SUMMARY

• The Implementation of the Integrated Financial Management System (IFMS) was motivated by the Ugandan Government’s desire to improve efficiency in budget preparation, execution and financial reporting.

• Since 2003, the IFMS has been extended across all 22 ministries and 25 central government agencies. The IFMS has also been implemented in 8 local Governments with plans to extend it to 6 more districts as part of the first tier IFMS implementation. Using a lower (second) tier solution which offers less complexity, the Government intends to further extend the IFMIS to all local governments. The second tier project implementation (based on MS Navision) has recently commenced. The discussion in this note is limited to the first tier IFMS implementation.

• The implementation of the IFMS has enabled the Government to address many of the fiduciary issues faced prior to 2003. This has led to: greater expenditure control and discipline in budget management as a result of improved oversight and enforcement of internal controls; a reduction in the time taken to process payments; improvement in account reconciliation; and more accurate and reliable financial reporting.

CHARACTERISTICS OF THE IFMS AND ITS ROLE IN SUPPORTING THE BUDGET PROCESS

APPROPRIATE DESIGN FOR THE IFMS

The design of the IFMS is based on a centralised architecture which enables central processing and storage of financial transactions. All processing takes place centrally at the server in the data centre of the Ministry of Finance in Kampala. Ministries, agencies and local governments (MALGs) are connected to the Data Centre over a Wide Area Network (WAN) and...
access the IFMS through a web browser. MALGs are however able to process and report on their financial transactions independently.

This centralised model was adopted to facilitate central oversight and management of the internal control regime without limiting the flexibility of MALGs to process their financial transactions. The model also eases maintenance of application software (including deploying upgrades) and limits the need for site based IT and high level application support skills at each of the MALGS.

IFMS BASED ON OPEN TECHNOLOGIES

The IFMS uses the Oracle application and database and the HP UNIX platform which both subscribe to open technologies. The concept of open technology architectures allows the flexibility to implement interfaces and integrate with other systems for the purpose of sharing data and enhancing efficiency. The IFMS is able to easily interface with systems at the Uganda Revenue Authority (URA) and the Bank of Uganda (BoU). It is expected that it will be easy to interface with the integrated personnel and payroll system (IPPS) currently being implemented by the Ministry of Public Service.

TABLE 1: KEY IFMS MODULES

<table>
<thead>
<tr>
<th>IFMS MODULE</th>
<th>ROLE</th>
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<tbody>
<tr>
<td>Public Sector</td>
<td>Enables vote holders to prepare and submit budgets electronically.</td>
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<tr>
<td>Budgeting</td>
<td>Consolidation is also done on the system</td>
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<tr>
<td>General Ledger</td>
<td>This enables electronic and automated posting of transactions on the system</td>
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<tr>
<td>Payables</td>
<td>Receiving and processing supplier invoices are linked electronically and validated in real time</td>
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<tr>
<td>Purchasing</td>
<td>Links purchase orders to the online cash limits thus enhancing commitment controls</td>
</tr>
<tr>
<td>Cash Management</td>
<td>Enables cash forecasting and bank reconciliation to be done online in real time. An interface with BoU is also in place to facilitate automated reconciliation</td>
</tr>
<tr>
<td>Revenue/Receiving</td>
<td>Links Treasurer with the Uganda Revenue Authority (URA) in respect of tax returns. Invoicing and collections of non tax revenue is also expected to be managed online.</td>
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COVERAGE OF THE IFMS

The effectiveness of the IFMS depends significantly on the extent to which it is comprehensive in covering Government financial transactions and the Government units throughout the budget process. To the extent possible, all government transactions – revenue receipts, debt, expenditures (including transactions financed by donor or other agencies), and all government units (ministries, agencies, sub-national units, projects, etc.) – should be covered in the IFMS. This approach will enhance the implementation of a common control regime and comprehensive fiscal reporting.

Since 2003, the depth of functionality and coverage of Government units under the IFMS has gradually been expanded. The IFMS will, upon completion of the implementation program, cover central and local Government units. Where key transactions are assigned to specific agencies, or best managed separately, the approach taken has been to establish electronic interface with systems in those units. This is the case for revenue systems under the URA, debt management systems and payroll systems under the Ministry of Public Service.

A key element in achieving a great depth of coverage is the level to which standardisation can be exercised. Some of the key challenges to standardization have been in relation to the use of multiple currencies, particularly for projects financed by multiple donors, and varying procedures for approving payments across different units of Government.

SUPPORT TO BUDGET PLANNING AND PREPARATION

The IFMS supports the budget planning and preparation process by providing historical expenditure data covering budget approvals, adjustments and actual expenditure at the lowest level (economic classifications). A record of approved budget appropriations is logged
and made available for budget execution. Initially, recurrent and development budgets were prepared on the IFMS by spending agencies to which the IFMS had been extended. However, the IFMS has not been able to provide the desired support to elements of budget planning that are analytical in nature, notably forecasting of revenues and expenditures over the medium term. Also, annual estimates could not be easily constrained by the budget ceilings of the Medium Term Expenditure Framework (MTEF), and the budget estimates were printed from legacy systems. The IFMS has also been inadequate to fully adjust to recent Output Oriented Budgeting (OOB) reforms. To address this, the Ministry of Finance has introduced a supplemental tool - the Output Based Budgeting tool (OBT) - to provide support in preparing, monitoring and reporting on the result based budget. The annual budget estimates are uploaded from the OBT onto the IFMIS, and expenditure data is taken from the IFMIS and uploaded into the OBT on a quarterly basis to enable budget reporting.

SUPPORT TO BUDGET EXECUTION

The IFMS was configured to implement internal controls during budget execution in line with public financial law. It facilitates the issuance of warrants and the release of funds to MALGs. This includes cash management such as electronic bank reconciliations and the issuance of cash limits which the MALGs use for expenditure planning. The IFMS also enables MALGs to receipt revenues, approve and issue purchase orders, record commitments, approve and process payments (including the printing of invoices checks to suppliers). The IFMS also facilitates the generation of management information and preparation of reports both at MALG level and consolidated level.

SUPPORT TO FINANCIAL REPORTS AND AUDITING

MALGs and the Ministry of Finance are able to rely on the IFMS to prepare reports on captured data. Along with standard reports, the IFMS offers a report construction module – the financial statement generator – which provides the flexibility to develop additional custom reports. It also offers a flexible way of querying the system on various aspects such as quick listings of purchase orders and commitments. The existence of an audit trail provides significant added security.

KEY FACTORS AND LESSONS IN SUCCESSFUL IMPLEMENTATION THE IFMS

PRE-REQUISITES FOR IMPLEMENTING THE IFMS

Based on the lessons learnt, the following are useful conditions to put in place to facilitate implementation of the IFMS:

- A comprehensive chart of accounts mapping budget classification to accounts is needed to allow seamless reporting between budget and expenditures.
- A public finance legal and regulatory framework providing a sound basis for implementing and using electronic systems and the right conditions to operate the IFMS are needed. In the case of Uganda, the legal framework and the internal controls regime were reviewed to enable proper interpretation and acceptance of electronic records and reports by relevant authorities and institutions for example when approving payments or auditing financial statements.

THE IFMS IS NOT JUST TECHNOLOGY

Implementing the IFMS is effective to the extent that it is accepted and utilized by the relevant staff and management. Introducing the IFMS is more than procuring and installing technology (hardware and software). It is about changing the way business is conducted, and changes to procedures will need to be adopted by staff and management.
In Uganda, there were two crucial elements that needed to be tackled:

- The IFMS needed to be appropriately scoped and aligned to the Ugandan program of financial management reforms that was under implementation so that it supported the objectives of these reforms.
- There were entrenched practices or power networks that were threatened with the introduction of IFMS. This, coupled with requirements to learn new skills and the fear of layoffs among staff, created negativity and had to be addressed to limit undesirable impact on the implementation of the IFMS.

An extensive change management exercise and a communications strategy were implemented to minimize the fears and negativity, and to improve ownership. These were accompanied by a set of incentives to ensure operatives used the systems. For example, withdrawing manual receipts and local purchase orders from use and abolishing the submission of manual financial statements at the end of the year by MALGs that were connected on the IFMS.

MANAGING THE IFMS DURING AND AFTER THE IMPLEMENTATION

A successful IFMS requires high level commitment within the structures of Government during and after implementation. Government leadership must be expressly exercised. In Uganda, responsibilities for implementing and maintaining the IFMS were assigned to the Accountant General – a position at the level of deputy Permanent Secretary (or Undersecretary in the Government of South Sudan). They reported to the senior management on the implementation. This position had sufficient power to mobilise the resources required and to ensure MALGs implemented the IFMS.

PLANNING TO IMPLEMENT THE IFMS

Careful planning is crucial for the successful implementation of an IFMS. In Uganda, this allowed the Ministry to (i) properly scope the IFMS (for example which modules and functionality to include - e.g. should payroll be part of the IFMS); (ii) assign time and desired level of resources to identifying user requirements; (iii) assign staff and develop skills relevant to participate in implementing and using the IFMS; (iv) put in place arrangements to manage the IFMS during and after its implementation.

With the help of consultants, Uganda undertook a study which developed the user requirements and provided a roadmap for the implementation of the IFMS. Funding was then secured to finance the implementation of the roadmap. In addition, the Ministry planned well in advance for the post implementation period including ensuring that (i) a proper support structure and technical staff were put in place; (ii) elements of the IFMS – for example site requirement - to be taken over by the MALGs were properly assigned to them and that they were guided in managing them; and (iii) funds for recurrent maintenance of such elements were provided in the MALGs budgets.

MANAGING THE SUPPLIER CONTRACT

Implementing an IFMS has five main components that need to be supplied: (i) the application; (ii) hardware and communication nets (LANs) within each institution; (iii) the interagency communication infrastructure (wide area network or WAN); (iv) Change management and training; (v) system integration. Success in implementing the system depends significantly on how these components are managed. In order to minimize risk, especially in view of the capacity and skills available at the time, the Ministry opted to have the supplier implement and provide project management services for all components (except change management) under a turnkey concept (one single contract). The Government shifted the risk for delivering the IFMS to a single supplier, rather than managing each component under a separate contract. The contract was arranged accordingly and payments tied to delivering key components. This proved to be a powerful strategy in implementing the IFMS.
PARTICIPATION OF RELEVANT UNITS
To maximise the chances for ownership and use of the IFMS, it is important that all Public Finance Management (PFM) units relevant to the IFMS participate in its design and implementation. In Uganda, units with key responsibilities in budget (for budget preparation and releases, and sector planning), macro fiscal units, accounting, internal audit, procurement, and external audit, were engaged on the need to participate. This was done in a structured way within a common structure. However, requests to expand the scope of the IFMS to accommodate special requirements for the budget and macro units were not fully accommodated and this initially limited their ownership and acceptance of the system in Uganda.

STAFFING AND SKILLS
Implementing the IFMS called for a new set of specialized skills – in accounting and IT – which were in short supply in Uganda. It was necessary to step up these skills quickly to enable the smooth implementation. The Ministry opted to recruit a team of 12 Ugandan experts to support the implementation of the IFMS and its skills development program. 40 graduate staff specifically trained to support the system were also recruited, many of which have since been absorbed into the civil service. The internal training facility that was set up during the project was key to developing the skills required. It should be noted that implementing a comprehensive capacity building program was in part possible because accounts staff are a common cadre over which the Accountant General has authority to recruit, deploy and discipline.

CHALLENGES TO IMPLEMENTING AND MAINTAINING THE IFMS

PROLIFERATION OF PARALLEL SYSTEM
Various ministries and agencies were already implementing, or were planning to implement, a system to support their financial management operations. This slowed the process of transition to the IFMS. The Ministry of Finance, evoking its mandate over financial management systems under the law, wrote to all MALGs informing them about the planned introduction of the IFMS and barring them to invest further in similar systems.

MANUAL PROCESSES
Manual processes pose the biggest threat to efficiency and effectiveness of automation under the IFMS. For example, commitments made off the system and only regularized after the fact, or revenue receipts and budgetary expenditures that may not be captured on the system, will limit its effectiveness for fiscal control and reporting. The system will only be good to the extent to which off system processes and controls are aligned with it. To the extent possible, the IFMS should be enabled to capture all financial transactions to minimize off system transactions. At the same time, the Ministry, supported by internal and external audits, needs to continually exercise vigilance to check on transactions that may be carried out outside the system and to ensure appropriate sanctioning of irregular behaviour.

EVOLVING WITH PUBLIC FINANCE MANAGEMENT REFORMS AND ANALYTICAL PROCESSES
Some new PFM reforms pose a challenge to the IFMS. Uganda has recently adopted output oriented budgeting, requiring Government to track physical performance in addition to expenditures. However, the IFMS's capability is limited to financial transactions and it has been unable to adjust to this new requirement. Therefore, it was necessary to develop a supplemental system (the Output Budgeting Tool) to track and report on the physical performance.

A similar challenge relates to the budget planning process which is inherently highly analytical. Previous efforts to automate its processes (using the Oracle financial analyser) have not been successful. It was decided that there was little benefit in covering highly iterative and analytical processes. Therefore, these processes remain off the IFMS.
CHANGES IN TECHNOLOGY

Changes in technology pose a major challenge to sustaining the IFMS. Hardware needs to be periodically replaced, particularly as software (both system and application software) advances. This is most apparent for the data centre. A second element of this challenge relates to institutions whose interfaces are implemented and have a separate procurement decision process. Specifically, URA has continually changed its technologies – even with open technologies (discussed in Section 1). This has constrained the smooth implementation of the interfaces.

RELIABILITY OF THE WAN

Given the centralised nature of the IFMS, the reliability of the connection between the MALGs and the data centre over the WAN is critical. The Government opted to outsource the infrastructure for the WAN, asking local telecommunication suppliers to provide the connection. Two suppliers, one backing up the other, were contracted. However, the WAN continues to be unstable with significant outages affecting the reliability of the IFMS.

MAINTAINING THE IFMS

Despite the meticulous planning, maintaining the IFMS has posed challenges. These include: high staff turnover, requiring continuous skills development; recurrent costs covering (among other things) licenses, technical support and the maintaining of equipment. Maintenance budgets have to be made available within MALGs and the Ministry of Finance. Importantly, the Ministry of Finance has to continue to provide leadership to ensure maintenance is done when it is due and to ensure the system continues to function at a satisfactory level, including in the wake of new reforms.

CONCLUSIONS

The IFMS offers tremendous benefits to the Governments in the budget cycle. Traditional IFMS application solutions tend to be better at supporting budget execution, accounting and reporting processes than the planning phase of the budget cycle. This is because of the present limitation to handle the demands for analysis. Implementing the IFMS is a complex undertaking. The IFMS has to be tailored to the specific needs of each country: one implementation will not fit every country. Accordingly, the design and the choice of technologies must be selected carefully to fit the needs of each government. There are other factors which are also important and to which attention must paid to ensure successful implementation of the IFMS. This includes high levels of commitment from key government officials, appropriate project management arrangements, as well as the development of the right skills and attitude to the IFMS among government institutions and staff. Due to its complex nature, challenges will emerge throughout the implementation process. These challenges will often vary from one implementation to another. Readiness to address these emerging challenges is essential to ensuring success in implementing an IFMS.

ENDNOTES

1. The first tier IFMS is based on the Oracle financial application.
2. Local governments in Uganda to which this statement applies include districts (as higher local governments), municipal and town councils.