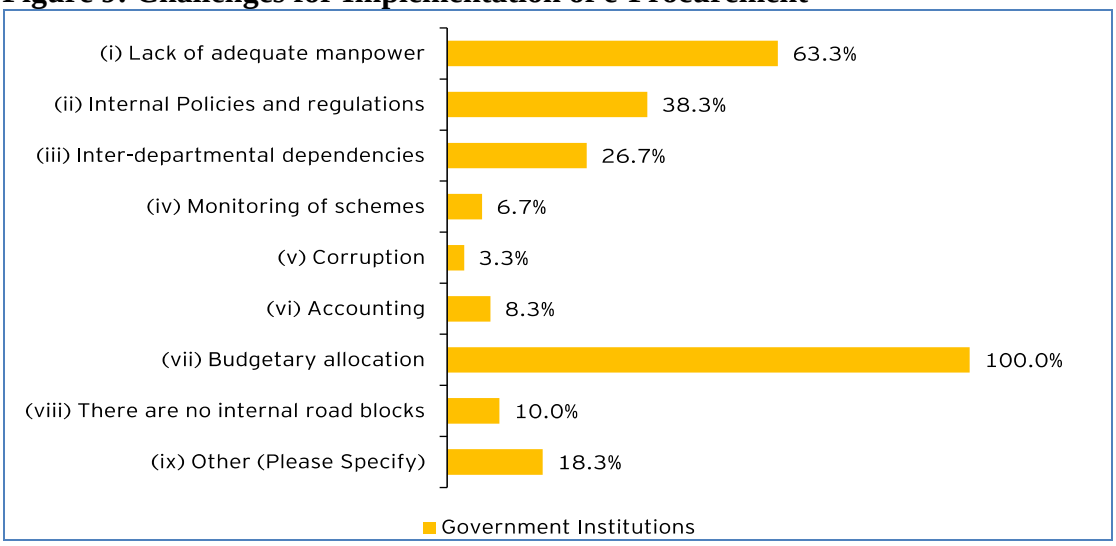
Figure 8: Use of Shared Services by Ugandan Agencies



Source: NITA 2012

The NITA Readiness Survey has made many related observations. However, the challenges for e-procurement are relatively narrow. The survey addressed internal road-blocks in implementing E-Governance initiatives, as shown in the graph below, most of which are discussed in this Implementation Roadmap for the case of e-procurement.

Figure 9: Challenges for Implementation of e-Procurement



Source: NITA 2012

Budgetary allocation is ranked the strongest internal roadblock followed by lack of adequate manpower among others while corruption is ranked the weakest internal roadblock.

3.4.7 Component 7: Standards

Of greater importance than the telecommunications network are the interoperability and middleware standards. A policy directive should require that application developments be in terms of consistent technical standards (e.g. SOA). There is no properly articulated Government Interoperability Framework (GIF) in Uganda already in place, but NITA has published standard technical specifications for the hardware and system software to be applied across the government. It is still not clear that any policy has been effectively communicated or driven with authority, and non-compliance has been an issue, compounded by IT capacity problems in many entities. In some countries, IT expenditure is not permitted without sign-off from a lead IT agency regarding consistency of the proposed expenditure with government GIF and architecture policies.

Regardless, there is poor integration of the network into government management practices, reflecting the effective lack of a GIF. Symptomatic of this is the common usage of hotmail / Gmail / yahoo business addresses amongst government officials, use of different application and database environments for key software systems running in the government. E-Procurement system is expected to interoperate with the IFMS (based on Oracle, National ID, Business registration and trade, Tax and VAT System seamlessly. Tier 2 IFMS running in local governments also should be interfaced with

e-Procurement system to facilitate budgeting,purchasing and commitment control, revenue management, and payment/payables.Survey results are shown in Table 11.

Table 11: Readiness Level of Standards

No.	Degree of Readiness	Level of Readiness (LoR)
1	The government has nominated an agency with responsibility and authority for developing and implementing standards.	3.50
2	The government is collaborating with the private sector and/or standards bodies in attempting to set standards.	2.96
3	The existing legislation is technology neutral rather than technology based.	3.05
4	The government has supported the provision of open standards	2.71
5	The Government is collaborating with its international trading partners to achieve interoperability.	2.62
6	Common management and process standards are being applied to procurement (e.g. UN Standard Product and Services Code or any other catalogue standard).	2.79
7	Standards related to the procurement systems (where applicable) have been put in place.	3.09
8	Government Interoperability Framework already exists and followed across the government applications	2.42
Average Level of Readiness		2.89

Uganda does not have common catalogue of goods, works and services for procurement. The PPDA conducted a survey on common use items in 2013[8]. Diversified use of common items suggests the urgent requirement of common catalogue with standard specifications in the country to streamline the procurement of common goods, works and services. The e-Catalogues plays very important role in e-Procurement. e-Catalogues are built under the classifiers and identifiers. Classifiers for goods, works and services are required for e-Procurement as well as for budget organizations. Classification codes are required to allow analyses to roll-up data into summary form for reporting and analysis. For example, a financial report may present procurement expenditure in terms of ten broad categories of items, such as Fuel, IT, vehicles, etc. Thousands of line items are summarised and drilled into in as much detail as necessary. The United Nations Standard Products and Services Code® (UNSPSC®) and the Common Procurement Vocabulary (CPV) are two most widely used catalogue classification standards in e-procurement systems in different countries. Countries use the classification standards most appropriate for the country in-line with the country context.

[8]Report on the e-Framework Agreement Background Study, February, 2013, PPDA.

Economic Classifier is different from Classifiers for Goods, Works and Services. Economic Classifiers are used for management of budgeting, planning, financial auditing, and account keeping of procurement expenses, and are required for tracking the budget allocated for specific procurement, requesting release of fund from the authority (from Ministry of Finance), and keeping the accounts for auditing purposes. Economic Codes Classifiers are usually prepared by Ministry of finance and published in gazette for common use by all in the countries.

In e-Procurement systems, e-catalogue is required for all of its processes, i.e. bidders choose their category of business while registration, procuring entities use e-catalogue for preparing bidding documents (especially preparing BOM, BOQ) in all of the procurements including framework agreements, preparing requisitions, call-off requests, and reporting purposes to make right strategic procurement.

3.4.8 Component 8: Private Sector Integration

The propensity for the private sector to adopt online technologies has already been commented. Within the private sector, there is extensive capability amongst larger businesses in the use of computers in their businesses, and showed enthusiasm for the introduction of e-procurement. This is inconsistent with perceptions of some government officials, who often consider the private sector to be unprepared, but quite consistent with experiences in many other countries.

Survey results reveal that the private sector is not adequately consulted for procurement issues. Similarly, private sectors are left behind in case of upgrading their skills in procurement; there is very limited training facility available for the private sector. The PPDA has been registering the providers through the *Register of Providers*, but the data should capture the comprehensive profile of the providers, so that the procurement opportunities could be targeted based on their skills, availability, and capacity.

E-procurement generally receives positive support from the business community *provided* it is presented in a user-friendly fashion. The only reservation to this is that there may be resistance arising from system security credibility and enablement of e-Procurement for the SMEs. The e-Procurement system should promote transparency and help support enhancing private sector trust to government and procurement system. Private sector support is very important in the success of e-Procurement system implementation, adaptation and sustainability. Private sector organizations including Private Sector Foundation (PSF) have shown their interest working with PPDA for the implementation and provide support on the private sector adaptation of e-Procurement system.

Table 12: Readiness Level of Private Sector Integration

No.	Degree of Readiness	Level of Readiness (LoR)
1	There is a high level of consultation between government and business on procurement issues.	2.77
2	Information and advice on procurement policy, regulation and process is freely available to the private sector.	3.23
3	Feedback to suppliers on unsuccessful bids is available.	3.30
4	An independent appeal mechanism is in place.	3.78
5	Costs to participate in government procurement are acceptable to big and small business	3.23
6	The private sector has confidence in the integrity, fairness, consistency, transparency and efficiency of the existing system.	3.04
7	Existing procurement processes do not disadvantage small businesses.	2.91
8	Government is providing strategies to assist business to develop catalogues and access to its infrastructure and systems.	2.57
9	Government is harmonising its approach to procurement with its regional and international trading partners to assist supplier access.	2.95
10	Training and education on procurement is readily available to all suppliers	2.57
11	Some private entities already have experience with international or national e-procurement marketplaces.	3.00
Average Level of Readiness		3.03

3.4.9 Component 9: Systems (Current e-GP Systems)

New developments need to recognize existing initiatives to establish e-procurement systems. The PPDA has got its corporate website, and also a separate tender portal developed to publish information on tender opportunities, Contract awards, blacklisting and other information. In addition, there is a register of providers (ROP). The tender portal (www.ppda.go.ug/tenderportal) and the ROP (www.ppdaproviders.ug) interface with the Procuring and Disposing Entities as well as the service providers. Currently, these two sites running independently which leads to duplication of some services.

There have been some fragmented developments that have occurred in the vacuum of unitary national e-GP system developments. Three entities in the Ugandan public sector, namely the *Uganda Revenue Authority (URA), Uganda National Roads Authority (UNRA), and National Water and Sewerage Corporation Authority (NWSA),* have initiated the automation of administrative processes of procurement.

These developments need to be reconciled with the need for a national e-procurement system, instead of multiple agencies developing their own systems. These developments are few and do not represent a major break-out of independent developments that would compromise an effective system. However, there is some urgency to proceed with a unitary system to pre-empt any trend towards fragmentation, which would be difficult to unwind, but the unitary national e-Procurement system should gradually incorporate the interest of these organizations and bring them into the National e-Procurement system.
The survey results in Table 13 indicate that there are divergent views on many aspects such as whether businesses can currently register online. This suggests that current functionalities are not well known or understood.

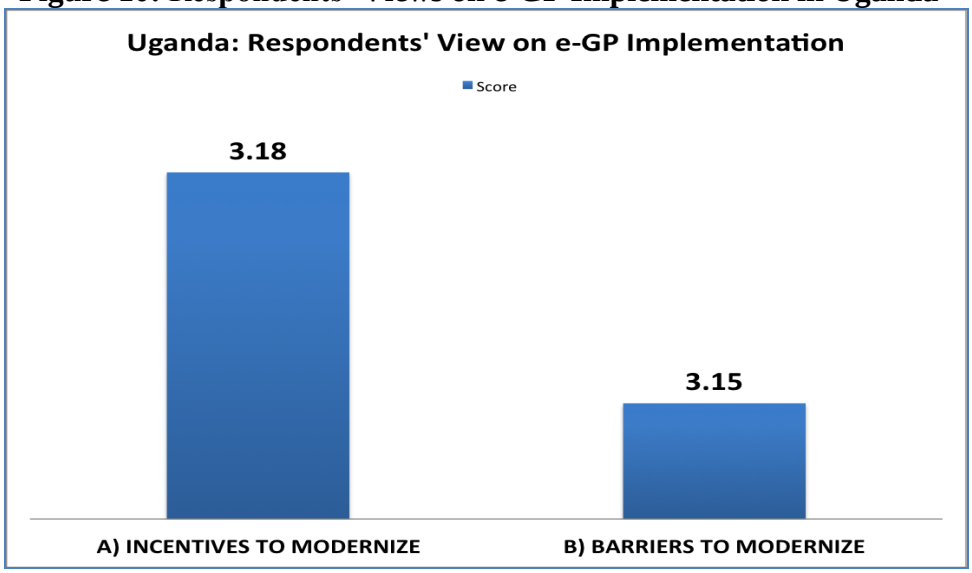
Table 13: Readiness Level of Systems

No.	Degree of Readiness	Level of Readiness (LoR)
1	The system is web based and is a unitary system for the whole of government.	2.41
2	Information on all procurement opportunities is advertised on a single internet site.	2.12
3	No proprietary hardware or software is required by suppliers to use the system other than a web browser and access to the Internet.	2.33
4	Buyers and suppliers can register for business online.	2.50
5	Buyer and supplier registries are linked to the system.	2.20
6	The system has a search engine to assist users to find information.	2.57
7	Procurement legislation, policies and guidelines, and information on how to use the system, can be accessed online	2.64
8	There is open access to all bidding other process documents	2.93
9	Electronic download of bidding documents is available	3.00
10	Electronic upload of supplier proposal documents is available	2.14
11	The system provides for security and privacy of information.	1.92
12	Common inter-operability and procurement standards are applied to all system	2.50
13	The System can easily be extended to new procurement methods like e-Government Procurement (e-GP)	2.71
Average Level of Readiness		2.85

3.5 Respondents' View on e-GP Implementation

Respondents' view on the success of e-GP System was divided, which seems natural at the early stage of discussions on the interventions of new technologies. The opinion on success and failure were almost 50-50.

Figure 10: Respondents' Views on e-GP Implementation in Uganda



This Strategic Plan for the e-Government Procurement (e-GP) is intended to be the basis on which the e-GP System implementation and operations will be managed during the period 2014 to 2017.

International experience has varied widely with, in some cases, e-procurement being rolled out and adopted quickly, while in other cases rollout has been followed by only slow take-up. The overall value of e-Procurement in the EU in 2011 is estimated between €170 billion (low range estimate) to €203 billion (high range estimate)[9], corresponding to a take-up of between 10.6% and 11.7%.Across the European Union (EU) as a whole, the development and application of e-Procurement has been slow and in 2010 was estimated to account for less than 5% of total procurement by value.

Features of e-procurement are broadly similar between countries, differing in terms of the detail of national laws, customs, the supplier-base, and institutional arrangements. Some international experiences from which e-Procurement lessons and best and worst practices may be identified are summarized in the Table 14 below.

Table 14: International Experiences with e-Procurement

Country	Policy Objectives	System	Components
Australia (State governments)	Efficiency Compliance Competition Transparency	Single unitary system in each State, with separate IFMS interface, open standards, web based, multiple buyer / supplier entities	E-advertising E-bidding, E-quoting, E-purchasing Integrated PMIS for workflow management, control and analyses
UK[3]	Transparency Efficiency	Multiple systems, open standards, web based, multiple buyer / supplier entities	Procurement Plans, E-advertising, E-bidding, E-quoting Management information systems
Portugal[10]	Efficiency, Transparency	Single national system with central agency and decentralized buying	E-advertising E-bidding, E-quoting, E-tenders E-auctions E-framework agreements
Chile	Transparency Efficiency Competition	Single National unitary system, with separate IFMS interface, open	E-advertising E-bidding, E-quoting,

[9]Study on EU e-procurement Measurement and Benchmarking, IDC report

[10]Additional examples of benefits in the EU are shown in the Annex - Business Case

		standards, web based, multiple buyer / supplier entities	E-purchasing Integrated PMIS for workflow management, control and analyses, Contract management
India (State governments)	Transparency Efficiency Development	Single unitary system in each State, with separate IFMS interface, open standards, web based, multiple buyer / supplier entities	E-advertising E-bidding, E-quoting, E-purchasing Integrated PMIS for workflow management, control and analyses
Kazakhstan	Efficiency	Single National unitary system, with separate IFMS interface, partly developed, multiple buyer / supplier entities	Procurement Plan, E-Quoting E-Bidding E-R/Auctions Integrated PMIS for workflow management, control and analyses
Korea	Transparency Efficiency Economic development Policy development	Single national unitary system, with separate IFMS interface, open standards, web based, multiple buyer / supplier entities	E-advertising E-bidding, E-quoting, E-R/Auctions E-purchasing Integrated PMIS for workflow management, control and analyses, Integration with other supporting government systems
Singapore	Efficiency Compliance Competition	Single national unitary system, with separate IFMS interface, open standards, web based, multiple buyer / supplier entities	E-advertising E-bidding, E-quoting, E-purchasing Integrated PMIS for workflow management, control and analyses

Each EU Member States has developed e-Procurement through its own specific approach and path, and each country is progressing in a different way and with a different speed towards the adoption of e-Procurement. However the development models used have been summarized as indicated below.

The first development model is driven by central purchasing bodies (CPB), managing public centralized e-Procurement platforms. The focus of this model is on the organization of centralized procurements with the use of Framework Agreements. Of these, Austria, Germany, Italy, France and Spain have a national platform dedicated to e-ordering and the management of centralized purchases. Germany and Italy have e-marketplaces dedicated to National Contracting Authorities. This model represents a

strong driver of the adoption of e-Procurement but with a somewhat limited scope: first of all, it addresses a limited population of Contracting Authorities (CA) (either national, or federal/regional if the platform is federal or regional). Second, it covers only the typologies of goods and services responding to simple, common needs. Take-up is limited to the typologies of purchases covered by active framework agreements, which in many cases do not include public works.

The second development model (centralized national platforms) is a variation of the previous one, and is typical of smaller MS. It is based on the centralization of all procurements in a single, centralized public national platform. This is the model chosen by Cyprus, Malta, Lithuania, Luxemburg (available since end of 2012), Estonia, Latvia and Ireland. Malta and Estonia moved to mandatory regulation in 2013, while Latvia imposes the use of the platform to national authorities for centralized procurements. Greece has chosen this model and is developing its national platform, which is not yet active.

The third development model (centralized regional platforms) is driven by federal/regional e-Procurement platforms centralizing procurements in their area of influence, with different levels of mandatory regulation. This model duplicates the national/centralized platform model at regional/federal level. It exists in federal states (Austria, Belgium, Germany, and Spain) and in highly regionalized states such as Italy and Finland.

The fourth development model (voluntary based on private solutions) is the voluntary/decentralized one, where the central government does not necessarily develop a centralized national platform but fosters the multiplication of private platforms in the country and provides centralized support and consulting. This is clearly the case of Sweden, Denmark and the UK.

The fifth development model, the Eastern European model: The Eastern European MS Czech Republic, Hungary, Lithuania, Romania and Slovakia represent another variation on these models. They all have limited or no private platforms, centralized national public platforms in a development stage, but have adopted take-up targets and favour the implementation of centralized procurements through FA. Their national public platforms tend to offer e-auctions and post-award services, particularly e-ordering/e-catalogues, which seem to be easier to adopt by their public administrations. In Slovakia and Romania there is frequent use of e-auctions, rather than e-Submissions. Romania's policies favour the use of e-auction in the last phase of procurements, even if they were carried out with traditional means for the previous phase. Poland has a mixed model, with a national platform, voluntary e-Submission, but also a strong focus on e-auctions. Analysis of content of e-procurement indicates that different countries globally have different components as depicted in the Table 14 above.

4.1 Key Learning Points

4.1.1 Fees and Charges Can Strongly Affect the Rate of Acceptance

One of the most contentious areas of application is in relation to fees and charges. It is common in some countries for fees to be attached to online registration, downloading of bidding documents, and digital certificates, etc. In these cases the preferred position is for document download to incur no charge while bid submission may incur a fee – this is a superior approach because it does not weaken transparency (anyone can access the bid documents for no charge), and it probably does not inhibit competition, recognising that suppliers incur costs for paper bid submissions regardless.

In the case of Kazakhstan and some other central Asian and East European countries there is a policy for accelerating e-procurement rollout and so registration is free, and digital certificates are also free as are all of the processes – this is the preferred approach, especially where e-procurement is new to a jurisdiction and acceptance needs to be created. Fees if charged for the use of an e-Procurement system should be reasonable in order not to deter bidders.

4.1.2 Parallel Systems Slow the Rate of Implementation

A common issue is where the government keeps the door open to paper bids even while it is implementing e-procurement. This is a two edged requirement. It addresses the need for suppliers to adjust and also addresses circumstances where connectivity is weak. However it also slows the rate of take-up of the systems and can defeat the purpose of promoting e-procurement. In Uganda the implementation of the IFMS demonstrated that running parallel systems slows uptake. While the pilot phase IFMS implementation maintained parallel manual systems, uptake was slower and this was addressed in the rollout both in Ministries and later Local Governments with the introduction of the 2nd Tier IFMS. The case for parallel bidding options, i.e. hard copy submission and electronic submission, should be carefully examined and at best discouraged in one bidding process. At the beginning, Procuring entities may indicate the procurements to be carried out electronically or manually in the Annual Procurement Plan. Even the data records of manual process procurements should be captured in e-PMIS to enable aggregated national procurement data collection, processing, analysis and dissemination for informed procurement related decisions on policy and practices.

Uganda will have to adopt a phased implementation approach hence the traditional system may have to be in place for some time. It should also be noted that not all items can be subjected to e-procurement from the time of introduction.

4.1.3 PKI-Digital Signatures Dramatically Delay Acceptance

A common problem is in relation to digital certificates. Users generally do not understand these, and resent having to pay a fee or go through the application process. PKI does not represent a technical standard, rather it is a product. The process also has its vulnerabilities. There is a commercial relationship between the digital certificate

provider and the government provider. Governments usually want some strong standards around the provision of digital certificates, such that they often like to license these players. In the case of some international arrangements there may be an agreement that the e-procurement system operate seamlessly between all parties to the agreement - there is a similar requirement for members within the EU. One approach is for the member states of these market entities to adopt a policy of mutual recognition, such that a government provider who has a digital certificate from one jurisdiction automatically has recognition in all member states, without need to re-register. This is not satisfactory because the concept behind competitive bidding procedure is that it be open to bidders from almost everywhere, rather than just within a closed trading bloc. It is recommended that alternative solutions from reputable international commercial certification authorities also be recognised. New developments are underway, targeted at cross border trade that are technology neutral and simple for implementation.

4.1.4 E-Procurement Should be Via a Central Unitary System

In some instances e-procurement has not proceeded in a coordinated fashion across a government but is fragmented between ministries or departments. A centralized coordinated approach is greatly superior in terms of cost, efficiency and interoperability. For example fragmentation multiplies security costs and weaknesses, and also requires suppliers to deal with multiple sites. A unitary system for all government entities is to be strongly preferred. Sometimes it is claimed that this conflicts with decentralisation policies: this is not correct – e-procurement is a technical and management infrastructure.

4.1.5 Policy reform is influential in e-procurement implementation

Definitive policy that mandates common purchasing strategies, documents and methods provides the best results. Overall, an integrated approach between whole-of-government and e-procurement initiatives can create an effective set of policies and standards minimize competing priorities and objectives and promote balanced benefits for all stakeholders. E-procurement strategies in many countries are developed by a centralized agency within a broader policy scope and were integrated as part of an overall change management strategy. As a result there was a greater potential for innovation within these governments, demonstrating that public governance and innovation are not conflicting approaches.

4.1.6 Servicing e-procurement requires skilled resources

E-procurement requires a multi functional team with members who can

- Understand public procurement policies and practices
- Benchmark and re-engineer business processes
- Understand business requirements and the technical capabilities
- Coordinate change management

- Develop training programmes

Most of these issues are ordinary business / management issues that do not require technical expertise to consider and should not require technical expertise to form competent policy decisions regarding. The following considerations for implementation have included:

- Will the government endorse, empower and resource a lead agency to implement e-Procurement? This should be considered in terms of the Institutional arrangements for procurement in the government.
- What expertise / professional development is required and from where will this come, and how will this be maintained?
- Does e-Procurement mean centralisation of procurement?
- Does e-Procurement belong as part of the Financial Management Information System?
- Should the e-Procurement system be acquired as an off-the-shelf system?
- What will the system cost to install and maintain and can this be justified? See Business Case for e-Procurement.
- Should a paper-based system be maintained in parallel to the e-Procurement system?
- Should the e-Procurement system interoperate with the tax system and other such systems in government?
- Who should arrange for training for e-Procurement and what does this involve?
- Is new legislation required?
- What are the security risks?

Most of these issues are ordinary business / management issues that do not require technical expertise to consider and should not require technical expertise to form competent policy decisions regarding.

CHAPTER 5: THE E-GP STRATEGY

5.1 Vision Statement

The vision statement for the adoption of e-Government Procurement in Uganda is as follows:

An e-procurement system that promotes value for money and good governance in public procurement.

5.2 Mission Statement

The mission statement is as follows:

To attain transparency, accountability, efficiency and competition in public procurement by leveraging Information and Communications Technologies.

5.3 Strategic Objectives

The e-Procurement is expected to facilitate in the following aspects of procurement:

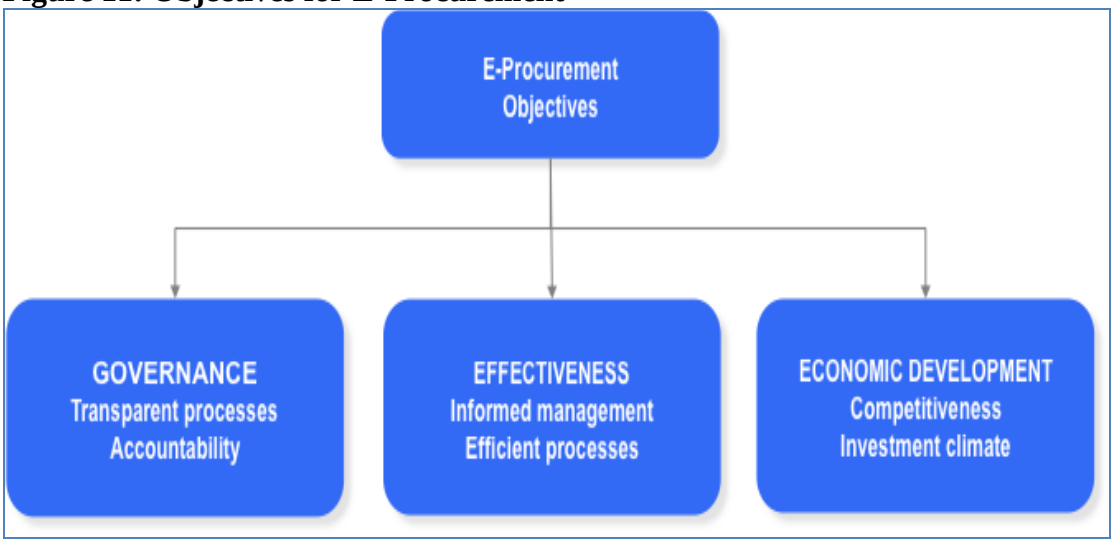
a) To enhance decision-making capabilities of procurement officials by providing meaningful and comprehensive procurement information
b) To improve financial planning and budgeting
c) To improve transparency and accountability in procurement procedures and practices
d) To bring efficiency throughout the procurement process and minimize the procurement cycle time.
e) To foster and encourage participation and promote competition among suppliers.
f) To harness economies of scale through demand aggregation and maximize value for money in government procurement.
g) To enhance citizens' and businesses' confidence in the government procurement process and the utilization of public funds.
h) To ensure confidentiality, integrity and authenticity of all transactions and data between the procurement entities and the suppliers, and
i) To enhance the management of procurement records and information

The objectives are summarised as three broad and high-level objectives as shown in Figure 4: namely

i. Improved Governance through enhanced transparency and accountability.
ii. Effectiveness through management information and efficient processes.

iii. Economic development through competitiveness and improved investment climate.

Figure 11: Objectives for E-Procurement



These objectives form the basis of the ***performance indicators*** set out below. Several aspects of these benefits are also set out in other terms and partially quantified in the business case.

Following consultations with the public and private sector stakeholders, the strategic objectives and indicators presented in Table 15wereagreed on.

Table 15: Strategic Objectives, Key Performance Indicators and Targets

No.	Strategic Objectives	Key Objectives	Key Performance Indicators	Targets
1.	Improved Governance (Transparent Processes and Accountability)	1.1 To improve service delivery to Procuring and Disposal Entities (PDEs), suppliers and users involved in government procurement.	User, Suppliers and Procuring and Disposal Entities (PDEs) Satisfaction Levels	Currently the baseline for the satisfaction is "not known". The specific targets aimed at achieving "Very Satisfied" by the end of 2018/19.
		1.2 To develop a more integrated approach to procurement across government agencies and	Percentage of all procurement contracts through e-Procurement to be procured under cross-agency e-Framework	25% of all procurement contracts through e-Procurement in these areas to be procured under cross-agency e-Framework Agreements by the end of FY2018/19 for

No.	Strategic Objectives	Key Objectives	Key Performance Indicators	Targets
		sectors.	Agreements	agencies with e-procurement.
		1.3 To improve transparency in procurement	Procurement Integrity rating for agencies with e-procurement	Public perception of transparency of procurement for agencies with e-procurement improves from x to by as indicated through Integrity perception surveys
2.	Effectiveness (Informed management, efficient processes)	2.1 To minimize the transaction costs associated with procurement of goods, works and services calculated separately through standardization, streamlining and the use of e-Procurement in the procurement processes within, and where appropriate across agencies and sectors.	Average Transaction Cost for goods, works (repairs and maintenance) and services Transaction cost for capital works	20% reduction in average transaction costs by the end of 2018/19. Reduction in transaction cost equal to 0.25% of total capital works expenditure by the end of 2018/19.
		2.2 To maximize value for money for Ugandan government expenditure by enhancing the buying power of the public sector.	Percentage of total expenditure on Goods, works (repairs and maintenance) and Services procured under e-Procurement contract Unit Cost Reduction for Goods, works (repairs and maintenance) and	50% of expenditure on Goods works (repairs and maintenance) and Services procured under e-Procurement contracts by the end of 2017/18. Average Unit Cost Reduction of 5% for Goods, works (repairs and maintenance) and

No.	Strategic Objectives	Key Objectives	Key Performance Indicators	Targets
			Services under e-Procurement contracts Fee levels for tender management and contract supervision and administration for capital works under e-Procurement	Services by the end of 2017/18. Reduction of 0.5% of total capital works expenditure under e-Procurement by the end of 2018/19.
		2.3 To improve the auditability of public procurement expenditures.	Improvement in audit ratings in procurement transactions Timely completion of procurement audits Increase in audit coverage	(i) % increase in the number of procurements audited that are rated satisfactory (ii) Reduction in the audit cycle time by x% Increase in the audit coverage by x%
		2.4 To make effective use of human resources in the procurement process.	Reduction in Transaction Cost Savings for Goods, Works and Services as a measure of the human resources being freed up for deployment elsewhere	20% reduction in average transaction costs by the end of 2018/19.
3.	Economic Development (Competitiveness, investment climate)	3.1 To promote competition among suppliers while maintaining reliable sources of supply.	Percentage of Tenders and Award Notices Published in e-Procurement Portal by the agencies registered in e-Procurement System.	80% by end of 2018/19.

No.	Strategic Objectives	Key Objectives	Key Performance Indicators	Targets
			The average number of bids received	Increase of 50% in bid numbers by the end of 2018/19.
		3.2 To be progressive in the adoption of e-Procurement.	Percentage of Tender Competitions carried out electronically	90% of open tenders carried out electronically by the end of year three years (by the end of 2018). This should be measured by comparing the number of tender competitions carried out electronically with the total number of tender notices published.
			Percentage of Tenders and award notices advertised and tender documentation published electronically	80% of all tenders and award notices advertised, and tender documentation published, on the e-procurement web site by the end of two years (by the end of 2017/18). This should be measured by requiring PDEs to report annually to PPDA on the total number of tenders issued and awarded.
			Percentage of Expenditure on common Goods and Services supported by	10% of expenditure on Goods and services should be supported by e-Framework Agreements by the end

No.	Strategic Objectives	Key Objectives	Key Performance Indicators	Targets
			e-Framework Agreements Percentage of Payments made through e-Payments under e-Procurement System	of 2018/19. 80% of all procurement transactions paid through the e-Payment mechanism provided by the e-Procurement System by the end of year Three (by the end of 2018/19).

There are both financial and non-financial targets estimated. Targets and key performance indicators are defined for each of the strategic objectives identified.

5.4 Defining Key Objectives

5.4.1 Improved Governance (Transparent Processes, Accountability)

a. To improve service levels to procuring entities, suppliers and users involved in government procurement.

User, Suppliers and Procuring and Disposal Entities (PDEs) Satisfaction Levels are the recommended indicators of the progress being made in the attainment of this objective. User, supplier and Procuring and Disposal Entities (PDEs) satisfaction levels are not currently monitored at a national level. It is recommended that satisfaction levels are measured at the end of each contract completion in terms of *quality, responsiveness, professionalism, specific expertise, adherence to schedule, and adherence to cost;* and reported through annual satisfaction report. Highest score for satisfaction could be 16.

Table 16: Satisfaction Levels

Satisfaction Description	Satisfaction Level
Extremely Satisfied	6
Very Satisfied	5
Somewhat Satisfied	4
Somewhat Dis-satisfied	3
Very Dis-satisfied	2
Extremely Dis-satisfied	1

In the absence of any reliable baseline satisfaction levels for users, suppliers and PDEs,

it is not appropriate to set quantified targets at this time. However once the baseline is established, the specific targets aimed at achieving annual increases in satisfaction levels should be set. ***Such type of satisfaction survey can be conducted through e-procurement system itself at the end of each of the contract conclusion event.***

b. To develop a more integrated approach to procurement across government PDEs and sectors.

The indicator shows the progress being made in the attainment of this objective while carrying out procurements on goods, works and services procured under cross-PDE framework agreements.

It is proposed that a target is set of 25% of all procurement contracts through e-Procurement in these areas to be procured under cross-agency e-Framework Agreements by the end of 2017/18. This should be measured through e-Procurement system on an ongoing basis by each PDE.

5.4.2 Improved Governance (Transparent Processes and Accountability)

a. Effectiveness (Informed management, efficient processes)

To minimize the transaction costs associated with procurement of goods, works and services calculated separately through standardization, streamlining and the use of e-Procurement in the procurement processes within, and where appropriate across agencies and sectors.

Average Transaction Cost is the key indicator of the progress being made in the attainment of this objective.

Average cost per transaction for goods, works and services is calculated as the average cost of processing a purchase order from requisition to payment.

The accurate measurement and realization (i.e. 'cashing in') of transaction cost efficiencies is difficult. It is suggested that movement in the average transaction cost should be tracked via the periodic, statistically based sampling of transaction costs ('requisition to payment' and 'tender preparation to payment') across a range of categories and PDEs.

Industry experience suggests a broad range of possible transaction cost reduction levels arising from the introduction of e-Procurement, varying from less than 10% to in excess of 70%.

The following factors were considered in arriving at a target for the national strategy. Very little proven experience exists upon which to base target savings, and there are grounds for believing that many of the published figures may be over-stated. The potential for savings should theoretically be higher. To maximize value for money for

Ugandan government expenditure by enhancing the buying power of the public sector. The following indicators may represent the progress being made in the attainment of this objective are as follows:

- Percentage of Total Expenditure on Goods, works and services procured under contracts through e-Procurement.
- Level of Unit Cost Reduction achieved as a result of increasing the level of on-contract expenditure both within and across PDEs (Goods, Works and Services).

b. To improve the auditability of public procurement expenditures.

Chronological and context based data availability in e-Procurement system help improve auditability and also significantly reduce the number of audit complaints because of compliance, transparent audit trails, and automated accountability through the e-Procurement System help measure the attainment of this objective.

c. To make effective use of human resources in the procurement process.

Tracking Transaction Cost Savings for Goods, Works and Services as a measure of the human resources being freed up for deployment elsewhere, is the recommended indicator of the progress being made in the attainment of this objective.

5.4.3 Improved Governance (Transparent Processes, Accountability)

a. Economic Development (Competitiveness, investment climate)

i. To promote competition among suppliers while maintaining reliable sources of supply

User and PDE Satisfaction Levels is the recommended indicator of the progress being made in the development of reliable sources of supply.

The recommended indicators of the progress being made in promoting competition in the supply base are:

- Percentage of Tenders and Award Notices Published in e-Procurement Portal.
- User and PDE Satisfaction Levels.
- The average number of bids received?

ii. To be progressive in the adoption of e-procurement.

The indicators of the progress being made in the attainment of this objective are as follows:

- Percentage of Tender Competitions carried out through e-Procurement
- Percentage of Tenders and award notices advertised and tender documentation published electronically
- Percentage of Expenditure on common Goods and Services supported by e-Framework Agreements

- Percentage of Payments made through e-Payments under e-Procurement System

E-Bidding:

- 90% of open tenders carried out electronically by the end of year three years (by the end of 2016). This should be measured by comparing the number of tender competitions carried out electronically with the total number of tender notices published.
- 80% of all tenders and award notices advertised, and tender documentation published, on the e-procurement web site by the end of two years (by the end of 2015). This should be measured by requiring PDEs to report annually to PPDA on the total number of tenders issued and awarded.

E-Framework Agreements:

- 10% of expenditure on Goods and services should be supported by e-Framework Agreements (by the end of 2017/18).

This should be measured by requiring PDEs to report annually to PPDA on the level of Goods and services related expenditure supported by e-Framework Agreements.

E-Payment:

- 80% of all procurement transactions paid through the e-Payment mechanism provided by the e-Procurement System by the end of year three (by the end of 2018/19.).

This should be measured by requiring agencies to report annually to PPDA on the total number of payments and the total number paid electronically.

The targets relate to levels to be achieved by the end of 2017/18, with interim measures along the way. Some of the key targets to be achieved by the end of 2017/18 are summarized here:

- Unit cost reductions of 2.5% of total expenditure on public procurement, arising from aggregation of common use items procurement across procuring entities and introducing e-Framework agreements; Unit cost reductions of 0.5% of total expenditure on capital works arising from savings from efficiency gains through the use of e-Procurement in the tender process and e-contract management;

- Average transaction costs reductions of 10% for general supplies services and works (repair and maintenance) as a result of standardization, business process reengineering and automation of procurement processes through e-Procurement system; Transaction cost related reductions of 0.25% in overall expenditure on

capital works as a result of cost savings in administrative cost in procurement and contract administration;

- 90% of open tenders carried out electronically;
- 80% of payments carried out electronically;
- 10% of all expenditure on supplies and services supported by e-Framework Agreement.

Significant financial benefits, as well as other non-financial benefits will be obtained if these targets are met.

CHAPTER 6: RECOMMENDATIONS FOR THE ESTABLISHMENT OF AN E-PROCUREMENT SYSTEM

Based on the foregoing analyses which take into account the desired e-procurement system, country circumstances, industry practice and international best practices, a number of recommendations are proposed for consideration going forward. These fall largely in six (6) broad categories covering practices, institutional issues, resourcing, and technology, economic and legal spheres. Suffice it to note that these carry implications for wide-ranging aspects of the implementation effort.

In this section these key recommendations for the changes that are needed to bring about the required transformation are outlined.

4.1 Recommendations on Procurement Practices

a. ***Procurement Management Framework****:* The system to be implemented must cover end-to-end procurement processes as prescribed in PPA and regulations, and as outcome of Business Process Reengineering. The system must be able to be scaled up and extended, if required in future.

b. ***Electronic Procurement Approaches****:* The e-Procurement system shall support and provide facility for digitally/electronically signing of all the documents, forms and communications using digital signatures or other alternative methods in absence of PKI based digital signature for the authentication and encryption of data adopted by the Government of Uganda, and ensure secured and authorized transactions in the e-Procurement System.

c. ***Procurement Approach****:* The e-Procurement system shall be possible to implement in modular basis as it is planned to be implemented in a phased manner; initially an e-Tendering, framework agreements, Contract management, e-PMIS and interfacing with readily available external systems as well as common procurement functions, then in later phases e-Auction and e-Reverse Auctions with integration of all procurement modules and interfacing with external systems.

4.2 Recommendations on Institutional Framework

a. ***Organization Design Considerations****:* The e-Procurement system will be hosted centrally at the National Data Center in NITA and secondary hosting in PPDA. All users of the e-Procurement system will access the system by any Internet browser with proper user authorization

b. ***Organizational Structures****:* Steps should be taken to establish a dedicated e-GP Unit within the PPDA organizational structure.

c. ***Integrating Mechanisms****:* A comprehensive Business Process Reengineering (BPR) is carried out before scoping the e-Procurement system and to capture complete set of indicators from the different stages of procurement activities, which will inform procurement compliance, performance, risks, efficiency, and other aspects of procurement practices.

4.3 Recommendations on Resourcing the Model :

a. ***Training****:* A Training programme shall be established by the PPDA in order that procurement officers from departments can be introduced to the systems and be able to walk through the screens. This training would be timed to coincide with rollout for respective departments commencing with the pilot agencies.

b. ***Change Management****:* A change management program shall be designed recognizing that a level of change management has already happened in case of the implementation of the IFMIS, and addressing the expectations of the stakeholders in terms of readiness for the transformation specific to e-procurement.

4.4 Recommendations on Technology

a. ***E-Enabling the Procurement Process****:* The system shall support or shall be possible to configure or customize to comply with the standardized procurement processes of Uganda. Shall provide a comprehensive configuration pages for configuring procurement rules and authority matrix, workflow for e-Procurement system administrator and Procuring entity administrators to set different parameters of specific events in procurement processes, fees, mandatory documents, type of procurement, evaluation methods, bidding method, etc. All changeable parameters shall be possible to configure from the configuration page applicable to all users, only to specific category of users, or ad hoc offers and subscriptions based functional availability as decided by the PPDA.

b. ***e-Procurement Transaction Support and Catalogue Management****:* e-Catalogue preparation function shall be available for PPDA. e-Catalogue shall follow the international standard of Common Procurement Vocabulary (CPV) for the goods and services categorization and additional attributes for identification of items.

c. ***Management Information Systems****:* The e-Procurement System shall support the creation of workflow for specific procurements by Procuring Entities (PE), where the PE can define the stages of process, actor for the task, time for next escalation, allowing possible forward, backward, parallel task delegation, insertion/removal/replacement of stages and actors from the workflow, etc.

d. ***Technology Standards Framework****:*

- The system shall be scalable and be configured or customized to comply with the standardized procurement and functional processes of the PPMO as well as all procurement practices.

- Each user including PPDA, Procuring Entities, Bidders, banks, Solicitor General, Auditors, etc. shall get a separate management and transaction dashboard upon logon for user specific procurement management, but still using the same single database and e-Procurement System platform.
- The e-Procurement System shall support multiple service delivery channels - web, mobile, etc. to accommodate various end user realities in the longer term. The web application shall also work in mobile smart phones.

a. ***Integration Principles****:* The e-Procurement System will be implemented in a phased approach starting the implementation from few pilot agencies. It will be inter-operable with existing and future systems in compliance with the Interoperability Framework issued by NITA.
   - The e-GP system shall be integrated/interfaced with other National systems such as the, e-ID, Business registration and trade, e-Tax and VAT System, e-catalogue. The integration with the IFMS is critical given that a significant part of the procurement cycle currently depends on the IFMS for, amongst others, requisition process, registration of suppliers and the payment of suppliers. Every potential supplier of the e-GP system will be given an opportunity to study the entire procurement cycle and how the IFMS system interfaces with the cycle to ensure that their design has seamless interoperability with the IFMS system.
   - *Solution Principles:* The e-Procurement System Supplier shall install, configure data center hardware, system software, and software as required by the e-Procurement System supplied/customized and commission implementation of the same is in line with the Government's approved plan for the rationalisation of IT services which, inter alia, mandates the following:

     - *Use of the NBI/EGI infrastructure as the primary vehicle for all Government data, Internet and voice services;*
     - *Centralized hosting Services, Data Centre Services and Disaster Recovery Services for Government Applications & Data;*
     - *Establishment of a centrally managed National databank;*
     - *Promotion of Unified Messaging and Collaboration Services (UMCS);*
     - *Consolidation and Bulk licensing of applications and software licenses*

4.5 Recommendations on Economic Factors

a. ***National Policy/ Strategy Formulation****:* The e-Procurement System shall support minimum 10,000 Tenders a year, 10,000 Users, 1,000 concurrent

users. There shall not be any restrictions on creating users, tenders and adding additional Contracting authorizes and users

4.6 Recommendations on the Legal Framework

a. ***Mandate****:* e-Procurement system shall support all procedures under laws of Public Procurement Law - Open domestic and international bidding, restricted domestic and international bidding, Quotation and proposal, direct procurement or disposals, micro procurement or disposals, other methods of procurement or disposal of public assets including framework agreements.

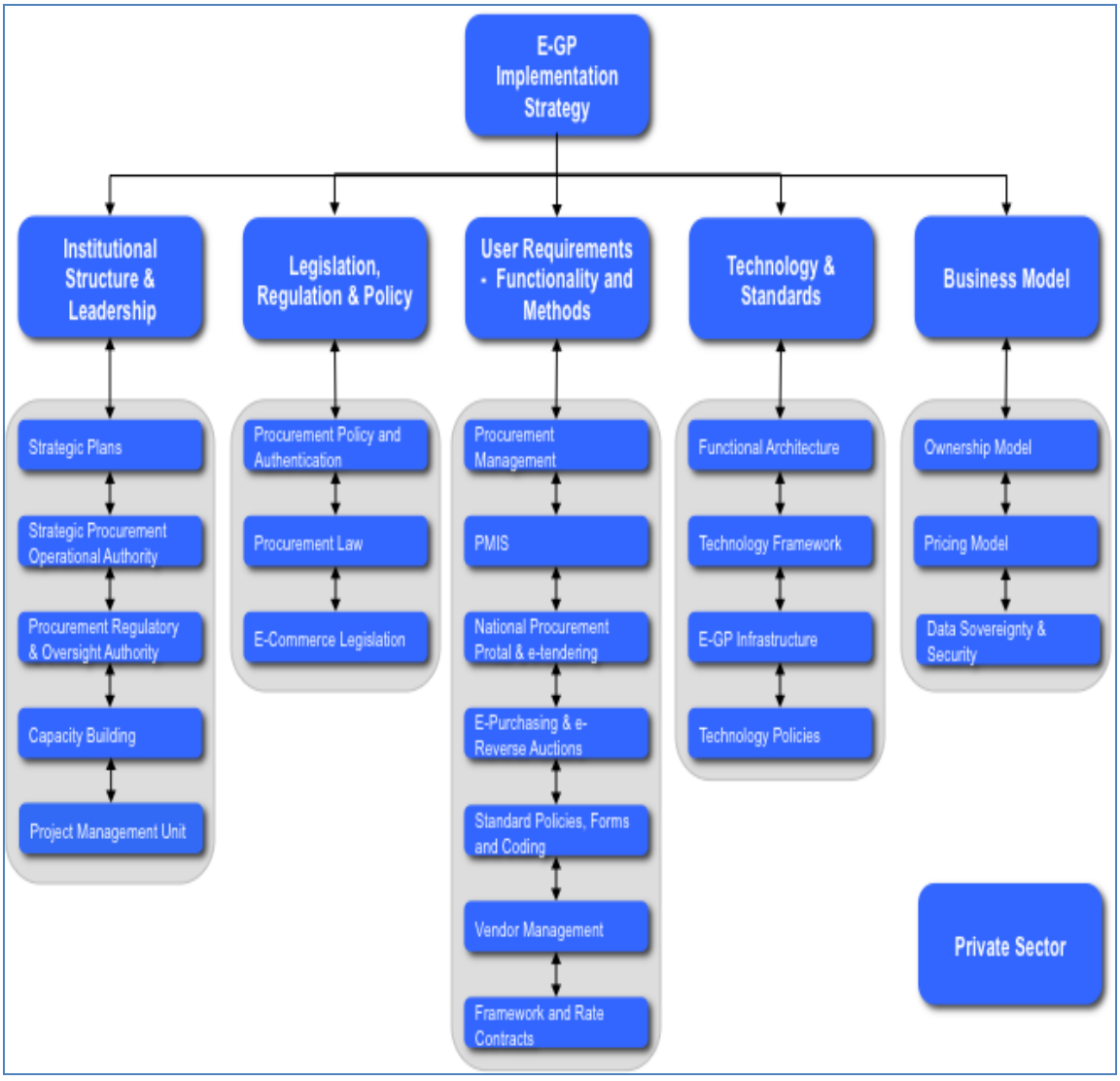
- *Transposition of Amendments to EAC Directives*
- *Review of Agencies' Statutory Basis*
- *Reverse Auctions*
- *Electronic Signatures Directive*
- *Maximising Competition in the Market*
- *Transmission and Receipt of Electronic Communications*

Underlying all the above is the recognition that the e-Procurement reform initiative will involve buy-in and support by the broad range of stakeholders including Top Political/Management, users and suppliers to the objectives and benefits of the National strategy and the associated initiatives. In all ways effort must be made to ensure that they understand, accept and support the reform initiative.

The issues to be addressed for the successful attainment of e-Procurement vision in Uganda and attaining the set strategic objectives are summarised in Figure 5 in terms of institutional, legislative, functional, technical and the business model. These issues apply *regardless* of the source of the e-procurement system and in Project Implementation parlance are referred to as *critical success factors*.

Some of these issues have been identified by the readiness assessment conducted as part of preparing this strategy document. This framework broadly identifies the issues that are relevant to Uganda and that are presented in the figure below.

Figure 12: E-Procurement Development Requirements



7.1 Political Commitment and Sponsorship

The first one is the need for strong political support for and understanding of the reform objectives and implications. Suffice it to note that this has been one of the key reasons for the success of the Uganda Public Financial Management (PFM) reform process.

7.2 Institutional Arrangements and Governance Structures

To maximize the full benefits of the e-GP System, its development ought to take into account the technical, functional and business requirements of the key players and stakeholders in the procurement industry. These include the PPDA, the Procuring and Disposal Entities (PDEs), Suppliers, Regulatory Bodies, Solicitor General, Auditor General, Ministry of Finance, Uganda Revenue Authority, National Information Technology Authority (NITA), etc.

The effective implementation of e-procurement hinges on establishment of appropriate and participatory institutional arrangements and governance structures involving key stakeholders to manage coordination, and policy development. The Governance structures delineating roles and responsibilities of the various institutional players will play a critical role in guiding successful implementation.

Other structures that are critical to the implementation effort include the following:

a. E-procurement Steering Committee (e-PSC): This would comprise executive representatives of key stakeholders to oversee implementation. The e-PSC is a high level organ that maintains the direction and monitors milestones of the programme. It will be chaired by the Deputy Secretary to Treasury and includes representation from key Departments in the Ministry of Finance, the National Information Technology Authority (NITA) and the PPDA. Detailed roles of the PSC are contained in Annex V.

***b. Project Technical Committee (PTC*)**: This would comprise the e-Procurement advocates/champions, IT Specialists from NITA, Procurement Specialists from the PDEs, the Ministry of Justice, and PPDA. Those individuals already engaged in e-procurement developments in Uganda could also be appropriate members. The roles of the committee are carried in Annex V.

c) ***Project Management Unit (PMU):*** The e-Procurement project implementation requires an effective and properly resourced PMU, operating with a properly maintained Risk Management Plan. This organ will manage the e-Procurement project from the incipient stage of system development and implementation through to the phase when e-procurement becomes operational. It is proposed that the PMU is headed by a full time e-Procurement Project Manager, reporting to the Executive Director of PPDA under the oversight of the Project Technical Committee. This will later evolve into an e-GP Unit to

be established in the PPDA as part of restructuring intended to sustainably manage support and rollout of the e-procurement function.

7.3 Legislation and Authentication

Another critical success factor entails getting the basic legislative requirements for e-Procurement right. Currently, legislation has provision for Electronic documents and Electronic signatures.

The primary procurement law explicitly recognises and provides for e-Procurement and also some of the online procurement methodologies such as reverse auctions, and authorises the PPDA to regulate such methods. In case of e-Framework agreements, it can be elaborated in e-GP guidelines.

The legislation also contemplates the use of *PKI-based digital* signatures, and seeks to regulate the machinery supporting these. This allows the user to access and manage e-Procurement by the users themselves from anywhere including cyber cafes without any fee for e-Signature. Use of e-Signature is broadly based on the country context, and clear government policies and governance arrangement of e-Authentication management in public and private sector.

7.4 Business Model for the Ownership, Implementation and Support

It is also important that an appropriate Business model for the ownership, implementation and support is adopted. This is central to control and ownership of government information and information security, as well as identification / ownership of the system by users.

International practices in relation to the application of e-Procurement vary considerably. Some governments contract domestic or offshore services providers to undertake all aspects of their e-Procurement, with the government merely providing the data. Other governments have retained ownership and possession of their e-Procurement system and contracted out the management, while others have retained ownership and operations entirely in-house. All of these options are technically possible, but the issues impact more broadly than technical considerations. Rather this is often a matter of national policy.

7.5 Acquisition Model

Adoption of an acquisition model that optimises existing synergies is critical for success of the e-Procurement implementation. Industry practice posits three possible approaches:

a. Local Development and Implementation: This is a bespoke approach and would involve engagement of local developers would be through outsourcing the

development and implementation with the ownership of the system remaining with the government (PPDA).

b. This is a medium-high risk path to development with some risks that separate Departments and Ministries will demand fragment the system into a variety of customisations, and lack of complete understanding and following of international best practices. But this option would ensure strong agency ownership and good integration with back-end management systems. The management of this approach would require an effective steering committee (described previously) involving all of the lead implementing agencies. A risk is lock-in by a local developer if local competition is weak.

c. Customized Off-the-Shelf: This acquisition of an off-the-shelf e-Procurement application which could be configured or customized, and modules which are not available could be custom developed. Usually these e-Procurement systems are delivered with the rights to copy, modify, update, and use as required by the purchaser. Adoption of the model involving the purchase of an end-to-end product draws in several additional issues. This approach is cost effective and also comes with a lot of experience in other jurisdictions. This is the recommended model.

d. Government to Government Support: Under this approach, the software system is provided free of cost, from another government. The recipient then proceeds to carry out customization, configuration, localization, and other technical support with its own resources.It is apparent that GoU prefers acquisition of an off-the shelf application through an International Competitive bidding. This will entail GoU developing the technical and functional requirements taking into account existing capacities and opportunities in order to guide the procurement process.

A detailed discussion of factors determining the choice of acquisition approach is contained in Annex VI.

7.6 Software and Data Ownership

Another critical success factor relates to ongoing operation of the system in case of significant failure by the provider. For a complex end-to-end system, regardless of any contractual arrangements, it would be impractical for a new service provider to take over from its predecessor while ensuring business continuity.

Accordingly, government will have rights to modify, update and use as well as control its own e-procurement system. The Customized off-the-shelf model supports this requirement. However, both for the development of the system, and the ongoing maintenance, the government shall consider private sector support and seamless transfer of knowledge to PPDA and local team.

Another related issue is that of the Intellectual Property Rights (IPR) of the e-procurement system software. It may not be possible for government to actually claim ownership of the IPR for the entire solution. In such cases, the IPR for any software product or solution, held by the Service Provider as on the date of agreement with the government would continue to vest with the SP. However, the IPR in respect of all the processes, software, applications and components, developed specifically for the project, shall vest in the government. In cases where custom development of the e-procurement system is undertaken, the IPR of the custom developed software shall remain with the government.

7.7 Sustainability of e-GP System

In order to guarantee sustainability and over time improvement of the e-GP system along with ownership and effective management at all levels of Uganda, a two-stream program will operate; (i) the management, maintenance and operation (MM&O) services of the e-GP system and data center; and (ii) On-going support for implementation and adaptation of e-GP at Agencies/Procuring and Disposal Entities (PDE) levels and Bidding community. These two programs will encompass: (i) system enhancement and MM&O services of the e-GP system and data center; (ii) capacity development of PDEs and Bidders and (iii) assistance for the PPDA and user agencies to drive towards a sustainable operation model.

While the e-GP System in Uganda will be owned and maintained by the PPDA, it is envisaged that the private sector will be involved in the maintenance, operations and on-going support through SLA contracts on periodical basis.

The PPDA may also be mandated to raise revenue to fund the operations, maintenance, and support of the e-GP system through:

a) Transaction or service fee from awarded Bidders,
b) Forfeited security and guarantee amounts,
c) Other Value Added Services (VAS) like classified Bid notifications through email or mobile alerts, additional storage for documents, fees for duplicate contract completion certificate, delivery of paper copy of bidding documents, trainings on request, etc.
d) Bidders registration and renewal for the use of e-GP System,
e) Bidding document download
f) Subscription on number of categories from thee-catalogue.

7.8 Choice of a Pragmatic and Consistent Strategy

It is important that there's broad agreement on key ingredients guiding a pragmatic and consistent strategy. This will entail inter alia adoption of a phased incremental approach underpinned by some of the following endorsements:

a) Mandating the use of the e-Procurement system in agencies as per the phasing plan. The Parallel bidding (use of both manual and electronic forms) shall not be permitted for the bidding procedures carried through e-Procurement System;
b) That e-Procurement based procurement procedures shall be governed by the e-GP Guidelines, which regulates the electronic procurement procedures after necessary Business Process Reengineering (BPR) of the manual procurement processes and practices;
c) Amendments shall be made to standard bidding documents and conditions wherever required to suit e-Procurement;
d) Recognition of online procurement methodologies such as e-Framework Agreements and Contracts, e-Quotations, e-Auctions and e-Reverse Auctions, and procurement contracts management using e-Contract Management functions of e-Procurement System;
e) Mandating centralized online bidder registration as a pre-requisite for participating in government procurement through the e-Procurement system, and submission and processing of bid responses through the e-Procurement system.
f) Protecting the rights and responsibilities of users, bidders, PDEs, PPMO, and other stakeholders while using e-Procurement system, e-Procurement system shall publish its Terms and conditions of use of e-Procurement system, Disclaimer of consequences of using e-Procurement system, policy of data protection and confidentiality, intellectual property rights, codes of practices, and authenticity of electronic transactions and digital records and documents as legal evidence, etc.

The above shall also be codified through the Guidelines on e-procurement by the PPDA. Overall, the existing legislations of Uganda are broadly able to facilitate e-Procurement.

7.9 Establishment of an e-GP Unit

For the entrenchment of the e-GP system and its unencumbered management, the PPDA will carry out a re-structuring in order to strengthen its in-house capability, and hence a dedicated e-GP Unit which will evolve from the PMU. During the rollout phase, an additional set of key performance measures should be applied, against which project management (both during rollout and ongoing) should be guided, and accountability maintained. The proposed structure of the e-GP Unit is annexed accordingly. As a corollary, the Ministry of Finance as the policy supervisor should also build capacity to provide appropriate supervision of this important reform initiative.

7.10 Change Management

Automation of the paper-based procurement system is not panacea and does not give desired efficiency, and leverage the available technology. Change Management (CM) is intended to provide a holistic framework to manage the change in the functional, technical, organizational or regulatory aspects.

As a critical success factor, CM will ensure that there is adequate attention to the technical and people side of change. It is also intended to impart a leadership competency for enabling change within all target units and to strategically increase change capacity and responsiveness. The idea is to get all involved to understand, accept and support change effort.

The scope of the change management extends to the people, process and technology as these relate to the e-GP system. Changes envisaged are enterprise-wide and span the following areas:

a) Design and acceptance of new business processes
b) Re-structuring shaping of institutions
c) Work ethics
d) New performance measures
e) Changed roles and responsibilities
f) Training
g) Changed policies and procedures
h) Changed relationship with stakeholders
i) New services and information flows to clients
j) Regular communication

An important ingredient of change management will entail Business Process Re-engineering (BPR). A detailed discussion of the BPR focus is attached in an Annex.... to this document.

7.11 Infrastructure and Web Services

Availability of a data-center facility for hosting the primary site of the e-Procurement system and also to establish the secondary hosting site is a critical factor. Presently NITA-U has the NBI/EGI data centre. The agencies shall develop a policy on risk, reliability and performance requirements for such hosting environments.

7.12 Training and Capacity Building

An important requirement for the implementation of e-procurement system involves provision of training to government managers, staff and suppliers. Failure to address this issue may lead to a lack of confidence in adopting e-Procurement and could result into delayed implementation.

The training and capacity building programmes shall be designed for all categories of personnel including Executives, Policy Officials, Procurement professionals and other players in the procurement function.

7.13 Private Sector Participation

Experience suggests that the most effective way to promote participation of the business community is through the *business value proposition*. The bidding community will be sceptical of investing in a 'good idea' but receptive to a credible business case that offers lower costs or greater tangible opportunity and transparency. A business activation strategy will address existing suppliers and may also work with the service industry that supports business applications. The development of a viable business activation strategy is critical in getting the buyer community embrace the reform.

7.14 Development of a Standard Catalogue

A Standard Catalogue for common procurement items of goods, works, and services with standards, templates, and guidelines is a vital tool in supporting E-procurement practices. Procurement of goods, works, and services under the e-GP will require a common catalogue, a basic standard for this type of procurement for nationwide, regional and international interoperability. The common catalogue ensures that the same product coding is used through the entire process, through publication of items online by suppliers, selection, reception and finally payment by the purchasing entity, especially for the e-framework agreements based procurements. It is important that Uganda adopts a commonly used classification system to ensure wider harmonization and ease of doing business. The proposed project will support the development of this catalogue through:

a. Standardization of goods and services coding. This will also determine the usefulness of management data in form of spend analyses, cost of analyses, cost to suppliers, and supply search, as it improves transparency and efficiency.

b. Classification of Goods, Works and Services. The common catalogue will also include the classifiers for goods, works and services for e-Procurement. This will allow summarization of data for reporting and analysis purposes. For example, a financial report may present procurement expenditure in terms of ten broad categories of items, such as Fuel, IT, vehicles, etc, summarized from detailed line items. One such classification code for procurement operating is the Common Procurement Vocabulary (CPV) of EU. Classification codes are less important in paper based procurement access, aggregation and analysis of the data is limited. Most e-Procurement systems are based on the CPV classification codes[11], because it is access free and easy to implement.

c. Development of Unique Item Codes for specific items. Item codes or identifiers are used to uniquely identify the specific goods, works or services based on their specific specification (dimensions, attributes, nature, etc.). They are different from the classification codes above. As an example, whereas the items codes of liquid propane and inflammable butane are 09122100-1 and 09122200-2, respectively, their classification codes are 09122100 and 09122200 respectably.

Common classification and item codes will improve efficiency of procurement because it will provide the basis for automated gathering and analysis of spend data for budgeting and planning, strengthen transparency and performance monitoring and reporting, enables automated price quotations for purchasing, unify financial management systems (i.e. with IFMIS), and procurement reporting (for the feedback in Auditor General's report), and track requisition, purchase, supply, inventory, procurement trends.

CHAPTER 8: RISK MANAGEMENT

The e-Procurement system is to be delivered on the basis of a public sector-wide service, and as such has potential key risk issues from both an internal and from a client perspective. Active risk management will ensure that PDEs and Providers are able to benefit from this service in the knowledge that the systems and the practices employed provide an appropriate degree of reliability, efficiency and security. The management of this project and a smooth implementation is essential to maintain public confidence and the integrity of the service. To this extent, the risk management framework provides a structured format that reinforces good management practices and aims to minimize unexpected outcomes. Implementation challenges for this e-procurement project will come from both inside and outside of government and can include, among others:

a) Misunderstanding by the developer of the true scope of the work, weak project management by the developer.
b) A developer that does not understand government procurement and presumes private sector purchasing procedures.
c) Assumptions that e-procurement is simply about technology.
d) Weaknesses in Government contract management, divided ownership of the programme, rigid processes and regulations.
e) Apprehension towards change by public sector staff.
f) Confusion over standards or the emergence of competing environments and limited interoperability.

There are also significant design and ownership risks. The scope of government procurement is extensive and varied, ranging from the acquisition of minor items such as office supplies through to major construction, telecommunications, defence, hospital supplies and complex services. This supply side, or government procurement, affects thousands of suppliers, thousands of line items and is usually managed by thousands of procurement stakeholders within government.

For the risk identification step, the following project or macro level (as opposed to process level) risks have been identified as shown as in Annex I.

Categories of Risk

a) ***Compliance Risks:*** – These are risks arising from non compliance with laws, regulations, internal policies and procedures and ethical standards.
b) ***Financial Risks:*** - These are risks that result from inadequate financial management.
c) ***Operational Risks:*** - These risks result from inadequate or failed internal processes, people and systems or external events.

d) ***Reputation Risk****: – Is* the possible loss of the organization's reputational capital or trustworthiness.
e) ***People Risk***: - Is the risk associated with inadequacies in human capital and the management of human resources, policies and processes resulting in the inability to attract, manage, motivate, develop and retain competent resources.
f) **IT/Systems Risks**: Cyber insecurity and rapid technology changes.

CHAPTER 9: MONITORING AND EVALUATION (M&E) FRAMEWORK

The Monitoring and Evaluation (M&E) framework provides the guidelines to monitor and evaluate the effectiveness of the e-procurement implementation, at the central level and also at the local government level. This is a common framework for M&E which is expected to facilitate periodic review of the progress of the e-procurement initiative, thereby providing inputs for informed decision-making.

Measuring and monitoring e-procurement activities is crucial to identifying problematic and successful areas; they provide insight into what is being done right and wrong. They act as tools that can help pinpoint the activities to investigate and adjust.

The proposed indicators are provided in the business case, Annex I be reviewed at the time of implementation.

10.1 Action Plan

The Action Plan in Table 17 presents major steps for implementation.

Table 17: E-Procurement Action Plan

#	Initiative	Initiator	Priority	Action	Details and Guidance
1	**INITIATION**				
	High level sign-off	High level endorsement of e-GP Strategy and action plan	Immediate	Announce Government's vision, key goals and objectives, benefits Endorse and prioritise cross-government coordination and change management. Establish objectives, performance targets and oversight, budget.	**E-Procurement Strategy and action plan**
2	**GAIN FUNDING APPROVAL – DONOR OR ELSEWHERE BASED ON INVESTMENT AND BUSINESS PLAN**				
	Discuss with donors	Minister for Finance, PPDA	Immediate		
3	**INSTITUTIONAL STRUCTURES**				
	Establish support and implement structures	PPDA in consultation with key stakehodelrs	Immediate	Review Project Steering Committee Establish Project Implementation	**5.1 Institutional Arrangements of Sections 5**

				Committee - Establish Project Management Unit - Establish the Project Advisory Council - Create working party from pilot agencies - Initiate BPR - Establish terms of reference and meeting schedules - Develop business model if required	
4	**E-PROCUREMENT SYSTEMS DEVELOPMENT**				
	Engage developer / suppliers	PPDA	Short term	- Finalise Business, Technical and functional specifications including standards for catalogues - Finalise phases for rollout - Advertise for e-GP Implementation - Evaluate and award development contract - Initiate BPR with pilot agencies	**5.4 e-Procurement Systems Framework under Sections5, and Section 6 – Business Requirements**

				• Establish training facility • Establish help desk / service centre and advertise to public and private sectors	
5	**PROJECT MANAGEMENT**				
	Management and reporting	PPDA, PMU, PIC, PSC, PAC	Short term	• Engage e-Procurement Technical Project Manager • Establish reporting formats, terms of reference and meeting schedules for PMU, Project Steering Committee and Project Technical Committees • Establish project milestones and KPIs • Establish contract management oversight requirements • Establish risk management and reporting	*Project management practices* **Risk Management Plan**
6	**POLICY AND LEGISLATION**				
	Operational regulations and e-GP guidelines	PPDA	Short term	• Revise existing procurement operational policies and harmonise with digital environment • Develop new	**Sections**8.1 and 8.2

				operational rules and guidelines as required for digital environment • Establish e-signature and e-document policies for the use in e-Procurement	
7	**BUYER AND SUPPLIER TRAINING**				
	Human Resource Enablement	Developer, PPDA	Short term synchronised with roll-out	• Developer to bring procurement officials in batches through training facility immediately before rollout • PPDA to activate Supplier Strategy	Contract obligations Follow recommendations of e-Procurement Readiness Assessment component 8 – Private Sector Integration
8	**Infrastructure and Web services**				
	Data Centre **Disaster Recovery Site** **Strengthen Government Gateway**	PPDA/NITA PPDA/NITA MoF	Medium term	• If required, create an integrated Data Centre with additional hardware, software and new architecture • Establish Disaster Recovery Site (DRS) with same replication of the data centre • Ensure speed & reliability of	**Sections 8.3 and 10 Funding Estimates.**

				government gateway	
9	**Monitoring and Evaluation**				
	Monitoring framework	PMU, PIC, PSC	Short term	Develop baseline indicators and gather current – state baseline data on procurement performance Private sector feedback system	**Baseline Survey should be carried out.**

10.2 Phasing of Implementation

Implementation of e-GP System will be adopted in phased rollout model as opposed to phased module activation model. This means that the initial system developed shall cover all methods of procurement and stages of the procurement process and all the required functionality to enable piloting of a complete system. Phases of rollout would be divided into two phases:

a. Pilot in selected Agencies, and
b. Wider Rollout throughout the country.

The e-Procurement system implementation should be in phased manner, which provides an opportunity to reduce the e-Procurement system failure risks, test the functionalities and processes in e-procurement system, and extend the demonstration effect in rolling out the system in other procuring entities based on the success during pilot implementation. It helps enhance the rollout plan based on the lessons learned during pilot implementation.

Success of the implementation of e-GP depends on many factors. Few of the major factors are the readiness of the agencies in terms of willingness and commitment of leadership in the organization to take up e-procurement, the level of use of ICT by the procurement process related personnel, and diversity of procurements carried out by those agencies.
The PPDA may nominate 8-10 pilot agencies considering their willingness and commitment to drive e-procurement initiative, and ICT readiness:

- One or two representative pilot agencies each could be chosen from among the agencies focusing on goods, works and services procurement,

- Procuring entities with specific nature of procurements (i.e. Medical (NMS), ICT (NITA-Uganda), rations, etc.),
- Procuring agencies already doing some forms procurement automation (i.e. URA, UNRA, NWSA),
- Procuring agencies representing geographical reach and including at least 2 Local Governments (only agencies passing the readiness requirements), and
- The PPDA as PDE as well as the Administrator of the e-Procurement System.

Wider Rollout implementation will be carried out based on further assessment of the PDEs on their readiness. It is expected that the 1st rollout within the 3 year period will cover 50 procuring entities.

10.3 Key ImplementationChallenges

The Strategy and associated interventions recommended in this document will see e-Procurement technology being leveraged to facilitate the introduction of a radically new framework for procurement for the good governance within the Ugandan public sector. While the potential benefits to be derived from the successful implementation of the initiative are significant, the implementation will present a number of key challenges that will need to be addressed if the targeted benefits are to be realized. These challenges (in no particular order) include:

a) **Collaborating across traditional organizational boundaries:** Many of the procurement practices and supporting technologies recommended under this strategy will require agencies to look beyond their own organizations and collaborate with other agencies inside and outside their sector. Fostering and encouraging this collaboration still adhering to the autonomy of individual agencies is a key challenge facing the initiative.This can be mitigated with strong leadership during implementation and change management**.**

b) **Viewing technology as an enabler and not a solution:** While technology undoubtedly has a key role in facilitating the program of change recommended under this strategy, experience elsewhere has shown that e-Procurement initiatives that are not based on a foundation of sound procurement practices and processes and appropriate organizational structures are unlikely to deliver the expected benefits. It is crucial therefore that the implementation effort addresses all elements of the procurement framework and does not place an over reliance on technology to deliver the targeted benefits. It should be treated as procurement improvement project using technology with procurement at the lead rather than solely as IT project.

c) **Encouraging the participation of both the private sector and Public Sector:** The ultimate success of the initiative is dependent on the participation of both the public sector procuring community and private sector bidding community. It is important that the change management and consultation process associated with the implementation of the initiative makes adequate provision to understand and address the concerns and requirements of both the private sector and public sector PDEs.

d) **Realizing and measuring the benefits:** The proposed investment program is justified on the basis that it will facilitate the realization of significant financial and non-financial benefits to the Ugandan public sector. Monitoring performance against targets is therefore critical. The challenge facing the initiative is to ensure that the measurement systems in place provide an accurate picture of the initiative's progress without placing an unreasonable reporting burden on participating agencies. In the case of non-financial benefits, it is essential that their ultimate financial impact be identified through a 'cause and effect' assessment so that it can be incorporated into suitable performance metrics.

e) **Developing the public sector's procurement competency:** Designing the appropriate organizational structures and providing the necessary technology infrastructure will be of little value if the structures are not populated with staff equipped with the skills necessary to support the implementation of the practices and processes recommended by this strategy.

f) **Achieving senior management support:** The e-Procurement initiative has been developed on the principle of encouraging rather than mandating agencies to participate. It is critical therefore that the initiative is successful in achieving the senior management 'buy in' at national, sector and agency level.

g) **Managing costs of rollout**: The scope of supply of IT equipment will substantially affect the cost effectiveness of the rollout. The roadmap has assumed that e-procurement will follow the footpath of the PPMS and IFMS and that there will not be a need to provide major equipment and networks within the PDEs, but to rely on their existing equipment. Given that e-procurement functionality extends almost to the entire agency to cover all user departments, equipping all these offices would not be cost effective and would slow down rollout. E-procurement should be deployed on the existing infrastructure within the agencies.

10.4 Implementation Timelines - Phases

The proposed implementation schedule is shown in Table 18. The implementation phases are a guide rather than a prescription and should be driven by the PSC.

Table 18: E-Procurement Implementation Plan

e-Procurement Implementation Plan															
			Year 1				Year 2				Year 3				
No.	Project Task		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
1	e-GP Readiness Study														
2	Procurement Status Benchmark Study														
3	Establishment of Institutional Structures														
3.1		e-Procurement Steering Committee (e-PSC)													
3.2		Project Technical Committee (PTC)													
3.3		Project Management Unit (PMU) along with e-GP Unit													
3.4		Decision on Business Model Including revenue options													
3.5		Nomination of Pilot entities for e-Procurement													
4	PPDA to Finalize Strategy														
5	High level government endorsement and policy announcement														
6	Business Process Reengineering														
7	Development of standard catalog for common procurement items of goods, works, and services														
8	Development of e-GP Guidelines														
9	Issuance of e-GP Guidelines														
10	Development of e-GP TOR, and bidding document														
11	e-GP System Implementation														
11.1		e-GP System Implementation Consultant selection (firm)													
11.2		Primary Data Center establishement													
11.3		e-GP System configuration, customization or development													
11.4		Secondary Data Center establishment													
12	Capacity Building														
12.1		Building Capacity of PPDA Staff													
12.2		Building capacity of bidding community and procuring entities													
12.3		Sensitization and communication of e-procurement to civil society and also top level bureaucrats and leaders													
13	e-Procurement in Pilot Entities														
13.1		Formation of Task Teams in pilot entities													
13.2		Change management in procuring entities													
13.3		Registration of pilot entities													
13.4		Registration of Bidders													
13.5		Workflow creation for each of the procuring entities													
13.6		Entry of Annual Procurement Plans													
13.7		Pilot implementation of e-Framework agreement and e-Quoting													
13.8		Roll-out of e-Framework agreement and e-Quoting module													
13.9		Pilot implementationof other procurement methods and modules													
13.10		Roll-out of all other procurement methods and modules													
14	Integration with other e-Services														
14.1		Integration or interfacing with IFMIS													
14.2		Integration or interface with URA Tax functions													
14.3		Integration or interfacing with Company registration													
14.4		Integration or interfacing with other services													

11.1 Cost Estimates for E-procurement

Final funding requirements will be dependent on the results of bidding for the e-Procurement system and its implementation requirements set out below. Funding estimates for the Customized Off-the-Shelf model are as set out in Table 19. It is anticipated that the alternative models will have different cost. The detailed costing and cash flow projections are indicated in Annex III.

Table 19: Cost Estimates

SN	Items	Cost US$
1	**Business Process Reengineering (BPR)**	
	BPR Consultant for Business Process Reengineering, e-GP Guidelines, e-Catalogue, and TOR and Bidding document for e-GP	235,000
2	**Building capacity of Stakeholders in Procurement Sector on e – GP**	
	Building capacity of PPDA, study tours	135,000
	Enhancement of e-Tender Portal	78,000
3	Acquiring and implementing e-GP System including strengthening of security	1,500,000
4	Enhancement of the Primary Data Center, disaster recovery site and establishment a management node at PPDA	950,000
5	Operation and Maintenance of the Primary Data Center, disaster recovery site and the management node at PPDA	500,000
6	Independent quality assurance/Auditing Consultant	300,000
7	Change Management and Stakeholder Engagement, workshops, sensitizations, seminar	295,000
8	Project Management, M&E and Hiring Technical key experts.	1,198,400
9	Retooling costs.	300,000
10	Review of enabling laws, regulations, policies and guidelines.	300,000
11	**Total Costs**	**5,791,400**

11.2 Break-Down of Estimation Details of Key Components

The breakdown of the project costs is presented in Table 20.

Table 20: Breakdown of Estimation of the Key Components of the Project

1. Estimation for e-Procurement System, piloting implementation, warranty support. Core training, and support services for three years		
	Items	**Cost (USD $)**
a	Acquiring and implementing e-GP System	$1,000,000.00
b	Review and strength of e-Procurement System security for three years	$500,000.00
	Sub-total	$1,500,000.00
3. Estimation for Enhancement of the Primary Data Center, disaster recovery site and establishment a management node at PPDAand required system software with licenses and Internet Connectivity for data centres for three years		
	Items	**Cost (USD $)**
a	**Servers and Storage devices** (Racks; Blade servers for web, application, database, EMS, backup, time stamping, domain control, log ship, anti-virus, test and training, development; SAN and related devices, Tape library), laptops etc.	$300,000.00
b	**Network Active** (Firewall, IPS, Switches, NMS, load balancer etc.)	$150,000.00
c	**Data Centre internal and external infrastructure** (DG set, UPS, Precision AC, Fire alarming system, digital CCTV, Surge suppressor, Access control system, Water detection system, dehumidifier, pest repellent, Data Rack, raised flooring, electrical and civil works, and passive components like network cables, patches, etc.)	$100,000.00
d	**System software Operating system and licenses**, Database and licenses, Anti-virus and licenses, Backup software, SSL certificates, time stamping server software, Application server software and licenses, third party components, SMS integration, etc.)	$200,000.00
e	**Internet Connectivity for three years**	$200,000.00
	Sub-Total	$950,000.00

Annex I – Business Case

Financial and Non-Financial Impacts

Potential savings from the implementation of e-Procurement framework have been estimated by the OECD to be in the range of 5-8%[12] of the procurement value. When combined with the greater procurement coordination and management information and control that are facilitated by e-procurement costs have been reported to fall by between 5% and 20%. The increase in competition from e-Procurement may yield substantial savings, through providing greater visibility and ease of access to the government market. Results from different jurisdictions of EU include:

E-Procurement Benefits of EU

Examples of savings and improvements

- Italian Emilia Romagna's agency Intercent ER offers e-Procurement services including e-Marketplace, e-Catalogues and e-Auctions and is now the reference point for 539 administrations (90% of local agencies). In 2008 it processed transactions amounting to some € 419 million, delivering efficiency benefits of € 67.5 million and time savings of 45 man-years.
- The Austrian Federal Procurement Agency centralises purchases for federal authorities through e-Procurement functionalities. In 2008 it reported savings of €178 million against a procurement volume of €830 million. Benefits seem to significantly outweigh the annual maintenance costs of €5 million, which are less than 3% of the savings.
- As of 1 February 2005, all contracting authorities in Denmark may only accept electronic invoices. This reform affects approximately 15 million invoices a year, and applies to the entire public sector, from ministries to nursery schools. The use of e-Invoicing is expected to save the public €100 million every year, on top of savings in internal administrative processes.
- In Norway, the Ehandel platform is helping authorities to achieve 20-40% reductions in the time taken to handle orders, receipt of goods and invoicing and delivering price savings in the region of 2-10%.
- In the UK, the Buying Solutions site reported in its 2008/09 annual report that it had facilitated sales of over £5 billion, delivering £732 million in savings. The UK also reported savings frequently exceeding 10% (and even up to 45%) through the use of e-Auctions and recently announced plans to use e-Auctions to save the taxpayer up to £270 million by the end of 2011.
- A Portuguese study compared the best bids for public works contracted by 50 Portuguese public hospitals in 2009 (using paper based systems) and 2010 (using e-Procurement). It concluded that a cost reduction of 18% had been achieved in 2010, due to the increase in competition generated by e-Procurement.

Source: EC Green Paper on expanding the use of e-Procurement in the EU (2010)

[12]OECD/DAC (2003). Mainstreaming the Procurement Function into the Public Expenditure Policy and Effectiveness Dialogue (OECD/DAC). World Bank Roundtable, Paris, 22-23 January. [On-line]. Available at www.oecd.org

In the state of Andhra Pradesh in India, where an e-Procurement system was launched in 2003, tenders processed through the e-Procurement platform in the pilot phase during 2003-04 reported a reduction of 16% in price quotations[13] in comparison to the previous year when procurement was manual. Some savings can be realised in terms of hard cash, while others may save time but not be cashable.

The Office of Government Commerce (OGC) in the UK reported transactions savings of £41 per transaction for small value off-the-shelf purchasing systems, which free up significant amounts of staff time, reduce order error rates and substantially reduce off-contract ordering (known as 'maverick purchasing')[14].

The Korean Government has reported "significant cost savings, a 5-fold increase in productivity, and drastic reductions in corruption. The governments of Chile and Andhra Pradesh reported savings ranging from 3%-20%, and Andhra Pradesh reported reduction in tender cycle time from 130 days to 32 days. The Government of Kazakhstan also reported significant savings from its partly developed system[15]. The Government of the Philippines has reported savings shown in the Table below. Estimated Savings by the Government of the Philippines as a result of posting its Procurement Opportunities onto its e-Procurement System.

Savings	Items
53%	Various drugs / Medicines
43%	Equipment for electrification projects
42%	Printing of letterheads
33%	IT equipment & supply / delivery of construction materials
25%	Supplies / Material Services
19%	Construction supplies, IT equipment
17%	Electrical / mechanical supplies & equipment
15%	Various office supplies / equipment
15%	Office Supplies / Materials
11%	Vehicles and Supplies / materials

Source: Philippine Government E-Procurement Service

[13] E-Procurement in Government of Andhra Pradesh, India. World Bank case studies available online at http://go.worldbank.org/W7W2AC3GS0
[14] OGC e-Procurement in Action (2005)
[15] Kazakhstan Centre for E-Commerce, April 2011.

A caution applies to all of these results, insofar as they are often reported by stakeholders themselves. However, in the light of the magnitude of public procurement, even the most conservative savings estimates dwarf the costs of implementing e-Procurement.

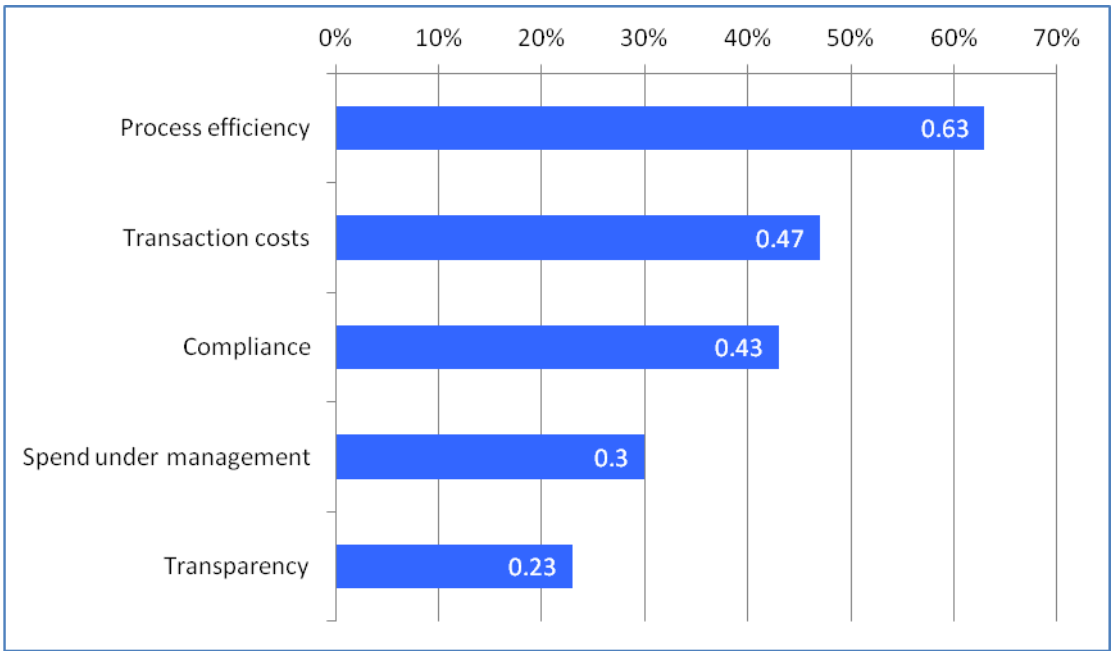
Alternatively, a cautious approach to developing a business case may elect to dismiss *all* savings claims. The business case will nevertheless remain compelling in terms of other benefits: transactional efficiency savings, standardization of the procurement practices, and price reductions, are only a part of the agenda. E-Procurement can also automate many procurement processes including supplier selection for some sorts of procurement, and opens the way for new efficient procurement methodologies that can increase market access and competition and also decentralise much procurement down to the point of service within the government (such as in schools). Benefits have been reported in terms of:

a. Reduction in inventory value of up to 80%;
b. Reduction in maverick buying – improved compliance of 30%
c. Reduction in errors due to elimination of manual processes;
d. Reduction in purchase-to-pay processes by 90%;
e. Reduced procurement cycle time by up to 80%;
f. Improved relations with suppliers who in turn have benefited from reduced transaction costs and improved efficiency;
g. Improved analytical capacity and management control.

Equally important is the potential of e-Procurement to strengthen governance through its capacity to enhance transparency and improve access to management and audit information. Many of the benefits of e-procurement are equally applicable to government and the business sector – efficiencies for government are also efficiencies for the private sector: the value of e-procurement for suppliers both in terms of efficiency (market access, ease of bidding, document transfers, transactions) and market information, drives the take-up of business technologies through the wider economy.

Similarly, the Aberdeen Group reported (March 2008) that public sector enterprises have significantly improved their performance as a result of e-procurement initiatives with lower transaction costs, lower maverick spend, and lower transaction cycle times. Automating the order-payment cycle has led to reductions in manual processing of procedural error-prone tasks, allowing staff to focus on more productive activities. The Figure below shows some of the targeted benefits from e-procurement projects: this refers to the number of responses to survey questions, rather than the level of benefits.

E-Procurement Project Objectives



Source: Aberdeen Group 2008

A World Bank survey (2007) of fourteen countries where e-procurement had been introduced, found that users of e-Procurement were almost equally divided between those that considered the primary benefit of e-procurement was in terms of transparency, and those that considered efficiency as the primary outcome.
Qualitative benefits reported from users included:

a. Reduced time for the procurement process
b. Improved access to procurement opportunities via a single national portal
c. Improved transparency of the process
d. Reduced errors in process and documentation for buyers
e. More sophisticated market intelligence
f. Increased market access

E-Procurement has, in some countries, eliminated at least one form of coercion – specifically the practice of physically preventing competitors from approaching and depositing a document in the bid box.

Methods

Technology opens the way for the efficient application of procurement methodologies such as e-auctions, e-markets, and e-framework agreements, and also enables the deployment of efficient e-purchase cards. The low cost efficient access to management

information in e-procurement enables the strengthening of control, oversight, efficiency and planning capabilities as well as competition.

An international trend in procurement performance and the evolution of procurement governance is partly being driven by e-Procurement. Parts of these potential gains in productivity come from the ability to engage more effective procurement methodologies through technology. In particular, e-quoting that samples the entire business sector becomes easy. E-framework agreements are more efficient to access and drive the decentralisation of procurement further than is otherwise possible.

Transparency, Reporting and Assessment

The potential for e-Procurement to strengthen transparency (an essential component of accountability) has been reported in research for over ten years. Technology reduces the marginal cost of management and audit information from high to almost zero. E-Procurement also provides more significant and timely procurement information that creates the potential for regular analysis and reporting for many stakeholders. This information aspect cannot be expected to function effectively in the paper environment. Examples include:

a. Spend analyses by department provide the intelligence for strategic procurement development;
b. Management of whole-of-government framework agreements should require standardised reporting on a weekly or daily basis in an analytical format;
c. 'Buy-local' industry development policies require spend analyses to review programme effectiveness and compliance;
d. Open-markets and cross-border trade policies often require spend analyses, potential savings and levels of cross-border trade;
e. Audit of procurement activity requires timely access to information from numerous widely dissipated small value transactions.

Access to accurate, timely and comprehensive spend data provides intelligence on spending patterns, inventory, performance and compliance. This information can help identify efficiency opportunities and market opportunities.

Uganda Benefit / Cost

In summary, it is clear that the business case for e-Procurement should include a range of qualitative and quantitative aspects. These are shown in the following Table, where the Indicators provide quantitative estimates in several cases. Where quantitative estimates are not able to be determined this does not mean that the factor is unimportant – there are compelling reasons why some of these qualitative factors are likely to be more significant than any of the quantitative factors.

Summary of Indicators for Impact Assessment of E-Procurement in Uganda

No.	Factor	E-Procurement impact	Direct Stakeholders	Indicators for Uganda (National)
1	Prices	Reduced 5-8% in competitive markets	All public entities	1% saving is estimated at approximately[16] USD 26.8 million saving for FY 2013-2014
2	Transactional efficiency	Reduced 65% for simple procurement	Firms, public entities, public	10% TBE
3	Procurement cycle times	Reduced 25-75% for complex procurement Reduced 80-95% for simple procurement	Community	1 month reduced cycle time for infrastructure budget
4	Compliance	As for maverick buying 30%	Departments, firms	
5	Delegation control / Decentralisation	Up to 100% simple procurement	Departments, firms,	
6	Transparency / Illicit practices	Substantial reduction reported	PPDA, audit, firms, departments	Similar to 1 & 2 above
7	Spend coordination X maverick buying	Increased 30%	Budgets, firms	Similar to 3 above
8	Audit capacity	100% for parts of procurement cycle	Auditor	As for 6 above
9	SME / business development	Online business enablement 25%	Firms	Technology take-up in Uganda estimated up to 60% of GDP growth
10	Inventory value	Reduced 70%	Budgets, departments	
11	Training requirements	Reduced for common functions	Departments, PPDA	

[16] Total Public procurement expenditure in Uganda for the financial year2013-2014 is expected to be 56% of the national Budget is USD 2,689,209,600.00 (Total national Budget is USD 4,802,160,000.00)

The above discussion refers to the benefits of a well-conceived, competently implemented e-Procurement strategy. Benefits have been described in qualitative and quantitative terms. The qualitative benefits are not readily measurable, however the reported quantitative results include savings ranging between 5%-20%. With public procurement accounting for between 15%-20% of the national economy, this level of savings potential is substantial and the benefit / cost ratio should be substantial even without considering the qualitative benefits.

A range of other procurement issues in Uganda would also be significantly addressed by a good e-procurement system. Examples include that:

a. There are problems in the quality of national bidding, and even the larger bidders are often not well-prepared, being short on capacity and guidelines for preparing bids – digital documents could assist with this. There is a dominant reliance on newspaper notices and advertising. Online postings are mandatory but compliance is poor, and advertising often happens on non-business days, in obscure local newspapers that escape audit and monitoring, and reduce competition
b. There are no national statistics on procurement other than what can be deduced from financial reports.
c. Procurement planning is reportedly often poor. Ideally, specifications should be approved when a project is approved, so procurement can start immediately. This does not often happen. Procurement plans are developed but not in standard formats
d. Billing is also a very frequent problem.
e. PPDA does not have well developed sets of Key Performance Indicators for the management or monitoring of complex procurement
f. Lack of transparency and consultation with private sector seems to be a major issue. An opinion was expressed that there is little trust of the public procurement system amongst many private sector entities.
g. Bidding was time consuming, slow an expensive, and competition in some sectors is limited and shrinking
h. There is no plan available before hand on the basis of which suppliers can prepare its business plan for the year. PPDA publishes few organizations plans.

The cost of an e-procurement development can be expected to range from around USD0.6 million up to USD3.5 million. Malpractice, a flawed strategy, or poor management in the development and implementation of e-Procurement can multiply this cost several times.

The ‘case against’ e-Procurement is essentially one where there is likely to be poor strategic and implementation skills making the exercise one of high risk. There have

also been cases where users on both sides of the market have raised objections. The reasons for these have included resistance to greater transparency and competition, or simply a reaction to change. There can also be concerns about data security and fraud (the risks of security and fraud are, however, generally greater in a paper-based environment).

Annex II - Benchmark Study of Procurement Performance in Uganda

SN	Questions	Response	Comments
1.	What is the contribution of public procurement in GDP as of available latest information (please mention the year)?	14%	
2.	What is the total value of National budget allocated and total value of expenditure in public procurement (including all kinds of goods, works, services)	56% of the national budget for FY 2013/14	
3.	How many Procuring Entities are in Uganda? Dis-aggregate by: Central line ministries Local governments (city, municipal, town and district councils Parastatal organizations	19 Central Gov't ministries 137 LG Entities including municipalities 128 statutory bodies and commissions	
4.	What is the total no. of complaints received and handled? Disaggregate by: a) Central line ministries b) Local governments (city, municipal, town and district councils c) Parastatal organizations	111 complaints received at the Authority in FY 12/13. Of these 72 were for investigation and 39 were Administrative reviews 10 administrative reviews and 15 Investigations from line ministries. 16 Administrative reviews and 26 Investigations from	

SN	Questions	Response	Comments
		Local Governments 13 Administrative reviews and 31 investigations from statutory bodies.	
5.	What is average number of procurement notices published and Contracts signed annually on goods, works, and services separately? Where are the publications made?	Data not currently available	
6.	What % of procurement is carried out through direct procurement method?	By No: 10.65% By Value: 8.99%	
7.	What is the % of contracts deviated from the time estimated in from contract awards in Annual Procurement Plan?	By No: 23.01% By Value: 6.32%	
8.	What is the % of Contracts needed contract variation?	By No: 1.05% By Value: 0.41%	
9.	What is the % of Contracts Cancelled after contract signing?	By No: 0.33% By Value: 0.15%	6 PDES reported on cancelled procurements

SN	Questions	Response	Comments
10.	What is the % of Contracts overrun original contract amount?	By No: 15.66% By Value: 20.73%	Considered procurements which over shot the estimated value by 15%
11.	How many certified procurement professionals are there in the Country? (having procurement training for equal or above 80 hours, or any other national, regional, or international trainings, education, etc.)	1,402 with CIPS certification	
12	Average number of days required preparing TOR/Specification and Bidding document for goods, works, or services procurements.	Goods- 2 days Services – 2 days	
13	How many procurement notices published by your procuring entity annually in average in goods, works and services separately?	Services – 4 Goods- 3 Works – non	
14	What is the number of bids purchased by the bidders in average for goods, works, and services procurements?	System only captures data on those who submit bids as indicated on 15 below	
15	What is the number of participants on average for goods, works and services?	Goods 2 Works 4 Services 2	
16	What is the % of bid submission out of those who purchased bidding document?	Data not available	

<table>
<tr><th>SN</th><th>Questions</th><th>Response</th><th>Comments</th></tr>
<tr><td>17</td><td>What is the required time for bid evaluation and on average number of days taken for the evaluation of goods, works and services contracts separately?</td><td><table><tr><td></td><td>No. of Days</td></tr><tr><td>Goods</td><td>20</td></tr><tr><td>Works</td><td>40</td></tr><tr><td>Services</td><td>20</td></tr></table></td><td></td></tr>
<tr><td>18</td><td>What is the average number of days taken by the Contract committee to approve the bidding document?</td><td>2 days</td><td>Data from compliance checks</td></tr>
</table>

Annex III Cash flow Projections for E-procurement

Uganda E-Procurement Implementation Cash Flow Projection

		2014/2015				2015/2016				2016/2017				
SN	Activities	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Total
1	**Business Process Reengineering (BPR)**													
	BPR Consultant for Business Process Reengineering, e-GP Guidelines, e-Catalog, and TOR and Bidding document for e-GP	$35,000	$200,000											$ 235,000
2	**Building capacity of Stakeholders in Procurement Sector on e – GP**													$ -
	Building capacity of PPDA, Hiring Technical key experts, study tours	$60,000	$15,000	$30,000	$30,000									$ 135,000
	Enhancement of e-Tender Portal	$30,000	$30,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$0	$0	$0	$0	$ 78,000
3	Acquiring and implementing e-GP System				$180,000	$300,000	$420,000		$200,000		$200,000		$200,000	$ 1,500,000
4	Primary and Secondary e-GP Data Center establishment and maintenance						$400,000	$425,000	$25,000	$25,000	$25,000	$25,000	$25,000	$ 950,000
5	Operation and Maintenance of e-GP system and Data center								$100,000	$100,000	$100,000	$100,000	$100,000	$ 500,000
6	Independent quality assurance/Auditing Consultant					$25,000	$75,000	$100,000				$100,000		$ 300,000
7	Change Management and Stakeholder Engagement, workshops, sensitizations, seminar	$15,000	$30,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$25,000	$ 295,000
8	Project Management	$31,000	$33,000	$45,000	$93,000	$133,300	$123,300	$123,300	$123,300	$123,300	$123,300	$123,300	$123,300	$ 1,198,400
9	Computers for Procurement Units (5 per PDE)						$50,000				$250,000			$ 300,000
10	Contingency									$100,000		$200,000		$ 300,000
11	**Total Costs**	**$171,000**	**$308,000**	**$103,000**	**$331,000**	**$486,300**	**$1,096,300**	**$676,300**	**$476,300**	**$373,300**	**$723,300**	**$573,300**	**$473,300**	**$ 5,791,400**
12	Funds Available													
13	DFID WB Administered Trust Fund	$250,000	$250,000											**$ 500,000**
14	Government of Uganda			$200,000	$200,000									**$ 400,000**
15	**Total Funds Available**	**$250,000**	**$250,000**	**$200,000**	**$200,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$ 900,000**
16	**Cumulative Surplas / Deficit**	**$79,000**	**$21,000**	**$118,000**	**-$13,000**	**-$499,300**	**-$1,595,600**	**-$2,271,900**	**-$2,748,200**	**-$3,121,500**	**-$3,844,800**	**-$4,418,100**	**-$4,891,400**	**$ (4,891,400)**

Assumptions behind detailed budget:

1. E-Procurement Strategy and e-GP Guidelines get high-level government endorsement as scheduled, and signals government commitment for embracing the e-Procurement for public procurement reform.
2. E-Procurement System will be procurement as off-the-shelf product through International Competitive Bidding (with perpetual license to use across the government of Uganda, and also with the rights to copy, customize and modify codes by the government to meet its requirement in future).
3. The Government shall receive grant financing of $500,00 by July 1, 2014 to support readiness for e-procurement
4. The Ugandan Government shall release the committed fund amounting approximately Shs. 1 billion (US$ 400,000) to kick start implementation in the financial year 2014/15.The government shall consider further funding in the subsequent years, and arrange the required rest of the fund through government budget or for grant/credit financing from development partners.
5. Data centre equipment supplied timely and e-Procurement System configured as per government requirement.
6. Project management costs include hiring of the e-procurement manager and all the support team as per the structure on Figure 5
7. Independent quality assurance includes (i) support to the government in certifying that the system delivered is as per specification and (ii) required third party verification of the integrity and security of the system
8. Very limited IT equipment if required is to be provided to procuring entities and the e-procurement pilot and rollout will follow the footpath of the IFMS and NITA investments in agencies where the IT infrastructure already exists
9. Supplier of the system shall support piloting and 1st rollout beyond which deployment to additional PDEs shall be done by the Government team

Annex IV: E-Procurement Risk Management Plan

Ref	Description of threat/issue	Likelihood	Risk*	Mitigation Measures	Risk Owner	Reviewing/ Reporting
1. Strategic Risks						
a.	Strategic Focus – loss of strategic goals	Low	H	KPIs, milestones to be reviewed and actions initiated	PSC	Bi-Annual
2. Operational Risks						
a.	Potential disruption to operations during solution deployment	Low	S	Careful & detailed planning; Awareness and training of users	Providers PMU	Quarterly
b.	Inadequate commitment	Medium	S	Implement change management	Technical Committee	Quarterly
c.	Inadequate coordination or working relationship with developer	Low	S	Ensure contractual requirements for both parties. Ensure PMU imposes effective management mechanisms	Technical Committee	On going
c.	System training - Inadequate or untimely	Medium	S	Change management program and capacity building programmes	PMU/PSC	On going
d.	Time Overrun	Medium	H	Regular progress reviews	PMU Agency Technical /PSC	Quarterly

e.	Disaster recovery not online	Low	S	available using existing systems	Technical Committee	Quarterly
3. Financial Risks						
a.	Inadequate budget	Medium	S	Tight project management and controls	PSC	On going
4. Reputational Risks						
a.	Negative Reporting	Low	S	Communication strategy in place	Technical Committee	On going
b.	Unethical Practices	Medium	S	Implement ethical code of conduct	PSC	On going
5. IT/System Risks						
a.	Inadequate BPR - lack BPR commitment	Low	H	PSC to seek commitment from agency heads	Technical Committee	At kick-off
b.	Connectivity - Connectivity delay /narrow	Medium	S	Review and strengthen gateway	Technical Committee	Monthly
c.	Acquisition model buyer lock-in	Medium	M	Review acquisition contract adequately	Technical Committee	At kick-off
d.	Suppliers' lack of access	Low	L	Connectivity solutions	PMU	Quarterly
e.	System does not meet user requirements	Low	H	Developing clear and detailed requirements	PMU	Quarterly
6. People Risks						
a.	High Turnover of staff	Low	H	Offer competitive work environment	PSC	During contract planning and evaluation
b.	Contract	Medium	M	Use of proven	PSC	Contract

	specifications disputes			international specifications		development
c.	Developer goes out of business	Low	S	Contractual reporting requirements	PSC	On-going
d.	Stakeholders resistance to change from manual to e-procurement	Low	S	Conduct an aggressive public information campaign and inform stakeholders about the safety and efficiency benefits of the project	Technical Committee	On-going
7. Policies and Legislation Risks						
a.	Legislation / regulations not enacted	Low	S	Review framework agreement functional rollout	Technical Committee	Quarterly report to PSC

***H – High Risk; S – Significant Risk; M – Moderate Risk; L – Low Risk**

Annex V: Recommended Organizational Responsibilities

***E-Procurement Steering Committee (e-PSC*):** This would comprise executive representatives of key stakeholders to oversee implementation. The e-PSC is a high level organ that maintains the direction and monitors milestones of the programme it will be chaired by the Deputy Secretary to Treasury and includes representation from key Departments in the Ministry of Finance, the National Information Technology Authority (NITA) and the PPDA.

The roles of the steering committee are the following:

- Provide policy guidance.
- Approve project roadmap and strategy.
- Validate and approve high level plans for the project.
- Mobilize and secure resources required for successful implementation of e-GP.
- Provide advocacy and visibility of the project.

Project Technical Committee (PTC): This would comprise e-Procurement advocates / champions, IT Specialists from NITA, Procurement Specialists from the PDEs, the Ministry of Justice, and PPDA. Those individuals already engaged in e-procurement developments in Uganda could also be appropriate members. The roles of the committee are carried in Annex V.

- Develop a roadmap and strategy to guide project implementation.
- Develop Project Charter to outline the project objectives, scope, identify the main stakeholders and specify their roles.
- Review and manage the project schedule and resources including setting up a Project Management Unit (PMU).
- Review supplemental plans including risk management, communication, project quality and change management plans
- Approve the terms of reference for major Consultants who will be engaged during the project.
- Advise on policy changes that may be required to implement the e-Procurement.

Project Management Unit (PMU)*:* The e-Procurement project implementation requires an effective and properly resourced PMU, operating with a properly maintained Risk Management Plan. This organ will manage the e-Procurement project from the incipient stage of the system development and implementation through to the phase when e-procurement becomes operational. It is proposed that the PMU is headed by a full time e-Procurement Project Manager at the level of Director, reporting to the Executive Director of PPDA under the oversight of the Project Technical Committee. This will later evolve into an e-GP Unit to be established in the PPDA as part of restructuring intended to sustainably manage support and rollout of the e-procurement function.

The PMU will also arrange interdepartmental working groups / committees to advance various aspects such as change management and BPR. Departmental task teams shall be established in implementing pilot entities with the instigation of the PPDA. The skill mix of the PMU can include:

- Strategic procurement management and accountability, user support, training and liaison;
- Procurement specialists analysing market trends and requirements, buying for government, procurement advice, managing framework agreements;
- A business manager who will manage the contractual relationship between the government and the service provider if the service is provided by a third party and will monitor performance.
- Procurement support staff-administration of process and clerical work;
- E-Procurement system manager/analyst;
- Data Centre, network and security specialist;
- Database specialist-data management, procurement reporting;
- Web Programmer;
- Help Desk support;
- Support staff.

To guide and oversee the technical systems planning and BPR as specified above a technical consultant shall be engaged.

Establishment of an e-GP Unit: *For the sustainability of e-Procurement system and its unencumbered management, the PPDA will carry out a re-structuring in order to strengthen its in-house capability, and hence a dedicated e-GP Unit which will evolve from the PMU. During the rollout phase, an additional set of key performance measures should be applied, against which project management (both during rollout and ongoing) should be guided, and accountability maintained.*

The structure of the e-GP Unit will be determined as and when need arises.

Annex VI: Comparative Considerations of Procurement of Software

Adoption of an acquisition model that optimises existing synergies is critical for success of the e-Procurement implementation. Industry practice posits three possible approaches: These are analysed in the table below:

Comparative Considerations of Procurement of Software

Advantages and Disadvantages	Local Development and implementation	Customized off-the-shelf	Government to Government Support
Advantages	Initial investment cost probably reduced by virtue of the developing by domestic manpower. It would likely be a user-friendly system arising from close agency collaboration and communication generating a system as a reflection of user's demands. As the system solution might be independent from foreign providers, it could be upgraded easily as required in the future. Low maintenance costs Strong 'ownership' by key stakeholders	Mature product as a foundation for a system that can be maintained locally, Relatively short period required for relevant and practical functionality to be operational. Purchase would only be for the functionality for which there is capacity to utilize Lower risk of technological obsolescence Low initial implementation costs Low risk business model Low risk system development and maintenance costs	Software cost may be low or void. The proven procurement system applied.

Advantages and Disadvantages	Local Development and implementation	Customized off-the-shelf	Government to Government Support
Disadvantages	The possibility of risks to the success of system development Lack of proven skills (offset by including foreign specialists) Potential of fragmented developments between agencies unless carefully managed by the steering committee Moderate risk of lock-in by local developers (mitigated by systems portability) Long and risky development and testing period required	Reduced local IT development and skills acquisition Potential issues with interoperability of successive modules (mitigated by TOR standards requirements) Risk of lock-in by module vendors, mitigated by simplicity and serviceability of modules Substantial risk of vendor lock-in, skills transfer difficult if knowledge transfer arrangements are not made from the beginning	Business Process could be completely different in jurisdiction to jurisdiction. Difficulty in localization Possibly high customization cost. The business process and legal framework is dependent on the software. Significant legal changes may be required to implement Difficulty of upgrading due to the absence of source data from the product.

Annex VII: Documents to be covered in the Business Process Re-engineering (BPR) Process

The following documents used in the procurement process should be standardised in order to harness efficiency and transparency that accompanies e-Procurement

- Procurement plans

- Invitations for EOIs, pre-qualification and bids
- Bidding document issuance, bid receipt and opening records
- Bank guarantee formats for Security deposit and performance guarantees
- Letters of award, Local Purchase Orders and contract documents
- Evaluation Reports;
- Any other standard documents that will be required for e-purchasing and e-auctions systems.

Standardisation of REOIs / Invitation for pre-qualification, terms and conditions and bid documents depend on the procurement type and different standard formats need to be developed.

The table below shows some standard documents that may require BPR to gain greatest productivity from technology:

List of Standard Documents

Type of procurement	Bidding documents
Goods	Procurement plans – departmental, individual and consolidated plans Advertisements Pre-qualification document for Goods Standard bidding documents Standard terms and conditions Record of issuance of bidding document Record of bid receipt and opening Evaluation report Evaluation result notice Letter of award, LPO and contract document Goods Received Notes
Works	Pre-qualification for Works (with JV) Pre-qualification for Works (without JV) Procurement plans – departmental, individual and consolidated plans Advertisements Pre-qualification document Standard bidding documents Record of issuance of bidding document Record of bid receipt and opening Evaluation report Evaluation result notice

	• Letter of award, and contract document • Certificates of completion
Consultancies	• Procurement plans – individual, departmental and consolidated plans • Advertisements • Pre-qualification document • Record of issuance of bidding document • Record of bid receipt and opening • Evaluation reports i.e. for EOIs, technical and financial • Evaluation result notice • Letter of award and contract document • Request for proposal for individual consultant • Request for proposal for consultancy firms Request for proposal for consortium bids
Information Systems	• Procurement plans – individual, departmental and consolidated plans • Advertisement for bids and EOIs • Pre-qualification document • Record of issuance of bidding document • Record of bid receipt and opening • Evaluation reports i.e. for EOIs and Proposals • Evaluation result notice • Letter of award and contract document • Request for proposal for IS (Information Systems) – Single stage • Request for proposal for IS – Two stage

The e-Procurement system shall provide these templates, so that Standard Bidding documents can be auto-generated by combining the static (non-modifiable) parts of the document and user inputs (for the customised parts). The e-Procurement system will facilitate auto-generation of other procurement documentation in standard format, using the inputs provided by the procuring authority. At each stage in the procurement process, auto-generation and auto-publishing of the documents is to be enabled.

Annex VIII: e-GP Governance Structures

1. The Steering Committee

The Steering Committee will play the oversight role; provide policy guidance and sponsorship to the project. The Committee is chaired by the Deputy Secretary to Treasury (DST). Its membership is provided in the table below.

The Steering Committee will undertake the assignment for a period of three years (renewable) and the specific roles will include:

a) Provide policy guidance.
b) Approve project roadmap and strategy.
c) Validate and approve high level plans for the project.
d) Mobilize and secure resources required for successful implementation of e-GP.
e) Provide advocacy and visibility of the project.

Composition of the Steering Committee Membership

No.	Name	Position	Organisation
1.	Mr. Patrick Ocailap (Chair)	Deputy Secretary to the Treasury	MoFPED
2.	Ms. Cornelia K. Sabiiti	Executive Director	PPDA
3.	Dr. David Turahi	Director/IT&IMS	MoICT
4.	Mr. Lawrence Ssemakula	Ag. Accountant General	MoFPED
5.	Mr. Peter Kahiigi	Director/IS	NITA
6.	Mr. Johnson Mutesigensi	Programme Coordinator	FINMAP
7.	Mr. Ben Turyasingura	Principal State Attorney	MoJCA
8.	Mr. David Kiyingi	Ag. Commissioner/ Procurement Policy	MoFPED

2. The Technical Committee

The committee will undertake the assignment for a period of three years (renewable) and will report to the e-procurement Steering Committee headed by the DST. Membership of this committee is provided in table below. The specific Terms of reference of the committee are:

i. Develop a roadmap and strategy to guide project implementation.
ii. Develop Project Charter to outline the project objectives, scope, identify the main stakeholders and specify their roles.
iii. Review and manage the project schedule and resources including setting up a Project Management Unit (PMU).

iv. Review supplemental plans including risk management, communication, project quality and change management plans
v. Approve the terms of reference for all Consultants who will be engaged during the project.
vi. Advise on policy changes that may be required to implement the
vii. e-Government Procurement.

Composition of the Technical Committee Membership

No.	Name	Position	Organisation
1.	Ms. Cornelia K. Sabiiti (Chair)	Executive Director	PPDA
2.	Mr. Christopher Gashirabake	Director, Legal and Advisory Services	MoJCA
3.	Mr. David Kiyingi	Ag. Commissioner/ Procurement	MoFPED
4.	Mr. Julius Torach	Dir/ e-Govt Services	NITA
5.	Mr. Peter Kahiigi	Dir/ Information Security	NITA
6.	Mr. Paulo Kyama	PM/IFMS	MoFPED
7.	Ms. Yerusa Nyagoma	Head/PDU	MoFA
8.	Mr. Steven Mugisha	Manager/Procurement	UNRA
9.	Mr. Simon Onyango (Secretary)	e-Government Procurement Project Manger	PPDA

3. Project Management Unit (PMU)

The Project Management Unit is required to competently manage the project. The PMU has roles in two stages, namely (i) during system development and implementation, and (ii) for on-going support when e-procurement becomes operational. Project team members required include:

i. Project Manager – Recruited.
ii. IT Specialists such as to recruit key technical experts and specialists among the following: network and security expert, business analyst, specification specialist, quality specialist, data center specialist (network and security, application, database) and help desk staff, database administrator, programming Experts, and few support staff. They will be recruited whenever required at a particular stage of the project or operation

The Interim e-GP Secretariat Membership - Transitional

No.	Name	Position	Organisation
1.	Ms. Monica Nyakaisiki	Manager IT	PPDA
2.	Mr. Bradford Ochieng	Manager Corporate	PPDA
3.	Ms. Doreen Kyazze	Senior Legal Officer	PPDA
4.	Mr. Martin Byamukama	Senior Procurement Officer	PPDA
5.	Mr. Simon Onyango	e-Government Procurement Project Manger	