INTRODUCING INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEMS

Governments around the world are investing a great deal of resources to streamline and improve public financial management. Many are implementing new, integrated financial management information systems (IFMIS) that computerize and automate key aspects of budget and accounting operations. Development agencies and international organizations such as USAID, the World Bank, and the IMF often play a critical role in shaping these systems through a combination of financial and technical assistance, training, and procurement support.

Recent USAID experience with IFMIS

- Azerbaijan: 2003 – Present
- Bosnia and Herzegovina: 1999 – 2004
- Haiti: 2004 – Present
- Iraq: 2003 – Present
- Kosovo: 2000 – Present
- Malawi: 2006 – 2008 (MCC TCP)
- Paraguay: 2007 – Present (MCC TCP)

An IFMIS can improve governance by providing real-time financial information that financial and other managers can use to formulate budgets, manage resources, and administer programs. Sound IFMIS systems can not only help governments gain effective control over public finances, but also enhance transparency and accountability, reducing political discretion and serving as a deterrent to corruption and fraud.

Obstacles should not be underestimated: among others, bureaucratic resistance; lack of top-level commitment; weak human capital; poor ICT infrastructure; and, in the case of conflict-ravaged countries, the instability and violence that impair any long-term work. Yet, the task is still feasible. The technology exists and aid providers can play a very important role in helping decision-makers choose the most appropriate tools for their environments.

This note describes the key features of government IFMIS systems, highlights some of the issues and challenges common to most IFMIS reforms, and lays out a series of “best practice” recommendations to guide IFMIS projects, from initial assessment to system rollout.

UNDERSTANDING IFMIS

An IFMIS is an information system that tracks financial events and summarizes financial information. In the private sector, such systems provide critical support for management and budget decisions, fiduciary responsibilities, and the preparation of financial reports and statements.

In the government realm, IFMIS systems must be designed to support distinctly public sector functions. They must be able to handle and communicate all the financial movements for the complex structure of budget organizations. Moreover, they must be designed to ensure compliance with budget laws and public finance rules and restrictions.

Integration is critical to the operation of an IFMIS. Integration, using a common “data warehouse”, ensures that every unit and every user adhere to common standards, rules, and procedures and helps safeguard against unauthorized or imprudent uses of budget funds. It also allows users anywhere within the IFMIS network to access the system and extract the specific information they need. A variety of reports can be generated to address different budgeting, funding, treasury, cash flow, accounting, audit, and day-to-day management concerns.

1 This note was prepared by Steve Rozner and is based on Rodin-Brown (2008), Integrated Financial Management Information Systems: A Practical Guide.
The scope and functionality of an IFMIS can vary, from basic General Ledger accounting application to a comprehensive system covering budgeting, accounts receivable/payable, cash management, commitment control, debt, assets and liability management, procurement and purchasing, revenue management, human resources management and payroll. Enterprise Resource Planning (ERP) programs that integrate all of these functions into the IFMIS system architecture have become the standard for large commercial organizations, but full integration is rare in the government realm. In many cases, where other “legacy” systems already exist but operate on separate “platforms”, a minimum is for all of these systems and their databases to be able to interface with the IFMIS.

The scale of the IFMIS will also vary depending on whether its operation is limited to selected central-level institutions, such as the finance ministry and treasury, or is implemented more broadly, to include line ministries, their spending agencies, and even regional and local governments and municipalities. These variations will have implications far beyond the cost of hardware and software installation.

**NOT JUST A TECHNOLOGY FIX**

Information technology is changing the way information is captured, processed and communicated. However, introducing an IFMIS should not be viewed merely as an IT solution. Simply automating inefficient processes will not make them any more efficient; nor will anything be gained from automating tasks that were not needed in the first place. An IFMIS invariably affects how things are done. It requires changes in management and organizational structures; changes in workflows; and, changes in roles and responsibilities. These changes ultimately affect the broader institutional arrangements in the public finance system. Following are some of the issues that commonly accompany IFMIS reforms.

**Legal framework.** An IFMIS must be underpinned by a coherent legal framework governing public finances. There should be clear legal guidance, inter alia: on: the roles and responsibilities of all institutions in managing, controlling, and monitoring budget execution; the authorization, commitment and release of funds; the basis of accounting (cash/accrual); reporting requirements; and, asset management, public investment, and borrowing.

Legal reforms are seldom simple or swift, but this process need not stall IFMIS implementation. An IFMIS can be designed with the flexibility to meet existing requirements, and evolve in response to legal or institutional changes.

**Business Processes.** Introducing an IFMIS generally implies fundamental changes in operating procedures. This can be done seamlessly by paying attention up-front to information flows and the way in which those flows are processed, managed, reported, reviewed and used for decision-making. IFMIS design should, therefore, be preceded by detailed functional analysis that underpins current functional processes, procedures, user profiles and requirements that the new system will support. Of course, there are exceptions to the rule—in particular, in fragile or post-conflict environments where the need to track and control expenditures is too urgent to wait for this functional work to be completed.

**Budget and accounts structures.** IFMIS implementation often involves simultaneous efforts to unify budget classifications and the chart of accounts (CoA). Both codes and classifications will have to be brought into compliance with standard classification and accounting frameworks, such as the IMF’s Government Finance Statistics and the International Public Sector Accounting Standards (IPSAS), and designed to accommodate diverse reporting requirements. Nevertheless, existing classification structures in the country should not be ignored.

**Centralized treasury operations.** Oftentimes a parallel reform to the introduction of IFMIS is the consolidation of all government financial resources in a treasury single account (TSA). A TSA is an account or set of linked accounts, typically housed within the central bank, through which the government transacts all payments and receipts. The treasury department manages financial resources centrally, sweeping idle balances from the sub-accounts of spending units and consolidating the government’s cash position at the end of each day. Among its benefits, centralized treasury management through a TSA improves cash control and minimizes the cost of borrowing, enabling more productive use of public financial resources.

**BUY VERSUS BUILD**

The decision to “custom-build” an IFMIS or buy a commercial software package “off-the-shelf” (COTS) depends on a variety of factors.

Custom-developed applications may be an effective interim solution when transitioning from manual to computerized recordkeeping. They also may be sufficient if the functionality of the system and the number of users is limited.

However, the “build-your-own” approach has its shortcomings. Among others, custom systems generally take much longer to complete than expected. The work involved in developing all the applications required to support a labyrinth of information flows, then testing them...
and maintaining them, is colossal and prone to costly errors and delays. Moreover, because custom development tends to be piecemeal, it regularly results in fragmented systems that lack the basic controls and audit trails necessary for effective financial management.

On the other hand, commercial package producers invest considerable effort to standardize core IFMIS functions and “fail-safe” them against the most common problems faced in custom development. The detailed checks and balances built in to COTS systems are critical, especially for building and maintaining trust and transparency. There is great value in taking a COTS system that has been used successfully in other environments, or even one that has been certified by an internationally recognized accounting group.

COTS packages are typically modular and can expand in capacity and functionality to meet expanding requirements. They can also be configured to link up with “legacy” systems that are already in place to postpone investments in modules that may not be needed right away.

There are a number of COTS packages that tailor to and incorporate public sector requirements related to budget control and accountability. These start from simple “shareware” and “open Source” packages to complex, full-blown ERP systems, such as SAP, Oracle Financials, and FreeBalance.

Of course, there are drawbacks to using COTS, too. For one, COTS solutions are not cheap. Initial outlays for software alone may be reasonable, but the ongoing costs of maintenance contracts, license fees and system upgrades are considerable and can be greater than the initial costs of the COTS. Furthermore, COTS packages tend to impose a rigid, standardized structure on business processes, forcing a government to organize to the application, not the other way around. This may be a positive outcome, however, since many reforming governments could benefit from the discipline built into COTS software applications. Nevertheless, resistance should be anticipated.

**IFMIS “BEST” PRACTICES**

This section highlights several good or “best” practices to consider when designing and structuring IFMIS reform efforts. Of course, there are few hard and firm rules. Requirements and choices vary from country to country, and flexibility and understanding are key.

**Get the facts.** Do a careful assessment of the current environment, including the political and power dynamics, fiscal priorities, the state of budget accounts, ICT infrastructure, and human capital. This analysis should lead to clear recommendations on what is needed, the scope of activities, and estimated costs. It should also indicate training needs and likely implementation challenges.

**Establish clear objectives.** Whether the objective is to improve the quality and integrity of financial information, improve the efficiency of budget execution, or something else, clearly lay out what you want to achieve and secure top-level commitment. A clear mission statement will help control the project direction, participant expectations and, ultimately, project costs. Support from high-level champions, namely the finance minister, will shield the project from forces of resistance and ensure local ownership of the reform.

**Create a roadmap.** The roadmap should cover immediate, medium- and long-term IFMIS tasks and objectives. It should clearly define parameters including the system objective and scope; the overall system conceptual design; expected impact and benefits; critical milestones and success factors; project implementation methodology; risk assessment/mitigation strategy; estimated costs; and the financing arrangements. Agreement on these and other concerns should lead to a written commitment from the cooperating government and corresponding commitments from donor institutions.

**Manage the change.** Change management is one of the most critical, but also one of the most neglected, aspects of IFMIS reforms. Resistance will come from all angles: vested interests who benefited from the way things traditionally have been done; civil servants who see new systems as a threat to their jobs; and, people who resist change simply for fear of the unknown. Any reform that ignores these forces tempts failure.

**Restoring financial control after conflict**

Reconstruction places immediate demands on post-conflict governments to distribute and account for massive amounts of resources. Getting control over the expenditure process is the highest priority in such situations. In post-conflict Kosovo, the transitional administration started with a basic, MS Excel expenditure tracking system. This allowed authorities to get an immediate handle on government spending and donor disbursements, providing a temporary solution while donor-funded technical assistance teams worked on the system architecture for a more robust financial management system. The new IFMIS, with basic accounting and reporting functionality, was in place in the treasury in just 26 days. The system has been expanding in scope and scale ever since. Today, the system covers a wide range of sophisticated functions and operates government-wide. All 80+ Kosovo budget organizations, including some 30 municipalities, are connected to the system, with over 650 active users.
As soon as an IFMIS project is conceived, a change management strategy should be developed, taking into consideration the change implications for diverse stakeholders, from politicians and senior officials to department heads, civil servants and the IT personnel who will support the new systems. Overcoming resistance will happen through clear communication, education, and training, as well as through “quick wins” that demonstrate the benefits of the change.

**Train.** Like change management, training should begin as early as possible, especially for treasury staff and IT personnel who will be affected most immediately by the IFMIS reform. A broader, permanent training program with curricula tailored to different types of system users should be developed, implemented, and made permanent and ongoing.

**Project management matters.** This goes beyond simply managing the technical aspects of implementation. The Project Manager (PM) not only must be expert in public sector finance and accounting, but must also have the “soft” skills needed to communicate and sell new concepts, manage expectations, and anticipate and respond to challenges. At the same time, the PM must have the management and leadership skills needed to direct and coordinate diverse activities executed by a wide range of specialists, including economists, accountants, lawyers, and experts in business process redesign, ICT, change management and training.

**Cultivate and utilize local talent.** Special attention should be paid to transferring knowledge and capacity to local team members and counterparts, who should assume increasing responsibilities for delivering project results. This will not only contribute to in-country capacity, but also will strengthen local ownership of the system.

**Establish project oversight.** A regular Steering Committee (SC), headed by a high-level figure, such as the finance minister, should be formed to oversee the IFMIS reform, review project progress, address risks and ensure that stakeholders’ needs continue to be met by the system as it develops.

**Shop around.** Selecting the right tools, equipment and technology requires a good deal of shopping around. It is very costly to procure a new system, only to discover later that the recurrent costs are too prohibitive, the structure is too rigid, or the system is otherwise incompatible with the government’s needs. Survey the marketplace, evaluate the different options, and identify the solution that best suits system and user requirements.

**Test the system.** Resist pressure to rollout the system before it is ready. This means pre-testing the working model with real data—proving the functioning of the CoA, the software and integration processes, recording real transactions, and producing real reports. Running the new and old systems in parallel during the test period will allow implementers to resolve hidden problems and make adjustments before “shutting off” the old systems.

**Phase implementation.** IFMIS implementation requires patience. The full project life cycle—from definition of objectives, to system specifications, to system procurement, configuration, testing, pilot installation and rollout—can take years to complete. Phasing IFMIS implementation, by separating the reform into manageable pieces, will allow for “quick wins” that help sustain or renew commitment from the government and donors alike. As each phase is completed, stakeholders can carefully assess project progress and make adjustments as needed.

**Set modest, achievable goals.** For many developing countries, the capacity is often too weak, and the need often too urgent, to aim for a complex IFMIS right off the bat. The initial goal should be to establish simple information systems that address the basic accounting and reporting needs of the treasury. Once operating effectively, the government can gradually expand the system as resources and conditions permit.

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**Recommended readings:**


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