

Acquisition by a government of an integrated financial management system

Within your country you are the senior official with responsibility for government accounting, perhaps with the title of Accountant General. Your country is one described as a low income or emerging economy, for example in Africa, Asia or the former Soviet Union. Your present accounting systems make use of computers, but with a mixture of systems that have been developed over the years. You have decided that you want to acquire a new "Integrated Financial Management System" (IFMS for short) to replace your existing treasury management systems and you want to know where to begin.

Before even starting the acquisition process the fundamental question needs to be asked - **why** acquire new financial management systems at all? The private sector drivers for change - cost saving and gaining a competitive advantage - work differently for governments. In many countries public financial management has traditionally meant ensuring expenditure is kept within the budget and that such expenditure complies with the financial rules. Concepts of financial management as an information system to improve the efficiency and effectiveness of government, provide transparency, ensure accountability and control corruption are quite new. Traditional accounting systems are not geared to these new objectives, hence reforming public financial management is likely to be a requirement for various forms of external support. In such situations, implementation of an IFMS provides the essential infrastructure for the required improvements in public financial management.

However, you should also be aware of the downside of such an IFMS acquisition:

- Acquiring an IFMS is not a "quick fix" - it is likely to take years to fully implement and cost millions of dollars (of this more later)
- During this period other reforms may be delayed waiting for the new system to be implemented
- A new IFMS is not in itself improved financial management - it is an information tool that can help achieve the desired reforms
- An IFMS implementation can fail, or more commonly may not realise in full the expectations from the system
- To realise the benefits from the IFMS, surrounding systems, financial rules and institutional structures will have to change
- Sustaining an IFMS is likely to place new demands on government for technical support staff and ongoing financing, e.g. license fees.

Thus acquiring an IFMS is not a decision to be taken lightly. It requires careful consideration, and a decision to proceed should have high level government support and commitment. Furthermore, an IFMS is a major project and as such requires a structured project management approach. The UK government PRINCE (PROjects IN CONTROLLED ENVIRONMENTs), version 2, is non-proprietary and one of the most widely used methodologies.

However, if after careful evaluation a decision to acquire an IFMS is taken, then what next? There are six stages to the process from start to end as summarised below.

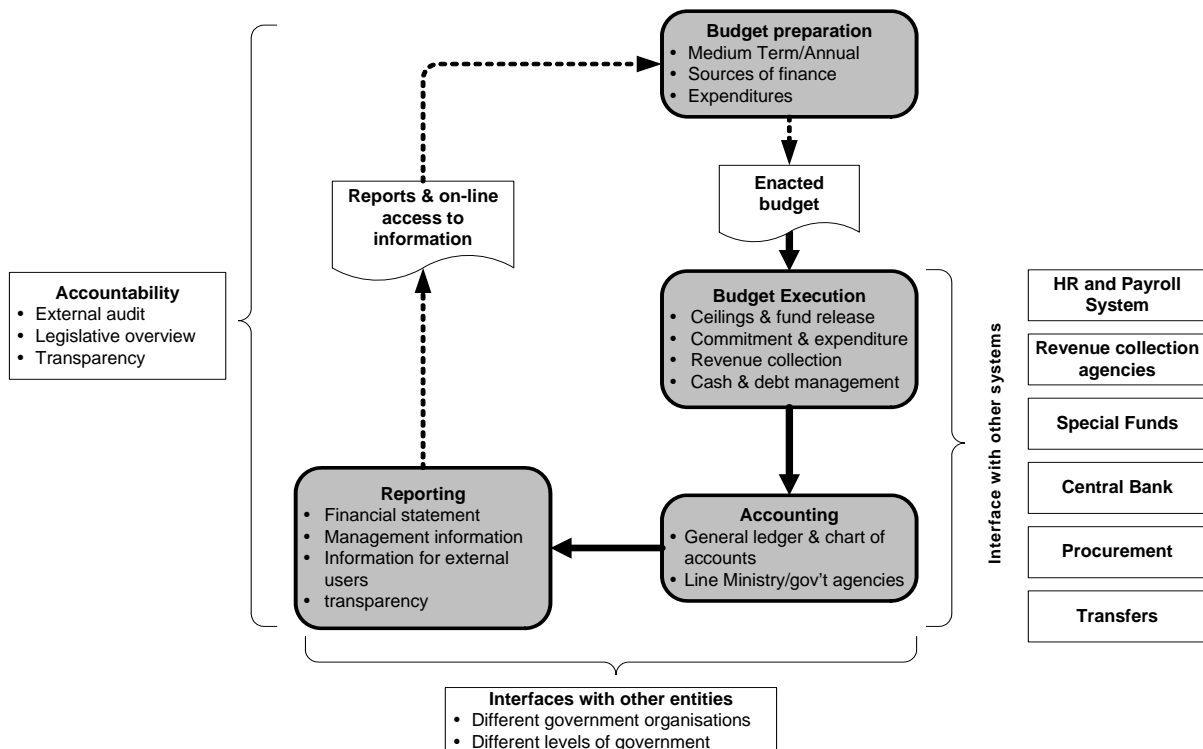
- Stage 1 Plan for the IFMS
- Stage 2 Identify funding
- Stage 3 Define user requirements
- Stage 4 The bidding process
- Stage 5 The selection process
- Stage 6 Contract negotiation
- Stage 7 Implementation

Stage 1 Plan for the IFMS

Planning involves a high level design of the system, identification of surrounding changes that will be required and actions to make the new system sustainable.

The first consideration is to decide precisely what the IFMS will cover - the business architecture and IFMS parameters. Four activities dominate government financial management - budget preparation, budget execution, accounting and reporting. Within these activities are many important government functions, often extending beyond financial management, e.g. payroll (typically a very large proportion of government expenditure), procurement, tax collection, cash and debt management. Many of the transactions will be the responsibility of individual government ministries and organisations, often using their own systems, e.g. tax collection. The diagram in Exhibit 1 provides an overview of government activities and some of the issues.

Exhibit 1: Government financial management overview



In general, the greater the coverage of the IFMS, the greater the potential benefits, but also the greater the complexity, cost and risk of failure. Big integrated systems will inevitably require a large integrated software package, demand substantial technical skills and place heavy demands on hardware and networks. There is a judgement decision on the balance between the benefits of comprehensive integration against cost and risks, and this decision can only be made in the context of a specific country. The decision on the architecture and parameters is a management decision, but it must be informed by technical advice on the issues and options.

Planning also involves identifying the technical architecture, for example how are transactions initiated outside the Accountant General's Office to be incorporated into the IFMS? How many users will have on-line access to information? What security is required, and what procedures will be put in place to protect against disasters, e.g. a fire destroying the computer centre? There are a number of alternative solutions to these and other issues, but in total they will define the networks, servers and workstations required for the system - the technical architecture.

Planning also involves considering the surrounding organisational structures, regulations, human and financial resources. The implementation of an IFMS is likely to impact on all of these if it is to be successful. Organisationally, some units may exist for functions that will be automated or integrated with other functions, and there will need to be specific organisational points responsible for managing the IFMS and supporting users. Financial rules, and sometimes legislation, often specify forms and

procedures which may need to be changed (e.g. electronic authorisation rather than paper signatures). Human resources must be trained to operate and manage the new systems, and technical support must be available for the new IFMS. Budget provisions must be established for new costs, e.g. software license fees, support contracts. Records management must be addressed - how long are electronic records to be kept, in what format, and how will access be controlled.

At the planning stage, other related reforms need to be identified and sequenced. Revisions to the chart of accounts are likely to feature amongst such reforms. The chart of accounts is the key to both integration and interface with external systems. For example, it will be very difficult to transfer payroll information to the accounting system if each uses a different classification for payroll expenditures - and this applies whether payroll systems are part of IFMS or separate.

Planning is fundamental to the success of the IFMS. Time and effort at this stage will yield benefits later. Furthermore, the planning stage can be used to build understanding and ownership of the changes by the users.

Stage 2 Identify funding

There is no simple answer to how much an IFMS costs. It depends on the size and complexity of the system, as defined in the business and technical architecture. The World Bank conducted a survey of 34 IFMS implementations and found the average cost was US\$12.3 million. However, there is a wide variation within this average. The minimum cost, even for a small system and related hardware just in the Ministry of Finance, is unlikely to be less than US\$ 2 million.

For many countries, this scale of expenditure will require some external funding. Given the current focus on improving public financial management, such funding is usually not difficult to identify, but does require a clear definition of the planned system. If the country does not provide such definition, the danger is that the funding agency may effectively “take over” the project and push their approach and solutions. In any event, if the acquisition is to be funded by concessional loans or grants, the procurement requirements of the funding agency will have to be observed, so it is easiest if these are built into the process from the start.

Stage 3 Define user requirements

You must identify and clearly state the user requirements. This will be in the form of a series of statements, e.g.

The system must allow for current and previous year transactions to be available for on-line enquiry and reporting

Previous year's data-files to be backed-up, and subsequently be accessed off-line for enquiry and reporting.

Requirements should be categorised as mandatory or desirable. Vendor will be required to demonstrate that they can satisfy all mandatory requirements, and as many as possible of the desirable requirements. Key mandatory requirements should be carefully specified, such that if a bidder fails to meet such a requirement the bid may be rejected. This, of course, must be clearly documented for the vendor in the Bid Documents when they are prepared.

In order to make a proper evaluation, “test scripts” may be developed for key requirements, using, where appropriate dummy transactions, which the vendor will be required to process so as to demonstrate that the functionality works as required.

The evaluation of the competing systems will take account of the vendor's written response to the user requirements, as confirmed by reviewing at least a sample against the test scripts. To facilitate the process test scripts are normally provided in advance to vendors so that they can set up their demonstration.

Developing user requirements should involve existing users, but is a process that needs to be carefully managed. When asked, users will normally specify detailed requirements that replicate

existing processes - and usually make most mandatory! Too detailed requirements create a number of problems:

- The opportunity to use the more efficient workflows and transaction processing of the package may be lost
- The further the requirements move from the way the package is designed to operate, the greater the cost, time and risk of implementation failures
- The vendor may have to develop procedures or modules that are not part of the package. These will be very expensive, and may not be supported through future upgrades.

Therefore, although there must be defined user requirements, as far as feasible these should be kept to high level requirements that are matters of principle, rather than detailed procedures. Working with users to develop this approach can in itself be a change management exercise, and help prepare for the inevitable procedural changes when the IFMS is implemented.

Stage 4 *The bidding process*

The first stage of the bidding process is to decide who will be invited to tender. There are three options for selecting invitees:

- Pre-qualification, with potential vendors submitting expressions of interest which are then evaluated to generate shortlist
- Open tender, with a general advertisement
- Limited tender, with the government inviting only a few firms to tender.

The first two approaches are the most obviously transparent, but take additional time and effort. The limited tender approach is quick, and can be justified because there are relatively few software vendors with any experience of government IFMS implementations; however, all stakeholders have to be satisfied that this is a sufficiently open process.

A decision must also be made as to whether the bidder will be for a complete system - hardware and software - or just for the provision of the software. In the latter case, bidders will be required to specify the hardware they require for their system to operate.

Whichever method is used to select bidders, bidding documents have to be prepared. Formats are normally prescribed by funding agencies, but all comprise standard elements:

- A formal request for bids with standard information, including bid deadlines, evaluation procedures, etc
- Description of the requirements, using the architecture descriptions and Statement of User Requirements (SOUR) developed above (test scripts may also be included or sent later)
- List of information requirements from bidders, including bid price and other financial information (under some bidding systems, financial details are not required until the bid has been accepted as being technically appropriate)
- Details of the contractual arrangements that will apply if the contract is awarded.

Bids will be received, and there should be a formal process for controlling bid documents, restricting access and opening of bids. At this stage it is likely that some bids will be rejected because the bids do not in some way comply with the bid requirements. Those that are left will be evaluated as described below.

The selection process may be single stage or two stage. In a single stage process all compliant bids are evaluated, usually with visit and demonstration by bidders, and a preferred bidder identified. Under a two stage process there is an initial evaluation, possibly with a demonstration, and then two or more preferred bidders are invited to demonstrate their system against the selection criteria and test scripts. A two stage process is obviously more thorough, but takes more time, increases costs for the bidder and government, and at the end may not result in a better decision.

The whole bidding and selection process is a very sensitive area, especially if an external funding agency is involved. That agency will be very concerned to be able to audit the bid and selection process to ensure that it was open, fair, and free from any possibility of corruption. Furthermore, major software companies that bid for IFMS implementations are powerful organisations, and may complain if they consider the process has been unfair. This imposes a need for a bureaucratic process that provides documentary evidence that all bid stages are properly carried out and can be demonstrated to be fair.

Stage 5 *The selection process*

The details of the evaluation process will vary between countries and the requirements of funding agencies, but there are always standard elements as described below. It is always preferable that an evaluation and scoring system is defined in advance, and essential that all information is properly documented.

Some or all of the bidders may be invited to visit your country and demonstrate their systems. If some bidders are rejected even before this stage, it is essential that the reasons for rejection are fully documented for the reasons indicated above.

The demonstrations should be more than a “sales pitch” by the bidder. Rather, it should be a rigorous process with the bidders demonstrating their ability to comply with the user requirements using the test scripts. Users of the system should be actively involved in this evaluation, and the results recorded in detail. The results will be combined into a score, and bidders ranked according to their technical scores.

Bidders will also be evaluated according to their financial proposals. It is important that all financial bids are evaluated equally, which will mean identifying additions, exclusions etc, and adjusting bids to identify a final price, to which net present value techniques should be applied to future costs in order to establish a full current bid price. The financial evaluation should take account of all costs, including hardware, through life support of the system, training requirements, and what is included and excluded in the financial proposal. Other factors will also be taken into account, including the financial stability of the bidding organisations, their experience, the implementation team, hardware requirements, and other relevant factors.

The scoring systems and specific procurement procedures being followed will determine how the final evaluation is conducted, but the outcome will be the identification of one preferred bidder who will then be invited to contract negotiation.

Stage 6 *Contract negotiation*

Contract negotiation requires careful management. Any changes should not move outside the bid requirements, otherwise the bid and evaluation process is invalidated. On the other hand, it is essential that all details and deliverables are specified. In particular there must be defined and staged acceptance criteria and timetables, with payment linked to meeting these requirements. Key persons and management structures on both sides must be defined, with clearly stated procedures for acceptance.

It is common for changes to be made, or requirements added during implementation. Such changes and additions may be necessary, but are also a frequent cause of delays and cost overruns. As such they need to be carefully controlled. The contract must specify procedures and documentation for any contract variations after the contract has been signed.

It is unusual for the contracting process to fail, but it should lead to a tightly drawn and very clear contract that minimises the scope for later disputes. Finalisation of the contract can take some time.

Stage 7 *Implementation*

Last, but certainly not least, the selected system has to be implemented. This article does not go into the detail of how a particular system works, but there are some general points.

Implementing an IFMS is a major project, and the agreed project management structure must be put in place before the implementation starts. This may involve institutional changes, appointing staff and actions to delegate authority. Furthermore, such organisational structures are likely to be specified in

the contract, and so must be in place to avoid delays and cost overruns which the contractor can legitimately charge to the government.

If the contract with the vendor does not include the provision of hardware and networks, then the requirements and responsibilities for such integration must have been specified in the appropriate contracts. It is essential that these are procured and implemented in accordance with the contractual requirements. This may in itself be a quite substantial procurement and implementation exercise, and need to be built into the project plan.

The implementation of the IFMS will be a major change for all users, and the users are likely to extend outside the economic Ministries to other agencies of government. This is an exercise in change management. The new system must be seen to have high level political support, and all involved must be fully briefed on the changes. As far as feasible there needs to be broad support for the IFMS. What you do not want is a Ministry or agency announcing it is in the middle of implementing its own system, and therefore cannot implement IFMS - this is where advance briefing and high level support become essential.

The whole implementation process must be managed. The project and organisational structure referred to above should provide for such management, but it must be made to work. At all stages there must be detailed documentation, including acceptance procedures. Not only does this demonstrate proper management, but will be essential in the event of any dispute with the contractor.

Conclusions

This article has provided an overview of the steps and actions involved in the acquisition by a government of an integrated financial management system. It is clear that many of these are subjects in their own right, for example project management, change management, but what does become clear that this is a major and important change for any government, and as such does require strong management.

Finally, it must be recognised that implementing an IFMS does not automatically lead to better financial management. What it does is to provide the financial information infrastructure on which reforms can be built - in fact, it is the beginning, not the end of the process.

References and sources

"Treasury Reference Model" World Bank Technical Paper No 505 (Ali Hashim and Bill Allan 2001)

"Implementing Financial Management Information System Projects: The World Bank Experience" (Bill Dorotinsky, available on the World Bank web site
www1.worldbank.org/publicsector/egov/ReinventingGovWorkshop/dorotinsky.ppt)

"Treasury Diagnostic Toolkit" World Bank Working Paper No 19 (Ali Hashim and Allister Moon 2003)

© **Michael Parry**

Michael Parry Consulting
www.michaelparry.com
E-mail: michael.parry@michaelparry.com