Toolkit for Researchers

Investigating and Addressing the Requirements for Building Integrity in Public Sector Information Systems in the ICT Environment



International Records Management Trust

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The International Records Management Trust has a long standing commitment to supporting developing country governments in managing their records effectively, in electronic or paper format, to safeguard national resources and citizens' rights. This research project marks an important step forward in this process. It should lead to new methodologies and training materials aimed at ensuring that as governments move into the electronic working, environment they will be able to protect and preserve the records needed to provide an evidence base for good governance. This includes underpinning the rights and needs of the poorest and most vulnerable, supporting democratic values, norms and practices; helping to enable trusted services; and facilitating the just and honest allocation of resources. The toolkit will guide the research process.

I am confident that our outstanding research team will work well together to deliver the project to the highest possible standard and that this work will make a significant contribution to the management of records to support accountability.

Anne Thurston Director International Records Management Trust June 2006

Chapter One Introduction

1.1 Aim of the Toolkit

This toolkit has been designed to introduce the project research team to the background and methodology for the project and to the deliverables that have been agreed. It also provides a guide to house style for the presentation of the deliverables. At the macro level, the toolkit introduces key issues in relation to public sector reform and pay and personnel and records management. At the micro level, it outlines the practical approach and methodology for delivering the project. It describes how the field work, which will comprise a series of case studies, will be undertaken, the types of data that will be collected and how the information will be used.

1.2 Objectives of the Project

'Without effective and efficient records management in place, the desired impact of financial and governance reforms is often minimal at best.'

The aim of this project is to address an issue that has significant implications for development in the electronic environment: the absence, in most developing countries, of the infrastructure and capacity needed to manage the records input to or generated by ICT applications and the lack of a strategy for developing solutions. The project will investigate the implications of this problem and define a strategy for addressing it, drawing on and adapting international good practice. The deliverables for this project, from the fundamental policies and accountability frameworks to the capacity building materials, to the assessment tools and techniques, will help place governments in a position to address these issues, and in so doing, contribute to the achievement of development goals, including the reduction of poverty and the protection of rights and entitlements.

The underlying premise of the project is that if computerisation is to provide the basis for informed decision making and effective service delivery, as well as for tackling corruption through increased transparency, the information generated must be reliable and trustworthy over time. ICTs are being applied to core areas of government operations, from the management of state resources (principally finance and personnel) to the management of service delivery (including health care, land usage, and legal and judicial matters). The success and sustainability of all of these applications is affected by the quality of the documentary evidence input to and generated by electronic systems, which should lay an audit trail for accountability.

The fundamental driver of the project is the recognition that governments are attempting to move to the electronic environment without taking account of the implications for managing records as evidence. Many are seeking to introduce electronic systems based on paper systems that have been poorly managed or have collapsed and to rapidly replace these paper systems. It is not possible to achieve control simply by automating inadequate and incomplete information systems. Even in situations where the paper records are under some degree of control, systems development initiatives tend not to take adequate account of the need to manage paper and electronic records together as an integrated whole, thus ensuring a complete audit trail until such time that it can be demonstrated that the electronic systems can

¹ Bhatia, Deepak. *IFMS Implementation: Aspects for Consideration*, PowerPoint Presentation at the World Bank, September 2004.

produce reliable trustworthy records that meet evidentiary needs over time. Moreover, few have taken account of the requirement to incorporate functional requirements for capturing and preserving electronically generated records as part of systems design. One of the outcomes of the project will be to strengthen to the process of overall systems planning, development and implementation by helping to ensure that these gaps are addressed. Failure to tackle these issues will contribute directly to the ongoing high number of computerised systems failures in developing countries.

A credible plan for improvement will require the development of a comprehensive and appropriate infrastructure for managing paper and electronic records comprising a combination of policies, standards and practices, systems specifications and human resources surrounded by effective management and governance structures. Technical capacity is one dimension, but wider concerns relate to assessment, accountability, and the ability to measure both compliance and progress, all of which focus on the management dimension. The project will involve identifying and working with stakeholders who, collectively, can offer insight into the different aspects of building and sustaining an effective infrastructure and the requirements for capacity building.

Ultimately, the focus will be on the ability of governments to establish and own these important records and information management frameworks and thus to be able to address the needs and concerns of stakeholders groups, including public sector trade unions, interest groups, citizens' advocacy groups and the private sector. In this regard, the project will place a high priority on identifying new and innovative means of increasing the use of and demand for well managed records, paper and electronic, as evidence for accountability.

The area of payroll control, linked to establishment control, stands out as being appropriate as the primary focus of the study. This is an instance, where records management problems, paper and electronic, represent a significant, but rectifiable, impediment to the success and sustainability of computerisation initiatives. The project will explore the management of paper records as inputs to financial and human resource management information systems, the management of electronic records as digital outputs and the links between them. To broaden the basis of the study and provide comparisons, the findings will be related to two other significant areas of service provision: land and court management.

The east and southern African region is the principal study area. Electronic governance is given a high profile in the region. The East and Southern African Association of Accountants General and the East and Southern African Branch of the International Council on Archives have already expressed concerns about the issues involved. Working in partnership with these organisations, it will be possible to approach the issues both from the supply and from the demand side and to develop findings and products that are of practical value and that they are owned locally.

Chapter Two Context and Background

2.1 Introduction

The benefits of records management are not yet widely understood. It the project is to have an impact, the necessity to manage records as evidence must be clarified. Essentially, well managed records make a fundamental contribution to accountability and transparency, high priorities for global development, whether in a paper or an electronic environment. Accountability and transparency depend upon audit, and audit depends upon reliable, trustworthy records. The project will contribute to anti-corruption initiatives that seek to enhance accountability in fiscal management, expenditure projections, control over budgetary expenditure and strengthened internal and external audit. Getting records management right will have managerial benefits, motivational benefits, fiduciary benefits and legal benefits (pay can be challenged legally).

At present, little is known about whether electronic systems are capturing and preserving the quality of evidence required to support accountability. However, if the emphasis on transparency is to be meaningful, then proof, through the availability of evidence, must become an increasingly significant issue for governance. The research will highlight the issues involved in protecting evidence in the electronic environment. Its particular focus will be expenditure efficiency in payroll management in relation to establishment control.² Procurement contracts are the biggest single area of large scale theft of state assets, but the payroll provides opportunities for small scale cumulative theft and is the other main area where corruption can occur in government. Payroll control is a micro problem with a major impact. Re-establishing control of the wage bill must be an ongoing task of government.

In recent years, most of the attention in this area has been focussed on the development of electronic systems rather than on the management of the information held in these systems. Records management is an important part of the solution to payroll theft; it provides essential controls that complement existing controls and objectives. This is not a new area but one that has not received adequate attention. The research will evaluate whether pay and establishment controls are supported adequately by evidence, and if not, why not. The study will contribute lessons and insights into problems caused by discrepancies and gaps in records systems, both electronic and paper-based. It will provide methodologies for introducing solutions and for measuring improvements that will help to strengthen pay and personnel management systems.

2.2 Significance of Pay and Establishment Control³

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² The payroll refers to the amount of money paid in wages. The establishment comprises government authorised positions with designated grade levels; establishment control is a significant aspect of personnel management (the on-going management of staffing or employee needs, determining necessary qualifications, recruiting, training, and maintaining performance records and benefits) and human resource management (enhancing organisational performance though activities including planning, recruitment, selection, training, performance appraisal). The nominal roll is the approved list of appointments.

³ This section draws incorporates information found on the various pages of the World Bank's Administrative and Civil Service Reform website:

http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPUBLICSECTORANDGOVERNANCE/EXTA DMINISTRATIVEANDCIVILSERVICEREFORM/0,,contentMDK:20133428~menuPK:1919290~pagePK:210 058~piPK:210062~theSitePK:286367,00.html. This includes contributions by Mike Stevens, Harry Garnett, Bill Dorotinsky, Gary Reid, Jeffrey Rinne, Nick Manning, Bob Beschel, Ed Mountfield, Ranjana Mukherjee and Ismail Radwan.

Comparatively poor pay has remained a feature of most public services and is a major area of concern in most developing countries. It is a demoralising factor in the civil service: people who are not working are being paid; people who are working are underpaid, sometimes below the level of a living wage. As long as the wagebill remains so high, it is difficult to improve remuneration to attract or retain skilled staff. Moreover, in order to deliver quality public services, governments need to spend money on goods and services as well as on wages and salaries. The public sector wage bill in many developing countries can account for as much as 50% upwards of total public sector spending, effectively squeezing non-wage expenditure, such as goods and services, maintenance and capital expenditure. 'In practice, this means that hospitals will lack medicines; schools will go without textbooks, etc'.⁴

Understanding traditional pay and establishment controls is a valuable starting point for the research study. Public service pay scales should provide consistent rules for matching pay to staff grades, and institutional arrangements need to be in place to ensure that the right number of public sector staff is hired, at the correct grades and with the right skill mix. This is traditionally referred to as *establishment control*. In Anglophone countries, under the traditional model, departmental organisational structures are agreed with the central personnel office. Approval then is given to a hierarchical staff structure and complement for each department, expressed in terms of authorised positions, each with a designated grade level. This constitutes an *establishment list* and is the basis for budgeting, personnel recruitment and promotion. The finance ministry prepares the budget following confirmation by the central personnel office that spending proposals are consistent with the agreed establishment. In a well functioning system, the finance ministry works in harmony with the civil service ministry to ensure that only approved positions are allowed through the budget.

In the traditional establishment control model, the distinction between established and non-established positions is fundamental. Departments and agencies may fill established positions that are vacant but may not add positions to the establishment. Departments that wish to increase their establishments apply to the central personnel office or equivalent, which assesses the increased workload or the implications of a new policy mandate, and adjusts the department's establishment accordingly. This is done in conjunction with the finance ministry so that additional budget resources, to pay the higher costs of personal emoluments, accompany any increase in positions.

The payroll, which is the responsibility of the finance ministry, must be closely linked to the establishment lists, which are typically the responsibility of the head of the civil service. Staff added to the payroll must have been hired or appointed to a vacancy in a department's approved establishment. These arrangements do not apply to 'non-established positions', such as those held by temporary or daily paid workers. Managers have used this option get around tight establishment constraints, and in some countries the number of temporary workers is very high. Temporary workers present problems as there is little documentation of their appointments.

During the 1970s and 1980s the wagebill increased rapidly as new ministries, departments and state owned enterprises were created and expanded; at the same time, in many countries, establishment controls grew weaker or broke down, and the number of temporary staff tended to expand. Countries then were pressured by multilateral lending institutions to reduce the

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⁴Aggregate Employment and Wage Bill Concerns, Ismail Radwan, Administrative and Civil Service Reform Website, World Bank, August 2000.

public wage bill. A number of approaches were tried in an effort to produce an accurate count of civil servants in preparation for reforms that were expected to contain or reduce the number of public employees and/or reform public sector pay.

Censuses (including enumerations, headcounts, pay audits, payroll verifications and payroll reconciliations) have involved a range of methodologies. Some were designed to obtain 'snapshot' data more accurate than the data in payroll and personnel records or as a cross-check against such data; others were intended to lay the foundations for a new, regularly updated, permanent system for collecting data and setting controls. Many of these exercises have had only limited success, sometimes leading to short-term savings but often failing to lead to sustainable improvements in civil service management information or strengthening establishment controls. Africa, where the majority of such exercises have been carried out, has the weakest civil service controls.

Civil service censuses have had mixed results. They have helped to eliminate ghost workers in some countries, resulting in moderate or even significant cost savings. However, they have been costly, and in the absence of routine establishment controls, there often has been no mechanism to ensure that ghosts do not get back on the payroll. Censuses have contributed to efforts to restructure civil services, but these exercises need to be informed by regularly updated information management. Staff and managers need to be encouraged to ensure that payroll and personnel data are complete and that accurate, systems in place to support this objective; managers need to know that they will be held accountable for inaccuracies and regularities. Internal and external audit can play an important roll in providing regular checks on accuracy.

There have been three main approaches to censuses:

- Physical headcounts, which are sometimes called staff audits, have been used to determine the number of staff employed (as opposed to the number of positions established) and whether the names on a payroll list belong to genuine employees. This approach is often used when the goal is to cut costs by eliminating ghost workers. It involves sending trained teams to the census area, where employees are required to present themselves, often with documentation such as photocopies of letters of appointment or birth records. Employees and data then are checked off, usually against the payroll. Headcounts can involve significant costs and logistical challenges, and the quality of the data often is suspect. It usually is out of date before data collection is complete, and without change control mechanisms, it is not meaningful over time.
- Questionnaires are the main alternative to physical headcounts and tend to be used when more detailed data on human resources are needed for restructuring organisations. This approach usually involves distributing questionnaires to employees or employers, who must submit the information back up the line, taking responsibility for its accuracy. The data then are compiled in some sort of database. Accuracy relies on the quality of the data provided at various levels of the process, which can be open to corruption, and again, the data is quickly out of date.
- Payroll reconciliation involves reconciling the payroll against alternative data sources, such as individual personnel files or service books, the nominal roll or established register or personnel databases. This has tended to be the least favoured methodology because of the difficulty of identifying credible alternative data sources and assembling

complete personnel files. It often has been dismissed as extremely time-consuming, particularly as the number of personnel databases grow and the reconciliation process becomes more complex.

Many governments now look to integrated personnel and payroll systems for the answers to the question of how pay and establishment systems can be managed and cross verified. Computerisation is making a significant contribution and is given high priority in the reform process. However, questions remain about the accuracy and completeness of the information held in these systems, how this information is verified, how electronic records are managed over time and how paper based systems can contribute to the overall The present study will examine the assumptions about data verification and the risks involved in ignoring this opportunity for data accuracy.

2.3 The Contribution of Records Management to Pay and Establishment Controls

The research project will test the hypothesis that systemic weaknesses in records controls contribute to manipulation of the payroll, making reconciliation with establishment records difficult and leading to a widespread misuse of funds. Efforts to improve establishment controls, personnel data and payroll data require a coordinated set of records management controls. The weaker the controls, the easier it is to hide corruption, and the harder it is to hold anyone responsible.

The benefits of electronic systems are not disputed, but the fundamental emphasis needs to be on the quality and reliability of the evidence, whatever the media, that is created and held in pay and personnel systems. It is not possible to be serious about pay reform without being concerned about evidence of employment; reliable evidence is essential to support the legitimacy of payroll transactions. There should be authorisation, at appropriate points in the process, for every addition, deletion or other change in the payroll. These authorisations need to be recorded in adequate detail through records management systems as an audit trail of evidence of who made the change, on what authority and when so that it is possible to know who is working for the government at what pay level, and only bona fide salary payments are disbursed by the treasury. Otherwise, they system can be manipulated.

System developers, seeking to improve accountability and effectiveness through automation, often recommend that paper-based systems should be eliminated as quickly as possible on the grounds that they unnecessarily duplicate processes from one part of an organisation or the government to another, making timely consolidated reporting impossible and errors difficult to detect and undermining confidence in the budget. They note that there is a huge risk of leakages from paper-based systems that lead to corruption and that paper systems are beyond repair. This view now is widely accepted in the development community. However, the assumption that paper-based systems should be eliminated as quickly as possible or that once an electronic system is in place, there is no need to retain hard copy documents need to be questioned and clarified.

In the past, the paper-based records systems provided the formal authorisation for the payroll. They do not inherently foster corruption; rather, it is the breakdown of controls and the resulting gaps in the information that supports fraud. A well managed paper-based system can provide the controls needed to protect a reliable record of authorisations. Moreover, if there is

fraud in the system, making a transition to a new system without addressing the quality of the information in the paper system will not resolve the problem. Migrating inaccurate or incomplete information to an electronic system transfers the weaknesses to the new system. Wholly electronic systems, where records are digitised or input electronically, are trustworthy only if there is a reliable electronic records management programme is in place. This still is rare, and mixed media formats still are the reality in most parts of the world.

Either the paper file or the personnel database should record complete proof of approval for any change to the payroll. Whichever media is used, it must be possible to demonstrate that controls are in place, records are complete, and that pay and establishment information is linked to provide the basis for verification. Where records do not match between systems or where there are gaps, it is not possible to have confidence in the system. The aim should be to avoid breakages in information flows - holes where people can to be added to the payroll without authorisation. There should be clear methodologies for auditing the controls, and there must be sanctions for any irregularities reported in the audit report.

There is a need to learn more about managing records as evidence in the transition from manual to electronic systems. At present, systems for managing pay information rarely take account of the management of paper records, particularly after the information has been input to the system, nor do they provide for the management of electronic information over time. If electronic systems are to provide the legal verification for employment, then there is a need to ensure that they capture and protect the evidence required for audit over time. As long as records are created in mixed media, there is a need to ensure that paper and electronic records are managed together as one total system, providing a complete audit trail of approvals and transactions.

The availability of accurate pay and establishment information for cross verification within computerised systems and between computerised and paper-based systems will help in establishing a clean, controllable and 'ghost-worker-free' payroll as a basis for paying public servants in a timely accurate manner; it will identify potential weak areas in pay and establishment control and support the requirement for a comprehensive and reliable set of personnel information for management and planning purposes. Specifically, it will help to support activities aimed at expenditure efficiency in terms of:

- linking payroll/personnel information to the budgeting system and modelling the impact of different assumptions about changes in rates of pay and allowances
- reconciling monthly payroll totals, to ensure that changes from month to month can be explained
- determining pay and allowance rates for individual employees and to prevent fraudulent amendments
- detecting 'ghost workers' due to fraud or error
- monitoring approved pay and establishment rates for individual employees against actual pay and for verifying payrolls
- monitoring staff movements and provide an 'audit trail' to enable unreasonable movements to be investigated

- ensuring that employees do not miss out on pension entitlements or receive pensions to which they are not entitled by providing the basis for audit of pension entitlements
- protecting other benefits to which staff are entitled (eg medical treatment) and ensure that they do not receive benefits to which they are not entitled
- supporting financial and staff forward planning.

2.4 The Contribution of Management Information Systems

Human Resource Information Systems (HRIS) and other electronic systems managing personnel functions are radically changing the management of staff in organisations world wide. These systems, which often are customised into a suite of business solutions, are increasingly complex. Sophisticated Integrated Financial Management Information Systems (IFMIS) and other powerful computerised business applications are used increasingly to link functions including:

- finances (accounting, bank reconciliation, cash flow, fixed assets management, general ledger)
- supply chain (inventory control, invoicing, requisition management)
- human resource (employee profile, skills and training, payroll)
- project management (project accounting, time and expenses).

As a tool, a HRIS supports good practice and consistent decision making. Such systems can manage various aspects of employee information and provide quick answers to questions about personal and financial information. Time can be saved and errors reduced at the point that payroll data is entered into the system. Employees can be assigned classes and pay codes to process salary and pensions and automatically deduct taxes. Managers can maintain and track attendance; merits, demerits and disciplinary plans; salaries and promotions; training, classes and skills; and performance reviews. Often they can access, review and/or update routine information in relation to pay and benefits, time and expenses, job opportunities, and skills and training information. Audit trails can be established and maintained by following transactions to where they began and by being able to obtain information at a detailed level. Good records management should be an aspect of these systems.

In addition to generating records relating the employment history of individual staff, an HRIS can generate valuable reports including:

- an approved list of every employee
- employee lists by department, location and supervisor
- summary and detailed information on each employee
- employee pay history details

- earnings register
- payroll summary
- benefits summary
- year end wage details
- holiday sick leave information
- direct bank deposit information.

2.5 Electronic Records

As electronic records generated by management information systems increasingly replace paper records, there are new opportunities to support efficient information management in human resource and financial management and in other fields. At the same time, there are

When HRIS systems are introduced to an organisation they usually supersede some (but not all) of the paper record formats in use previously. Many of the report outputs mentioned in section 2.4 (such as employee lists, earnings registers and sick leave records) will have been maintained as paper records before the arrival of the HRIS. Sometimes staff may continue to create some or all of these in paper form after the introduction of an HRIS (thus effectively duplicating the work of record keeping), but more commonly the separate maintenance of these paper records is discontinued once the HRIS is fully operational. Instead of laboriously creating such records by hand, organisations expect to be able to rely on the retrieval and report generation features of the HRIS. However the reliability and accuracy of the reports output by an HRIS are dependent on the validity and completeness of the data which the system contains; and the availability and accessibility of human resource records over the longer term may be jeopardised unless proper attention is paid to recordkeeping needs when the HRIS is designed and implemented.

In the place of the previous paper documentation, organisations may choose various strategies:

- 1 Reports may be generated from the HRIS on a regular basis and printed to paper or output to microfiche to form a permanent or long-term record.
- 2 Reports may be generated and printed to paper as and when they are requested by a member of staff.
- Reports may be generated on a regular basis and stored electronically to form a permanent or long-term record.
- 4 Reports may be generated and stored electronically as and when they are requested by a member of staff.

Reports may be viewed online as and when they are required by a member of staff, but not stored or retained for long-term use.

Many organisations adopt strategies 2, 4 or 5, but these do not result in the creation and preservation of full and adequate records of the HR function. Strategy 1 will meet recordkeeping requirements but if records are printed to paper or output to microfiche, the ability to search, disseminate and retrieve records electronically is lost. In the longer term, printing is not a cheap solution, because of the storage and retrieval costs associated with paper. Strategy 3 is the most effective, but will succeed only if adequate electronic recordkeeping capabilities are in place within the organisation.

As an alternative to preserving reports generated from the HRIS, it may be possible to regard the HRIS as a whole as a recordkeeping system. Some HRIS systems are likely to have stronger recordkeeping capabilities than others. The determining factors will include:

- Does the HRIS maintain historical data (ie does it ensure that existing data are not merely overwritten when the system is updated with new information)?
- Are historical data maintained in a way that allows them to be accessed when required?
- Can users interpret historical data once retrieved? Does the system preserve the context of the data and the circumstances of their creation as well as the data themselves? Are the interrelationships of the data preserved?
- Does the HRIS support the security and retention/disposal controls which government recordkeeping requires?
- Is there a full audit trail of changes made to the system?
- Will the HRIS support the ongoing maintenance of historical data or audit logs so that they remain accessible over time, for example by allowing migration to newer or more standardised formats?
- Is there staff capacity to manage electronically-generated or digitised records?
- Are all of the records required to support establishment control captured by the HRIS?

If the answer to these questions is 'yes', the HRIS may well provide sufficient recordkeeping functionality, and reliance on reports for recordkeeping purposes may be unnecessary. The search and retrieval capabilities of the HRIS then will be available to users seeking evidence of past activity and cumulative evidence over time as well as those wanting current information. However, it is important not to assume that all HRIS will function as recordkeeping systems; many are designed largely to support current informational needs.

A further complication is that, as yet, few HRIS systems can be expected to capture all the documentation of the human resources function. In general, HRIS systems capture information in the form of *data*: for example, names, addresses, departments, locations, dates, grades, entitlements, rates of pay, etc. Records in the form of *documents*, such as signed contracts of employment, and letters to and from individual employees, almost always have to be maintained outside the HRIS. Traditionally, these 'documentary' records are maintained

in paper filing systems. Alternative approaches may include the maintenance of some or all such records in an electronic document management system (EDMS) or an electronic records management system (ERMS); or the provision of EDMS or ERMS capability within a leading-edge HRIS system.

For the foreseeable future, most developing country governments will operate in hybrid environments, some records are on paper while others are in digital form, rather than introducing fully developed DRMS or EDRMS systems. The issue then is how to manage records which are closely related in terms of context and content, but physically divided between paper and digital media. Effective linkages between records in different media - and specifically linkages between recorded information about individual employees maintained in a HRIS and paper files relating to the same individuals - are critical to the success of hybrid systems. The research project will develop guidance on assessing the effectiveness of recordkeeping in this hybrid environment.

At the same time, the research team will need to recognise that in the longer term there will almost certainly be a further move away from paper, and that the records currently kept in paper files will eventually be replaced by digital formats. Some governments may already have set up digitisation programmes for converting paper files to digital images, and in due course, when the appropriate management infrastructure and capacity are in place, paper may be eliminated altogether in favour of 'born digital' records (ie records which are both created and maintained electronically). The effectiveness of existing records systems needs to be judged, not only in terms of their accuracy, reliability and completeness, and their contribution to good governance, but also in terms of their suitability for future conversion from a hybrid to a wholly digital environment.

2.6 Indicators and Benchmarks

There is a strong emphasis within the development community on the ability to demonstrate how the Millennium Development Goals are being met; benchmarks and actionable indicators are an important way of achieving this. Many areas, for instance effective rule of law, are too broad to measure, and there is a desire to find issues that are narrow enough to be measured precisely. The availability of trustworthy information that can be measured is an area that lends itself to actionable accountability indicators. For instance, the International Monitory Fund has been looking at expenditure on personnel as part of debt relief; the IMF wants accurate numbers, and this requires verified data. The project can make a contribution by coming up with objective measures where actual numbers can be demonstrated in relation to change. It may be possible to define a link to public expenditure tracking surveys.

Country Policy Institutional Assessments (CIPA)

The World Bank places considerable emphasis on Country Policy Institutional Assessments, and although these indicators are at a very high level, it is worth relating the study to the CPIA indicators. CPIA consists of 20 equally weighted criteria representing the policy dimensions of an effective poverty reduction and growth strategy. All of the indicators are reviewed every year in every country to determine whether there are weak points and if so, why? The criteria are grouped in four clusters: Cluster A Economic Management; Cluster B

Structural Policies; Cluster C Policies for Social Inclusion and Equity; and Cluster D, Public Sector Management and Institutions (which aims to capture key aspects of good governance).

For each of the 20 criteria, countries are assessed on a scale of 1 (low) to 6 (high). The ratings focus on the quality of the country's current policies and institutions, which are the main determinants of the present prospects for aid effectiveness, and draw on a variety of indicators, observations, and judgments that include knowledge obtained from country dialogue and the Country Assistance Strategy (CAS) process, the available body of economic and sector work (ESW), and project preparation and supervision, and monitoring and evaluation.

The research project will contribute directly to three of these indicators:

- 15 Quality of budgetary and financial management. This item includes an assessment of the quality of processes used to shape the budget and account for public expenditure.
- 16 Efficiency of public expenditure. This item assesses the extent to which the desired results of public programmes are clearly defined and the available resources are used efficiently to achieve them. Countries with high scores specify the expected results of public programmes. Performance is reported and influences budget allocations. Public servants' compensation is adequate (eg at least 75% of comparable private sector compensation) and their hiring and promotion are competence-based. Line agencies have flexibility to make operational decisions and are accountable for results and adhering to budget.
- 17 Transparency, accountability and corruption in the public sector. In countries with high scores, the reasons for decisions and their results and costs are clear and communicated to the general public. Accountability for decisions is ensured through audits, inspections, etc. Conflict of interest regulations for public servants are enforced. Authorities monitor the prevalence of corruption and implement sanctions in a transparent manner.

Public Expenditure and Financial Accountability (PEFA) Indicators

The Public Expenditure and Financial Accountability Performance Measurement Framework drills down from CIPA. In due course, PEFA ratings may influence CIPA ratings. The 28 PEFA indicators were developed between 2001 and 2005 by a multi-agency partnership programme including the World Bank, the International Monetary Fund, the European Commission, the Strategic Partnership with Africa and the Governments of the United Kingdom, France, Norway and Switzerland. The indicators represent an assessment methodology rather than a diagnostic tool that identifies solutions. See http://www.pefa.org/

The assessment methodology is being rolled out to a wide range of countries, and the PEFA Secretariat is providing training and information to help define, supplement and clarify the meaning of the indicators. The indicators are wide ranging, including personnel management procurement and debt management, and the teams assessing the indicators do not always have the background needed to understand how to measure all aspects of the indicators. For instance there is an indicator about international accounting standard, and there has been a need to develop an additional set of guidance to explain what is meant here. In the area of

procurement and revenue administration, there has been a need to drill down to a greater level of detail, and a detailed set of indicators for benchmarking has been developed and agreed by the Organisation for Economic Cooperation and Development (OECD), although this work has not yet been harmonised with the PEFA Performance Measurement Framework. See *Baseline Indicators for Assessment of a National Procurement System*, http://www.oecd.org/dataoecd/12/14/34336126.pdf)

There is a log on the PEFA website of areas where assessors have had difficulties, and the Secretariat is seeking to provide clarification. The research team should keep this long under review. See:

http://www.pefa.org/PEFA%20Website%20--%20CURRENT%204-9-03/www.pefa.org%20WEBSITE/Clarifications%20Dec8%202005.doc

Indicator 18: Effectiveness of the Personnel and Payroll System is concerned with managing personnel payments and is particularly relevant to the research project. So far, the assessors have not highlighted many problems with this indicator. This may be because they have understood it well, but it may be because the assessors tend to be public financial management personnel who have not been exposed to personnel management and do not see the pitfalls. They have raised questions about different payrolls, and they have asked for clarification on the authority and basis for changes to the payroll. The Secretariat has indicated that it is insufficient for the authority and basis for changes to be stated in the rules; they must also be applied in practice so that the actual authorisation of and basis for the changes made are clear.

The PEFA Secretariat has indicated that it would be helpful if the research project could be coordinated with the Assessment Framework to provide more detailed clarification for assessors and particularly for internal auditors on the dimensions of Indicator 18. The research project case studies can provide concrete examples of problems and solutions, and the guidance or clarification that the project prepares can appear on the PEFA website. There are likely to be other indicators to which the study can contribute, particularly Indicator 21: Effectiveness of Internal Audit.

By highlighting the issues involved for internal and external auditors and providing tools for measuring improvements, the project can help to empower auditors to be better able to monitor systemic issues by defining audit criteria and methodologies for measuring the completeness of and linkages between the records during payroll and personnel audits. The assessors and the auditors need to look at the quality of information held in the personnel records, the personnel database, the payroll and the numbers actually employed and to evaluate how this information is linked and verified. Whether the systems are manual, electronic or hybrid, there needs to be a means of checking back to the authorisation for changes in the system, and this is likely to involve referring to original source documents. At present, internal auditors do not always go far enough in checking this requirement.

The internal audit will need to take particular account of the integrity of systems during the transition to HRIS and FMIS applications and should monitor these systems closely, particularly if the aim is to eliminate paper systems. They should ensure, through sampling and other methodologies, that the system accurately records changes in the information held in the system and that the authority for these changes is fully documented and can be clearly tracked. Normally, the external auditor focuses less on the detailed transaction audit. However, in some cases the external auditor also becomes involved in this area. Sometimes

the internal and the external auditors meet at the beginning of the year and determine highrisk areas and how they will address them.

In developing Indicator 18, the PEFA Secretariat has merged issues relating to paper personnel files and the personnel database. PEFA is not specifically concerned with media; the emphasis is on whether the country can produce the required level of controls, whether in a paper or an electronic environment. At present in the audit environment, it is increasingly taken as a given that electronic copies are acceptable and that in the transition to electronic systems the two systems should run in parallel for an initial period, but that once the transition is complete there is no need to retain hard copy documents. This will only be safe if there are clear standards for monitoring electronic systems.

Where the research demonstrates that there are pitfalls in the transition to electronic systems and that there is a risk of weaknesses in this area, then these should be identified and defined in the guidance notes. For instance, the notes should indicate that if electronic record cannot be maintained to an adequate standard, then it is essential to keep paper records as well.

Chapter Three Project Logistics

3.1 Sequence of Activities

The first part of the project involved introducing the project infrastructure, conducting background research and developing this toolkit.

The sequence of activities to follow will involve:

- developing a research methodology and a toolkit to guide the research team
- training research team members in data collection as part of case studies
- conducting eight baseline case studies in six African and two Asian countries on the challenges and capacity requirements for managing records (paper and electronic) in relation to computerised systems and against development objectives
- exchanging and comparing findings between the six African participating countries via video conference and an intranet site
- synthesising regional and international research and experience and defining a route map for the way forward showing the sequence of steps and milestones involved in strengthening and linking paper and electronic records systems and moving safely to an increasingly electronic environment
- defining policies, good practice guidance, standards and resources (both generic and in relation to pay and establishment records) required to capture and preserve electronic records and link them to paper-based records
- defining strategies for creating stakeholder awareness of the issues involved, citizen demand for accurate and authoritative records as evidence and the political will to create the appropriate infrastructure and capacity
- relating the route map to different levels of information technology development
- reviewing these outputs and plan the development of training materials
- creating four training modules compliant with ISO 15489, to cover:
 - mapping information flows, paper and electronic, and defining records control requirements
 - managing electronic records in structured environment and unstructured environments
 - preserving digital records
 - managing records in relation to public sector development
- producing an overview report of the case study findings
- presenting the findings to stakeholders at the regional and national levels

• making the findings available as a shared international resource through internet postings and through other means.

3.2 Outputs and Outcomes

By the end of the project, the outcomes of the study will be:

- Governments will be in a position to build the infrastructure and capacity needed to manage electronic records as accurate and reliable evidence in the electronic environment and government officials will have an enhanced awareness of the significance or records for accountability and a greater degree of ownership of records as crucial state assets.
- Government officials and records professionals will have access to sound and cost
 effective guidance and capacity building material on approaches to policy and practice
 for managing records as evidence, both in a generic context and in relation to pay and
 establishment records.
- Governments' ability to measure progress toward accountability will be enhanced.
- There will be a higher success rate of e-governance applications with improved value for technical assistance spending.
- The rights of the poor to access accurate information, protected over time, in order to assert their rights, entitlements and interests will be strengthened.
- Services to citizens will be supported by more accurate and well managed information.
- A regional professional community of ownership and cooperation will be developed.
- The international development community will be able to raise awareness, ask questions and provide sound advice, drawing on policy briefs, guidelines, fact sheets and measurement indicators developed through sound regional and international research and experience.

3.3 Key Dates and Milestones

TIMEFRAME

Activity	Feb- Mar 06	Apr- Jun 06	Jul- Sep 06	Oct- Dec 06	Jan- Mar 07	Apr- Jun 07	Jul- Sep 07	Oct- Dec 07	Jan- Mar 08	Apr- Jun 08	Jul- Aug 08
1 Develop data collection toolkit			•				1				
2 Two-day stakeholder meeting											
3 Two-day training workshop											
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4 Conduct eight case studies in											
Africa											
5 Exchange and compare findings											
via video conference											
6 Conduct two case studies in											
Asia											
7 Develop route map and indicators,											
plan good practice/training materials											
8 Develop good practice guidance											
materials											
9 Create four training modules											
10 Present project findings at two-											
day stakeholders meeting											
11 Facilitate one-day workshops											
in six case study countries											
12 Disseminate products widely											
13 Steering Committee meetings,											
meet international organisations,											
Output to Purpose Review											
14 Project Research, Management,											
Oversight and Quality Control											

MILESTONES

Outputs, Project Papers and Reports	Delivery to DFID
1 Research data collection toolkit on project website and distributed to team and assistants	June 2006
2 Preparatory papers for two-day planning meeting for senior stakeholders on project website and distributed	to be discussed
3 Training materials for two-day training workshop for research team on project website and distributed	to be discussed
	Dec 2006
4 Four case studies in Africa completed and circulated to key stakeholders for comment	
Remaining four case studies in Africa completed and circulated to key stakeholders for comment	Apr 2007
5 Video conference to exchange and compare findings completed and summaries of discussions posted to project	June 2007
website	Sept 2007
6 Two case studies in Asia completed and circulated to key stakeholders for comment All ten case studies finalised, distributed to educators and researchers, posted on project website and disseminated	Oct 2007
widely	OCI 2007
7 Route map defined and posted to project website; development indicators developed and circulated to donor	Dec 2007
agencies	2007
8 Draft good practice guidance materials and resources circulated to team for comment	Mar 2008
9 First two core training modules circulated to team for comment	Jan 2008
Remaining two core training modules circulated to team for comment	Apr 2008
Good practice guidance materials and resources, and four core training modules finalised,	-
posted to project website and distributed to key stakeholders and project partners	June 2008
10 Two-day review meeting for regional stakeholders completed and papers posted to project website	July 2008
11 One-day national workshops completed in 6 case study countries in Africa and papers posted to project website	Aug 2008
12 Donors adopting indicators, products linked to RMCAS, findings available on the Internet and disseminated	Aug 2008
widely	
13 Annual Steering Committee meetings conducted by video conference and annual project partner meetings	September each year
conducted	
face-to-face by project director; minutes of meetings posted to project website and circulated to project team	
Output to purpose review conducted and report posted to project website	June 2007
14 Annual project reports submitted to DFID, posted to project website and circulated to key stakeholders	March each year

3.4 Study Sites

Six study sites in Africa and two in Asia have been selected. In east and southern Africa the following sites have been approached:

- Kenya⁵
- Tanzania
- Zambia
- Malawi
- Lesotho
- Ghana

These sites have been reviewed with the by the East and Southern African Association of Accountants General (ESAAG) and the East and Southern African Regional Branch of the International Council on Archives. In Asia, India and Pakistan will be approached about hosting studies

English-speaking countries have been selected as these countries have broadly common administrative systems, which will facilitate a comparative view of systems and practical methodologies for measuring and strengthening records controls. Consideration was given to working in post conflict countries or fragile states, but it was felt that there would not be a great deal of benefit to be gained. The problems may be more severe, as has been observed in Sierra Leone⁶, but the means of assessing and addressing these issues is systemic and they certainly are part of reconstruction and systems development.

Recent work on public service pay reform has focused attention on the underlying business function and has created buy-in from stakeholders. Payroll control issues have been examined in Kenya, Tanzania, Zambia and Ghana, with support from DFID and the World Bank, and have included involvement by governments, trade union representatives, academia, civil society groups and World Bank country offices. The payroll study was developed on the premise that pay is a key public service issue and pay reform has remained a thorny and challenging issue, with comparatively poor pay an ongoing feature of most public services.

The selection of Kenya, Tanzania, Zambia and Ghana as study sites, with the addition of Malawi and Lesotho, should make it possible to build upon the existing findings, introduce a

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⁵ Kenya is experiencing the impact of recent revelations on corruption, so it is too early for the government to take a decision.

⁶ The International Records Management Trust recently undertook an investigation of how records management records management standards and good practices can be integrated into financial management information systems (FMIS) as a basis for reducing the risk of misuse, mismanagement or loss of the electronic financial records created in these systems and for strengthening control of paper-based inputs. The project, which was funded by the UK Department for International Development, included two visits to Sierra Leone (November 2005 and February 2006) to examine these issues.

⁷ The most recent presentation on this work was in Arusha, Tanzania on 6 June 2005 under the title *Tactics and Political Dynamics of Public Service Pay: Lessons from Sub-Saharan Africa* by Kithinji Kiragu and Denyse Morin of the World Bank. Professor Rwekaza Mukandala of Tanzania also is a key contributor to this work.

new dimension, widen the stakeholder audience and explore a range of different conditions and stages of computerisation. The comparative studies in two Asian countries will provide an opportunity to compare and contrast the findings in different cultural and economic contexts.

Pay and establishment records will be studied in all of the African countries and in one of the Asian countries. For comparative purposes, to help validate the findings, three additional studies will be undertaken. These comprise a study of court records in one of the African countries, a study of land records in one of the African countries and a study of land records in one of the Asian countries.

Good practice will be defined specifically in relation to pay and establishment records, and generic guidance will be prepared. It will not be possible within the scope of this project to provide similar guidance on court and land records. The hypothesis is that the issues will be broadly across functions (even though some will be specific to the function), especially when viewed in the light of larger development goals.

3.5 Steering Committee

In order to strengthen the relevance and the impact of the project, a steering committee will be appointed to monitor the overall methodology and the outputs at each stage of the project against work plans and to advise on the development and dissemination of the deliverables. The Steering Committee will aim to ensure that the project makes the maximum contribution to international goals for poverty reduction, accountability and transparency, and good governance. It will meet formally on an annual basis by video conference, and the members will receive quarterly reports, with brief monthly updates. The Steering Committee will keep project deliverables and work plans under review and help to ensure that they are relevant and are related to wider development goals. It will monitor the progress and relevance of the project against the Logical Framework and comment on the programme for the coming year.

In order to provide a range of perspectives, the following people have been approached and/or agreed to participate as committee members:

- DFID Financial Management Adviser for Africa
- DFID Financial Management Adviser for Asia
- Nicola Smithers, World Bank, Financial Management and Public Sector Management Africa
- Gert Van der Linde, World Bank, Financial Management, Africa (Abuja)
- Ranjana Mukherjee, World Bank, Public Sector Management, Asia (Washington)
- David Sawe, specialist in electronic government and personnel management information Systems, President's Office, Government of Tanzania (Dar Es Salaam)
- Jerry Gutu, CEO, ESAAG (Pretoria)

- Eastern Southern African Regional Branch International Council on Archives (ESARBICA) representative
- Anne Thurston, Project Director (London or Washington)
- Michael Hoyle, Project Manager (London or Washington).

3.6 Roles and Responsibilities of Team Members

The Project Management Team, working under the oversight of the Steering Committee, will coordinate the research and analysis and the development of deliverables. The Team includes the following roles:

- *Project Director*: responsible to DFID for overall coordination and quality control of the project. The Project Director (Director of the Trust), will be the accounting officer for the project. The Director is legally responsible for reporting to the Trustees of the International Records Management Trust on the delivery of all Trust projects, and she will ensure that the Trustees are kept fully informed about the project. She will channel the Trustees' views to the Steering Committee and the Steering Committee views to the Trustees.
- *Project Manager/Lead Researcher*: this role involves a dual responsibility:
 - The *Project Manager* will be responsible for ensuring, on a day to day basis, that the project is delivered to a high professional standard. He will coordinate the implementation of the research programme and the development of the deliverables. He will maintain regular contact with other research team members and will be responsible for addressing any difficulties as they arise. He will have oversight of planning, monitoring and reviewing progress toward project deliverables; preparing reports; and maintaining regular communication with government stakeholders, the Research Team and specialist advisers. One third of the post holder's time has been allocated for these project management responsibilities.
 - ♦ The *Lead Researcher* will participate actively in the delivery of the research programme as a member of the Research Team. He will conduct a number of the field studies and will make a significant contribution to the development of all deliverables. his equates to approximately two-thirds of the full-time post.
- The *Research Team* comprises three senior researchers who will conduct the field research and participate in the preparation of the deliverables on a daily paid basis. Two of the team members are African records specialists with practical and research experience, postgraduate qualifications and teaching experience. The other member of the team will have extensive experience in managing records, paper and electronic, in the public sector environment. The team members will conduct the field research and will participate in the preparation of the deliverables.

- Research Assistants will comprise two professional staff members from each of the national archives/records service in each of the participating countries, who will be responsible for gathering background documentation and information and for carrying out specific tasks in support of the case study research. The research assistants will gain experience and training while contributing to the delivery of the research.
- The *Project Coordinator/Administrator* is responsible for ensuring that the project budget, logistics and communications are managed efficiently, including making and recording disbursements and preparing budget statements; making travel arrangements for all field meetings and for case studies for the Research Team, the specialist advisers and the research assistants; communicating with specialists to ensure that that the required information is delivered to time; managing all project documentation; and serving as the primary point of day to day contact for the project when the Project Manager/Team Leader is in the field.
- Regional/International Specialist Contributors: experts who will contribute in the fields of electronic records management, electronic government requirements, pay and establishment control issues and capacity building.
- *Local Reviewers*: responsible for evaluating the usefulness of outputs and recommending improvements.

3.7 Reporting Arrangements

Under the guidance of the Project Director, the Project Manager will develop, monitor and update project plans and prepare and circulate monthly briefing notes to the Steering Committee, the Project Team and the partner organisations; copies will be available to DFID through an intranet site. The Project Director will submit annual progress reports and an end of project report to DFID and to relevant stakeholders. All of these reports will include a full budget statement. The Project Director will meet the DFID Research Officer responsible for the project every six months to review progress toward deliverables and to agree forward work plans. DFID will have access to the project intranet site and will be able to monitor project postings.

3.8 Budget Management

Expenditure on the project will be managed in accordance with the budget limits. Invoices will be submitted to DFID at the end of each month for costs incurred during the month, including both direct costs and fees and salary costs. Invoices will need to be supported by *copies of invoices/receipts* for actual reimbursable expenditure.

3.9 Communications

Communications will take place in a variety of ways. In addition to face-face-meetings, telephone calls and email communication, the project will make use of several forms of technology to save costs, enhance efficiency and build ownership. These include:

- *a project intranet site* that will make it possible to share documents (and control versions) among the Project Management Team members and between the Team and the participating organisations; in addition to quarterly reports, regular monthly updates will be posted
- a project website, to which draft documents can be posted for international comment
- electronic discussions
- video conferences.

Chapter Four Methodology and Approach

4.1 Aims

The research will explore the contribution that records management can make to current initiatives to introduce computerisation aimed at improving government efficiency, transparency and accountability, and at strengthening of service delivery. It should help to identify and clarify the requirements for managing paper and electronic records in relation to development requirements and contribute to standards for international good practice.

The research will concentrate on the interrelationships of pay and establishment records, and comparisons will be made with issues arising from the management of court and land records. Information obtained as part of the research will either inform or be incorporated into the project's deliverables, namely the case studies, good practice guidelines and training modules.

In particular, the research will seek to explore the following issues:

- the risks associated with the rapid transition to the electronic environment when records are not properly considered as part of, or in relation to, computer applications
- the need to understand more about the management of electronic records as evidence of government decisions, actions and transactions, management of state resources, delivery of services, and the protection of citizens' rights and privileges.
- the relationship of evidentiary requirements to reform objectives
- the requirements for managing the records of key public sector functions in different media (paper, electronic, digitised)
- an understanding of the interrelationships of records in two key areas of resource management: pay and personnel.

At the end of the project, governments will be in a better position to understand their current state of pay and personnel recordkeeping and to assess performance against relevant indicators. Options will be available for making improvements to ensure that pay and personnel information is properly managed in paper and electronic environments for accountability and evidentiary purposes.

4.2 Approach

Assumptions

The following assumptions are made:

- Strong ownership of the design and delivery of the research is essential if the outputs are to be relevant and well used; ownership of the findings and the political will to implement them is essential.
- Outputs must be developed in relation to real situations and to outcomes that are achievable and practical.

- A partnership between the demand side (senior public sector stakeholders) and the supply side (records professionals) is necessary for identifying meaningful answers.
- The records profession can make a significant contribution to public sector development.
- The deliverables should be applicable to a wide range of development environments.

General Concerns

All the case studies should look and feel similar, addressing common issues, following a common methodology and presented in a common format. Members of the research team will need to work closely together and communicate effectively to ensure a common approach to gathering and presenting data. At the same time, it will be important to be pragmatic. Different countries will have different ways of doing things, and access to stakeholders and information is like to vary from country to country. The team will need to respond flexibly to these circumstances. It will be important to gather a mixture of good and bad experiences. Team members will need to prepare reports as soon as they return from the field and to provide details of lessons learned and challenges that they faced.

Throughout the research process, the Research Team members need to ask themselves the following questions, which will feed into all of the project deliverables:

- What impact does records management have on the management of the government functions studied?
- How does the loss of control of records contribute to systems that perpetuate corruption?
- How does the loss of control of records contribute to systems that perpetuate corruption?
- What are the risks for the governance process and services to the poor if paper and electronic records are not managed? What are the risks for anti-corruption, access to information and electronic governance initiatives if these issues are not addressed?
- What are the opportunities for strengthening anti-corruption initiatives, access to information and electronic government initiatives?
- What are the opportunities for strengthening services to the poor by strengthening the management of records, paper and electronic?
- What can be done to create greater demand by citizens for records as evidence and greater political will in governments to introduce solutions?
- How can records management issues be fed effectively into policy development, poverty reduction strategies and fiduciary risk assessments?

- What are the causes of weak records management, paper and electronic? How common are these issues in Africa and Asia? Why are these issues not being addressed adequately? What solutions have emerged?
- How applicable are the lessons learned in managing paper and electronic records in developed countries, where there have been significant investments in finding solutions? What can be learned from European, North American and Australasian initiatives in this area and how this knowledge can be adapted appropriately to a developing country context?

Detailed questions intended to guide the research process are at Appendix A.

Coverage and Limitations

The field research will take the form of a series of case studies, eight in Africa and two in Asia. Most of these studies will focus on records management as it underpins pay and establishment controls, but three will provide comparisons of records management in relation to court management and land management information systems.

The studies of pay and establishment controls will focus on the core civil service payroll. As far as possible, they also will examine controls for teachers' payrolls, which can be larger than civil service payrolls and which present special problems as teachers tend to move from place and employment information is particularly hard to track. The intention is to explore the issues affecting teachers' records in at least two countries, but more if possible. The aim is to provide some comparative findings without spreading the field research too thin to be meaningful.

The research team will gather high-level information on other payrolls, if they exist, such as for health workers, the police or the army. It would be valuable to gather detailed information on these payrolls, but spreading the team's time too thinly could diminish the quality of the findings. If the lessons drawn and models developed from the central civil service are workable, they can be transferred, with some modification, to other payrolls.

Similarly, it would be valuable to highlight the issues involved in devolving functions to the districts. It would be valuable to know what can go wrong when staff are posted to this districts. In many cases, the district staff still are employees of the ministries and are paid from the centre even though they are posted to the districts; in others they are paid through district treasuries. Again, there is a risk that the findings would be diluted it the research team attempted to spread itself too thin.

Consideration was given to conducting studies in one or more Francophone countries. However, as the administrative patterns and controls are quite different from those in Anglophone countries it was decided that it would be more meaningful to work in countries with one administrative tradition. The rationale for selecting particular countries for field studies is explained in Section 3.4.

Finally, there is an important debate under way about whether the traditional controls are the most appropriate means of managing the payroll, particularly in relation to encouraging

enhanced performance. This is beyond the remit of the study, but the findings may make an indirect contribution to this debate

4.3 Methodology

It is proposed that the research will involve three methods of gathering information, as described below and in more detail in Sections 4.4 to 4.6. All of the methods of information gathering must work together to provide as complete a picture as possible and to cross check the information. All three aspects of the methodology should, for instance, feed together to answer a central question: Are the controls that were applied traditionally to ensure that changes to the payroll were authorised and documented being applied effectively in the electronic environment?

- Collecting *qualitative* information about public sector reform, electronic governance initiatives, pay and personnel processes and records management; this information, derived mainly from internet searches, documents and interviews, is essential to provide background and context for the research. It also will provide an indication of the links between pay and personnel processes and recordkeeping. A set of high level questions has been developed to guide the research process. Details of this aspect of the research are set out in Section 4.4 and the questions are listed in Appendix A. Data collection sheets, indicating the stakeholders to be interviewed and the areas to be covered are at Appendix B.
- Mapping *information flows*. This is a valuable method for identifying weaknesses in control systems for payroll, establishment and human resource management. Inputs and outputs can be identified and the exchange of information analysed. This helps to build a picture of the current processes and controls and provides a basis for understanding records management requirements. Details on how to analyse information flows are described in Section 4.5.
- Conducting *quantitative* research: A sample of records will be examined to evaluate the quality of payroll information and personnel records from a systems perspective. For practical reasons, this will need to be a small sample that will result in significant indicative findings but will not aim to be statistically sound. The aim is to highlight key issues. The sample will provide a basis for developing performance indicators that will help make it possible to measure progress towards improvements in the management of pay and personnel records in relation to objectives for public sector reform. The indicators need to be time-bound and linked to the completion of activities or to specific outputs and outcomes. They should also relate to the Public Financial Management Performance Measurement Framework and poverty reduction strategies. Details of this aspect of the research are in Section 4.6.

4.4 Qualitative Research

Qualitative analysis will provide essential context or background for the research in terms of understanding relevant laws, practices and processes. The information for this aspect of the project will be drawn from documents and responses to questions during interviews with officials and others.

Research Questions

Research questions have been developed in order to collect consistent qualitative data as part of the case studies. The questions are linked to the three key areas of research, specifically:

- good governance, public sector reform and electronic governance and government
- pay and personnel
- records management.

Questions should be selected from the pool to questions at Appendix C as a guide to information gathering. When preparing for an interview with a stakeholder, appropriate questions should be selected from the pool. Data gathering sheets are provided at Appendix D to indicate the main areas to cover with particular stakeholders. In some cases, posing the same question to different officials and examining various official documents should provide a cross-check. Where there are differences of opinion, the alternative views should be outlined. Gaining a good understanding of the issues at the highest level and drilling down to the actual records that support the business processes will provide a good overall picture.

Examination of Documents

Research will be conducted through examining documents on the Internet and in hard copy form. In many cases, the Internet will provide background material on public sector reforms, ICT and other developments in the selected countries. Internet research should be completed prior to beginning in-country research and the site address and date viewed should be recorded. The following categories of information will be reviewed:

- governance structure and public sector reform
- donor assistance and programmes
- relevant legislation, strategies and policies (sometimes available)
- government publications including reports
- academic studies
- news media material where relevant.

While an increasing range of material is available from the Internet, it is likely that some information will be available only in hard copy. Documents will need to be viewed, noted, copied or obtained from government ministries, libraries or other sources. The research assistants should be able to assist in obtaining this material, including:

relevant legislation

- strategic plans
- relevant policies and initiatives
- reports
- manuals
- procedures
- instructions
- bidding documents and specifications
- staffing and organisational structures
- data relating to pay and personnel
- newsletters, media material.

In particular, it will be important to study staff rules, accountant general's instructions, personnel instructions and other documentary sources to determine how appoints were confirmed traditionally and how they were notified to the payroll.

Interviews

Face to face interviews will be an important source of information for the studies. It is essential to prepare for the interviews. The following points should be considered:

- Does the information provided by preliminary research need to be validated or expanded in interviews?
- Who will facilitate the interviews? (If at all possible, a records manager, accountant or another local professional in a relevant profession should participate in the interview.)
- Have the stakeholders received adequate background information in advance of the interviews? (Normally this would be the relevant briefing note, but some stakeholders will want to have a list of questions in advance of the interview.)
- If an official is unavailable, is there a suitable alternative?
- Is it appropriate to interview some officials in groups?
- How will the interviews be documented?
- How will the information be corroborated?

At the beginning of the interview, the researchers will need to outline the project and refer to the briefing note. Interviews may vary in length depending on the number and complexity of questions and the amount of discussion, but normally they should last less than an hour. Follow-up interviews may need to be requested if not all questions have been covered, if the official concerned needs to obtain additional information or if issues that require clarification arise subsequently. The official's time constraints must be respected.

Researchers need to be conscious of the importance of asking questions that are appropriate for the staff being interviewed. Interviews with senior staff should generally focus on strategic, policy and management issues. Interviews with technical staff should generally concentrate on systems design and management. Interviews with junior staff will concentrate on day-to-day management of records, particularly in relation to IT systems. The question sheets will give an indication of the level of person to be interviewed.

It is important to record the results of the interview as fully as possible during the discussion, while still being fully engaged; it is equally important to read through the notes of the interview as soon as possible after it is completed and to add clarifications that it may have been difficult to record during the session.

The precise composition of the stakeholders will vary from country to country, but in general, the following officials should be consulted if possible:

- accountant general
- auditor general
- permanent secretary ministry of finance
- head of internal audit in ministry of finance
- head of establishment office/ personnel management office/ human resource management office
- head of civil service department
- head of civil service reform
- head of public service commission
- heads and senior staff of the integrated financial management information system, the integrated pay and personnel database, and of other relevant IT systems
- permanent secretaries of ministries of agriculture, health and education (typically the largest spending ministries)
- departmental/ministry official with responsibility for IT
- permanent secretary, ministry with responsibility for records and archives
- departmental/ministry official with responsibility for records management function
- head of registry

- national archivist
- donors
- other individuals as required

Appropriate officials will be identified for the studies of court and land records.

Onsite Examination of Systems and Records

Information also will be gathered through an onsite examination of information systems and of physical records. This will include an examination of:

- online systems
- data capture forms
- data outputs
- records as data inputs
- paper records that are not linked to electronic systems
- sites where paper records are stored
- sites where electronic and digitised records are stored.

It also will be important to examine manuals and guidance for managing these systems and records. Researchers should gather examples of this system documentation, including data input forms, screen shots, spreadsheets and manuals.

This aspect of the research will be helpful in mapping information flows, which are described below.

4.5 Mapping Information Flows

The research methodology also will involve analysing selected business processes associated with the pay and personnel function. The aim is to produce, through interviews, examination of documentation and onsite observation of processes, a picture of the existing control points and documentation as a basis for determining whether records management requirements are being met and where there are gaps. This will include a narrative text describing the steps in the processes and showing activities, authorisation points and supporting records, with flow charts representing this information diagrammatically

Two processes have been selected to be analysed:

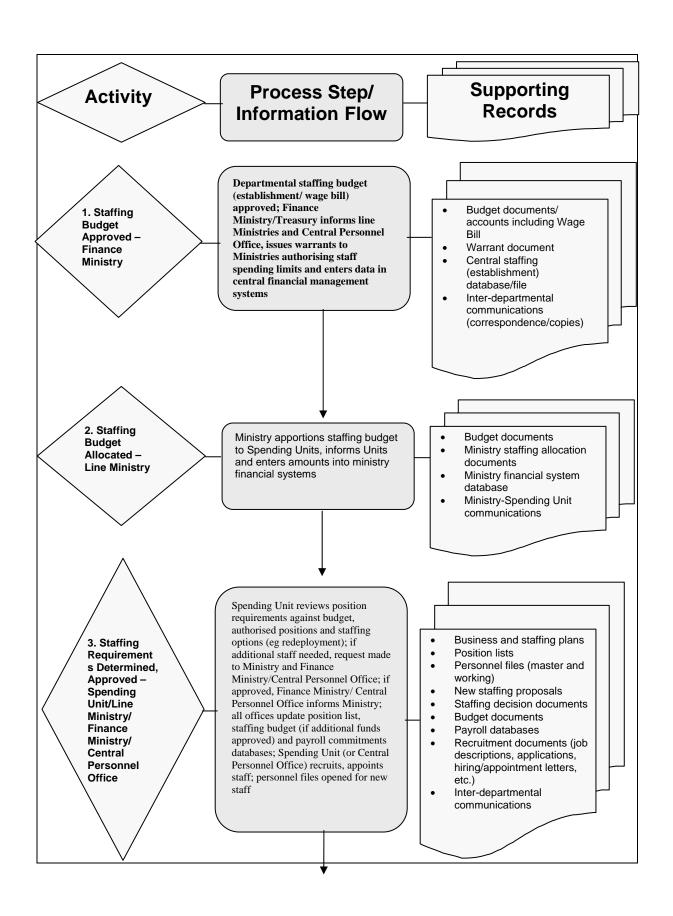
• an employee joins the payroll on first appointment

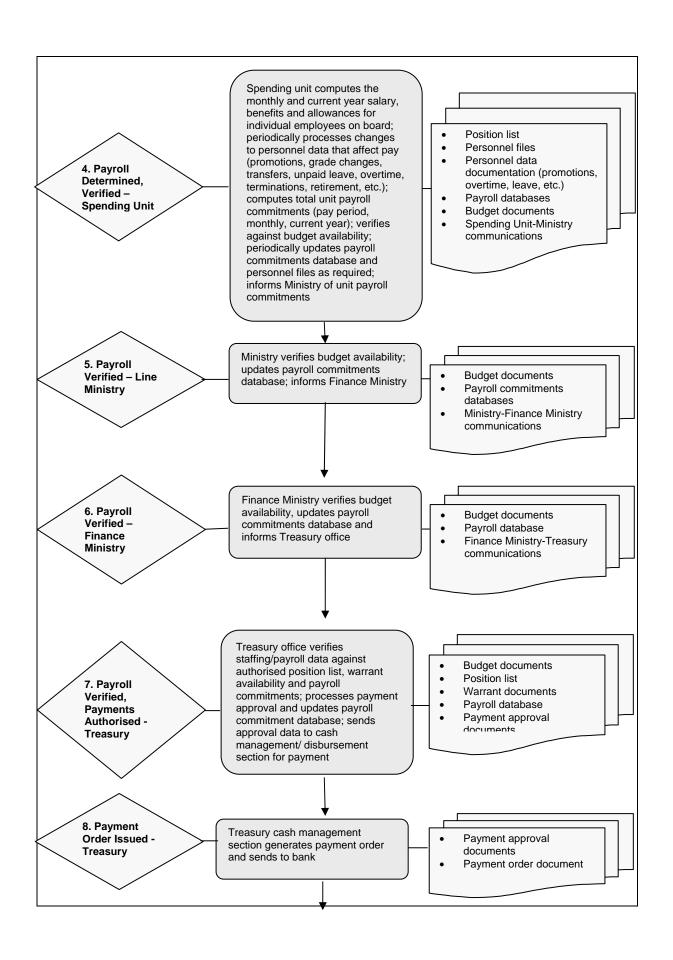
• there is a change to the payroll following an employee's dismissal, retirement or separation from the public service.

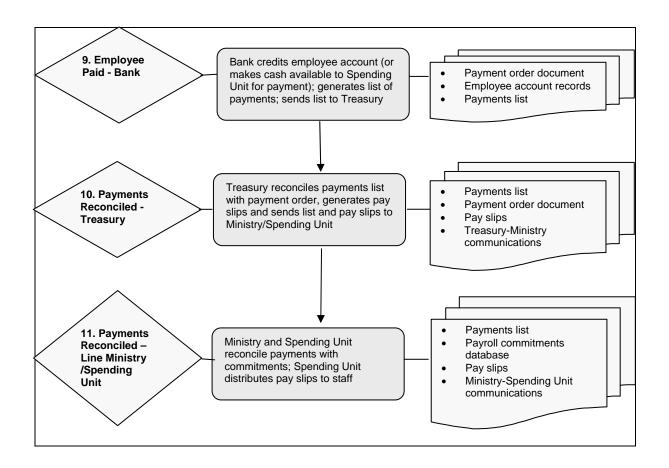
The two processes should be described and mapped for two categories of government employees:

- permanent and pensionable staff
- daily paid or temporary staff.

The following flow chart of the establishment/pay process, based on the Treasury Reference Model developed at the World Bank, should help in mapping the business processes to be examined and determining records management requirements:



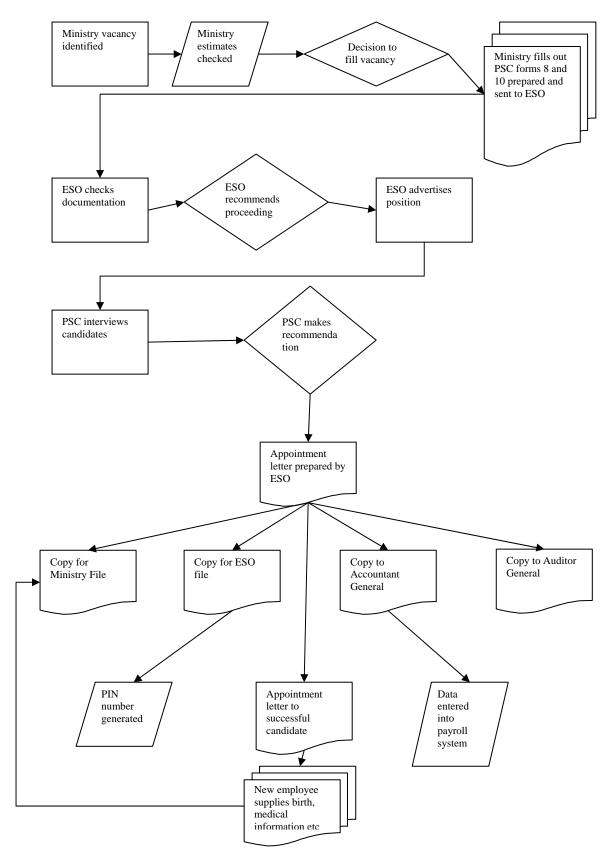




A recent example from Sierra Leone, analysing recruitment and appointment processes, provided the following text summary and diagram:

When a vacancy is identified, Public Service Forms 1 and 8 are completed to record the vacancy. The Estimates are checked to ensure that there is funding available for an appointment. The vacancy forms are submitted to the Establishment Secretary's Office (ESO) for consideration. If they are approved, the advertising process is commenced by the ESO, and a vacancy application is submitted to the Public Service Commission (PSC). The PSC interviews candidates and makes recommendations, which are recorded on forms that are sent to the ESO. The ESO prepares a letter of appointment. A personnel file is opened at the ESO and the letter should be placed on the file. A copy of the appointment letter is sent to the Accountant General's Department and details are entered on to the civil service database and payroll. A copy of the appointment letter is sent to the Audit Office. A copy of the appointment letter is sent to the ministry concerned. The appointment letter is sent to the successful candidate. A personnel file is opened in the ministry, and details of birth and medical information etc are placed on the file as well as on the file in the ESO.

These processes are illustrated in the information flow chart that follows:



The Project Manager will develop the first set of flow charts, and the Research team then will agree a standard model.

4.6 Quantitative Research

One of the aims of the project is to assess how far existing systems achieve or fall short of achieving the controls that existed traditionally. Indicators are to be developed, based on quantitative information derived from the case studies that will contribute to the wider objective of measuring effectiveness in development programmes. Indicators are to be developed to determine whether records (electronic, digitised and paper) are providing the evidence required to support the processes involved in pay and establishment controls in terms of completeness, authenticity and accuracy.

The project will focus on electronic, digitised and paper records held in or by:

- the paying authority
- the central establishment authority (if function not fully decentralised)
- a high spending ministry: education or health or agriculture

Sampling

One intention of the project is to provide amplification of Indicator 18 of the *Public Financial Management Performance Measurement Framework*, which was developed by the Public Expenditure and Financial Accountability (PEFA) Secretariat, based in the World Bank. This tool identifies the following areas of measurement:

- degree of integration and reconciliation between personnel records and payroll data
- timeliness of changes to personnel records and the payroll
- internal controls of changes to personnel records and the payroll
- existence of payroll audits to identify control weaknesses and/or ghost workers.

The study will use samples of pay and personnel records to identify weaknesses in records control systems, data gaps or the lack of linkages between systems, to support and clarify the PEFA Indicator, and will develop specific measurable indicators to amplify the first three of the PEFA areas for measurement. It has been agreed with the PEFA Secretariat that the indicators and guidance developed can sit on the PEFA website for use by assessors and auditors.

Each case study will take a random sample of 50 names from the payroll of one ministry. It will involve carrying out a series of checks to determine the degree to which data can be verified within and between systems, whether traditional paper or electronic or digitised. The All employees included in sample should be based in the ministry headquarters in the central government. It may be possible to expand the sample. It is recognised that the findings from these small samples can be indicative only. The purpose is to determine key issues that require more detailed examination, and also to help develop a methodology for conducting checks on larger samples in the future.

For each name in the sample, the master or central personnel file should be examined to confirm the presence of the following key records, which together represent the contract of employment between the employer and the employee:

- application for employment
- letter of appointment
- employee's acceptance of employment
- medical certificate or statement confirming fitness for employment
- certificates or proof of education required for appointment (these will not be available for all employees).

In addition, a check should be made for each name in the sample in order to complete the table illustrated on the next page. The purpose is to determine whether there is agreement of core data between the personnel file, human resource information system and payroll, and also to identify the incidence of delays between authorisation of change in employment and updates of the payroll. Where necessary, 'not applicable' or 'not able to determine' will be entered in the table, and if a file is missing, this should be recorded.

In carrying out these checks, any suspect data should be noted, for example, a change of date of birth in the personnel file, or an amendment to core data in the HRIS as indicated by the audit trail recording changes to data. Where there are discrepancies, it may be possible to check the data input forms for the HRIS and the payroll.

Moreover, while completing this sampling process, the research team also should gather information about the following issues:

- Is it possible to make observations about the frequency of staff changes?
- Do the files contain information about training and career progression?
- Do the files contain annual performance reports? Are the reports consistently available? Are they held on open or closed files?
- Are key documents scanned and held in the personnel database if they are not held on personnel files?
- Is the level of the salary noted in the appointment letter?
- Are there observations that can be made about the total pay package in terms of the relationship between base pay and allowances as part of the total pay package?
- Of the files sampled, are the permanent and pensionable staff held against established posts at the correct grade level?
- Is the salary defined specifically in the letter of appointment?

Data element	Paper File	HR database	Payroll	Notes	
Employee number					
Name					
Date of birth					
Date of offth					
Position title					
Designation/Grade					
Duty station					
Date of 1 st appointment					
Date of 1 appointment					
Date of authorisation for last change					
in employment affecting pay					
Date change made in payroll					
Base salary					

Housing allowance		
Medical allowance		
Gross salary		
Increment level		
Housing allowance		
Medical allowance		
Performance assessment		
Pension/ social security entitlement		

Logistics

There will be sensitivity about the confidential nature of pay and personnel records. When viewing personnel information, care must be taken to respect confidentiality and to assure officials that the information seen will not be used in a way that can identify individual employees. Various logistical issues will need to be resolved prior to commencing the sampling. These include:

- discussing the project and sampling technique staff including departmental secretary, head of human resources and other stakeholders
- agreeing with senior officials a contact staff member within the agency concerned who can provide assistance in finding files or can assist with meetings
- identifying where the records are held
- obtaining security clearances required
- obtaining permission to access the files and obtain information from the HRIS and the payroll system
- locating space to carry out the work.

4.7 Training in Data Collection

Research assistants will receive training in data collection. They will be given a copy of the research toolkit, and the senior researchers will offer training covering the aims and context of the project and the research methodology. There should be opportunities to discuss other aspects of contemporary recordkeeping and archives management not only with research assistants, but also with all staff at the National Archives and with government officials at all levels.

Chapter Five Deliverables

5.1 Summary

The project will produce four main deliverables, which will be available without charge in the public domain. These outputs will be used as follows:

- Policy makers and system designers/managers will be able to use the following outputs to make decisions and ensure that system design takes account of evidentiary requirements:
 - route map providing a sequence strategy for moving from a paper-based to an
 electronic information environment and linked to development targets
 - good practice guidance materials supporting the developments of laws, policies, staff responsibilities and accountability for records management.
- Records professionals and educators responsible for strengthening records management policies, systems and practices in the ICT environment will be able to draw on the:
 - voute map providing a sequence strategy for moving from a paper-based to an electronic information environment and linked to development targets
 - strategies for creating stakeholder awareness, citizen demand and political will for managing paper and electronic records as evidence
 - *⋄* good practice guidance materials
 - *♦ four training modules*
 - database of case studies, with a report summarising the findings, as teaching and staff development materials.
- The international community will have available:
 - ♦ a database of case studies
 - ⋄ route map of sequence strategy
 - *⋄ good practice guidance materials.*

5.2 Case Studies

The case studies will provide an excellent source of information on pay, personnel and establishment records in government in selected countries. Some of the studies will build on earlier work while others will be new insights on the state of traditional and electronic recordkeeping in pay and personnel. As systems move from traditional to electronic environments current practice, lessons learnt and next steps will be outlined. Data collected will enable comparisons to be made and will provide snap shot of the challenges being faced. Information from the case studies will also inform other deliverables ensuring that sound practical guidance will be developed and delivered.

5.3 Good Practice Guidelines

This will involve drawing on regional and international research and experience and ensuring that all materials comply with the International Standard on Records Management (ISO-15489). The materials will include records management indicators and will cover the requirements for:

- effective laws and policies to govern the way government records are created, maintained and used; these may include 'public records' acts, freedom of information and protection of privacy laws, archival legislation, government-wide and departmental recordkeeping policies, etc
- staff responsibilities and accountability for creating and maintaining and protecting records
- effective standards and practices for managing records including documenting, classifying/indexing, storing, protecting, accessing, retaining, transferring, destroying and archiving)
- staff capacities, including all public servants and records and information professionals
- budget requirements for office and storage space, equipment and supplies, computer systems and other resources.

5.4 Training Modules

Mapping Information Flows and Defining Records Control Requirements

The module will cover topics including determining what information is needed to support government functions; documenting business activities, decisions and transactions and identifying the control systems needed to ensure that the information is created and managed as authentic and reliable evidence.

Managing Electronic Records in structured environments and unstructured environments

The module will cover organising, indexing, storing, accessing and disposing of records; establishing the link between paper and electronic records; protecting the security and confidentiality of sensitive information; introducing consistent naming and file classification systems.

Preserving Digital Records

The module will cover topics including maintaining business records and data for as long as they are needed for legal/business accountability or historical uses; introducing appropriate long-term preservation practices for paper and electronic records/files, including conversion and migration.

Managing Records in Relation to Public Sector Development

This module will examine issues involved in integrating and using the information to support post-conflict reconstruction, access to information initiatives, anti-corruption and electronic government; distributing and sharing information with those who need and have a right to see and use it.

5.5 Dissemination

The Project Management Team will work with the partner organisations and the Steering Committee to disseminate findings. In addition to sharing the findings with relevant agencies in the partner governments, this dissemination strategy will include:

- A workshop for the regional partner organisations, ESAAG and ESARBICA, and for
 international partners, aimed at articulating the lessons learned about managing records
 generated in the electronic environment as evidence for accountability (specifically in
 relation to pay and establishment control and in the broader context of accountability
 requirements and computerisation initiatives) as well at launching project products.
- A *national stakeholders' meeting* aimed at sharing the project outputs and articulating their relevance for electronic government applications.
- Dissemination of outputs through the East and Southern African Association of Accountants General, which works closely with the International Federation of Accountants. ESAAG regularly shares findings within the region through its website and its meetings.
- Dissemination of outputs through the East and Southern Regional Branch of the International Council on Archives (ICA), which works closely with the ICA on African and international development strategies. ESARBICA shares findings within the region through its website and its annual meetings, and the ICA does the same on an international scale.
- Dissemination of outputs in collaboration with the World Bank. This includes dissemination through seminars (for instance 'Brown Bag' lunches and the 'Quick Start Programme' and through advisory networks. In particular, it has been agreed that the research findings and project outputs will provide content for the World Bank Institute (WBI) Media Governance and Information Program. In this way, the information will be shared with WBI client countries, and training and support in implementation can be provided. The programme has three 'pillars', and the research findings and products will be relevant to all three, especially the second:
 - strengthening the information environment; legal and institutional frameworks for access to information
 - public information capacity and records management; building government
 capacity to respond to demands for information through enhanced records
 management

- developmental journalism skills and training
- Dissemination of outputs through the World Bank Public Sector Governance website. The themes for the site include anti-corruption, administrative and civil service reform, decentralisation, e-government and public expenditure.
- Dissemination of outputs through the Commonwealth Secretariat, Governance and Institutional Division's Informatics Programme. This is likely to involve Commonwealth-wide meetings/training programmes, which will provide a means of extending the research findings and deliverables to countries across the Commonwealth.
- Publicity through press releases and dissemination of outputs through a project website.
- Distribution of outputs without charge to management institute, training centres and universities in Africa and Asia
- Distribution of outputs through other international organisations and networks such as the E-Policy Resource Network; the Development Gateway; the African Information Society Initiative; the UNDP Institutional Development Group and the UN Division for Public Administration and Development Management (which have agreements to exchange findings with the World Bank Thematic Group on Administrative and Civil Service Reform; the African Association of Public Administration and Management); the Commonwealth Association for Public Administration and Management; and Transparency International
- Dissemination through the Trust's website. The availability of the Management of Public Records Project Study Materials without charge provides a valuable model for sharing capacity building material.

Chapter Six Report Writing

Research Questions

PAY AND PERSONNEL

Policies and Responsibilities

- Are pay reform and personnel management important features of the public sector reform programme? Are any of the following priorities: (a) reduction in the public service wage bill; (b) reduction in overstaffing; (c) improved public expenditure management; (d) eliminating payroll fraud; (e) decompression of salary scales; (f) greater decentralisation; (g) improving service delivery?
- What percentage of the national budget is spent on the payroll?
- Which agencies are responsible for the following public service management functions:

 (a) establishing human resource policy and personnel management framework; (b) approving departmental structures and maintaining a record of established or approved positions; (c) human resources planning for the public sector; (d) preparing annual human resources budgets; (e) authorising promotions and transfers; (f) maintaining service records; (g) preparing the payroll; (h) auditing the payroll; (i) administering pensions?
- What is the extent of the authority of the central office responsible for personnel? Does it have authority over a) teachers, b) health workers, c) local government employees? What percentage of public sector personnel does the office cover? Are separate establishment authorities responsible for certain categories of workers?
- What payrolls does the government operate? Do these different payrolls present special issues in terms of managing records as evidence?
- In particular, what are the issues that affect the teachers' payroll?
- Is there a single institution responsible for pay in the core civil service, or is there a decentralised pay system operated by individual ministries against a common standard set by the accountant general? If it is a decentralised pay system, who is responsible for pay in MDAs? Is it the MDA accounting unit? Do the staff of this unit report to the accountant general? How much authority do MDAs have for making their own appointments?
- Are the staff posted to the districts paid from the centre or from are they paid by district treasuries. Are there particular issues that affect the payment of these staff?
- What mechanisms are in place to bring together information from different payroll systems and track payroll expenditure on a consolidated basis?
- Is there currently a freeze on recruitment, filling vacancies, or creating new posts? What was the order that introduced the freeze and when did it come into effect.
- What are the processes for sanctioning new posts?
- Are guidelines and procedures available for approving recruitments, promotions, and transfers? How are these guidelines issued?

- Are there authoritative and accurate employment figures for public service employees? Are these figures available for: (a) core public service administrators; (b) teachers; (c) health workers; (d) police; (e) armed forces; (f) local government workers; (g) employees of public enterprises; (h) temporary or daily paid workers; (i) contract workers? How is accuracy demonstrated?
- Are records created and kept to show: (a) the authorisation for each post; (b) that all authorised posts have budget approval; (c) the total number of authorised/ budget-approved posts; (d) the number of vacancies against authorised/ budget-approved posts; (e) the current status of authorised/ budget approved posts (eg, whether temporary or 'frozen')?
- How many posts have been approved for each of the following 'big spending' ministries: a) health, b) education and c) agriculture)? What percentage of the national payroll is allocated to each of these ministries?
- For each of these ministries, what is the establishment structure, including the approved mandate, the organisational structure and the staffing numbers? Is it possible to get the job descriptions, a list of approved positions and the annual input to the budget process?
- Are recruitment, promotion and transfer records sufficiently authoritative and accurate to allow checks of public sector workers against authorised posts, annual budgets and available funds?
- Is there a personnel file for each permanent and pensionable public servant including: a) core civil servants, b) teachers, c) health workers, d) police, e) members of the armed forces, f) local government workers, g) contract workers? Do these files provide a complete and reliable history of the career of each public servant?
- Does the computerised personnel database, if there is one, provide a complete set of personnel data needed to provide a reliable career history of each public servant?
- What common standard data entry form(s) are used for adding employees or making changes to the payroll?
- How is an employee added to the payroll? Taken off the payroll?
- What are the main allowances that different categories of public servants are entitled to receive?
- What records are created to authorise pay entitlements and allowances? How are pay changes determined and carried out? Are there records systems and procedures in place to ensure that changes to the payroll are authorised and verified? What records are created to authorise a change in pay?
- Are the forms or data entries used to update payroll records linked to the records documenting the career history of employees (eg, they are placed on personal files)?

- How is the personal file record of a pay change linked to the payroll record?
- Are there systems and controls in place to ensure that payroll records for permanent and pensionable staff and for temporary workers are up-to-date; that transferred, terminated or retired employees are no longer on the payroll; and that 'ghost workers' are at the correct rate of pay. What systems and controls are used?
- What is the policy on hiring temporary workers?
- For temporary or daily paid workers, are records created and kept to show: a) the current number of these workers; b) the duration for which they have been hired; c) the basic personal details of each worker; d) the number of these workers who have been absorbed into the public service proper.
- What systems and controls are in place to recover advances from pay?
- How can it be verified that the right person is paid the right amount? What is the role of external audit? What is the role of the internal audit unit? What is the role of external audit? Do the auditors assess the effectiveness of control systems for financial and records management?

Pay Systems and Human Resource Information Systems

- How has the payroll system evolved over time?
- Are payroll and human resource management functions integrated or linked through an IT system? If so, describe the system.
- Is there an FMIS? When was it introduced? What modules does it include?
- How were the pay and personnel information systems planned, designed, tested, implemented, evaluated and maintained? Is there a centralised body for the strategic development of IT resources and systems or is this responsibility decentralised?
- Who is responsible for managing and maintaining pay and human resource information systems? To whom do they report, and where are they located in the organisation? Describe the pay and human resource information systems that are being used. What is the product version? List all of the system modules that are being used.
- List the product names and versions for the server hardware, database management system, and any other system components that support the systems.
- Have the system designers taken account of the need to build in records management functionality (ie, records remain accessible, authentic, reliable and useable for the entire period of their retention and usefulness)?
- What provisions are in place for capturing and managing the electronic records being generated by the computer applications? What provisions are there for managing the paper records being input to these applications?

- What, if any, other automated tools are used to support the pay and personnel functions? Describe.
- Who provides the day-to-day server and network administration for the systems? Who provides the day-to-day technical and user support for the systems? Are there any problems with technical capacity?
- Where are the system servers located? Is this a secure and reliable environment?
- Does following system documentation exist: (a) system requirements; (b) system architecture/design diagrams; (c) administrator manual, user manual?
- What system backup and recovery mechanisms are in place?
- Were original, verifiable data sources used to populate the electronic system(s)? If not, please specify what data were used.
- Do systems include an audit trail function that captures and stores information about: a) all the actions that are taken upon an electronic record, b) electronic file or classification scheme; c) the user initiating and or carrying out the action; d) the date and time of the event?
- Are there policies and procedures for a migration process (upgrades or off-line storage, etc)?
- Have records or data ever been lost as a result of: (a) system failures; (b) power outages; (c) tampering; (d) other reasons (specify)?
- Are forms/input screens consistent between paper and electronic systems?
- Is there a photograph on the file? In the personnel database?

RECORDS MANAGEMENT

Policies and Responsibilities

- Is overall responsibility for the management of personnel and payroll records assigned to the national archives or some other central government body or is this the responsibility of the MDAs? At what level of responsibility is this handled (title, duties, position in organisational chart?) Do those responsible have: (a) professional training; (b) overall responsibility for managing personnel and payroll records from creation to final disposition; a formal relationship with the national archives?
- Which organisations are responsible for records management in government and what are their roles and functions?
- Are there policies for managing personnel and payroll records and information, covering paper, electronic and digitised records? If yes, who issued the policy or

guidelines? Do the guidelines specify: (a) objectives for the management of payroll and personnel records; (b) responsibilities for creating and maintaining records; (c) standards (format, quality, content) to meet evidentiary and regulatory requirements throughout the life of records; (d) policies and procedures to transfer records, including electronic, to archival custody; (e) preservation standards and guidelines to maintain access over time?

- Is there a procedure manual for the management of personnel and payroll records throughout their life? When was it issued or last updated? What are its contents? Are electronic records covered? What other instructions are available to guide the management of these records?
- Are there specialists in the management of personnel and payroll records within the national archives or elsewhere in government? Are professional records managers actively involved in managing records input to and created by pay systems and human resource information systems?
- Are staff available who have the training needed to manage electronic and digitised records over time? Describe their training and responsibilities.
- Are there internal or external audits/evaluations of records management? If yes, when, who conducts them, etc?
- Is there a disaster recovery plan which includes personnel and payroll records (paper and electronic)?
- What level of resources is allocated for records management and how are these resources organised and controlled?

Control Systems

Capture, creation, registration, classification

- How were personnel files kept in the past and where were they kept? Classically, a public service department kept a file for each employee in the civil service; a file also was kept in the ministry to which the employee was appointed and often a file was kept in the public service commission, at least for the higher grades. What can be learned from examining documentation including staff rules, personnel instructions accountant generals' instructions?
- How has the situation changed? Are the same controls being maintained, in either a paper-based or an electronic system?
- Are there guidelines or instructions (such as a set of rules or procedures manual) for managing the authoritative personal records or master personal files throughout their life?

- Are documents added to files in such a way (eg, by a tag for paper records and folio numbers, or sequential number for computer records) so that their sequential order is preserved and that they cannot become easily detached or out of order?
- Are personnel files (master and working) assigned a classification code, keyword or unique identifier used to retrieve the records (eg Social Security Number or Tax Identity Number)? Does this identifier link them to the payroll? What identifier is used?
- Is the same identifier used in the personnel database? Is this also the payroll number?
- What data-entry form or paper record is used to create the electronic record?
- What metadata about the records is created or copied when the record is captured?
- Are imaging or scanning systems used to capture manual records? What systems are used? Does the system allow integration with existing business and records management systems? Are there procedures in place to guide staff on using the system and on quality assurance? Are procedures in place for managing these records over time and for linking them to related paper-based and electronic records?
- Which records are digitised? How are decisions taken about which records are to be scanned? After scanning, does the organisation keep the original document for accountability purposes?
- Is the record assigned to a disposition class, assigned a default retention period or linked to a retention schedule/authority when it is created or captured?

Storage and Preservation

- Are current paper personnel records stored in a storage facility that meets requirements for security, temperature and humidity control, fire precautions, etc?
- Is there a problem with paper records being lost, damaged or altered? Explain.
- Are there security measures in place to prevent unauthorised access to paper, digital and electronic records?
- Are payroll records and payroll change forms (eg data entry forms) stored so that they can be easily accessed when required
- Are electronic records held in a reliable storage system? Describe the storage media and architecture?
- What backup and disaster recovery procedures are in place??
- What security measures are in place prevent unauthorised access to electronic records?
- Have any measures been taken to ensure the long-term preservation of electronic records? Does the system have an archiving module? Does the system allow for the

export or migration of data to non-standard formats (eg XML)? Are staff trained to use these procedures?

Access

- Have formal instructions been issued defining who can or cannot access personnel and payroll records? Do the instructions cover both paper and electronic records? Are the access privileges of users verified before records are released?
- Are there problems in accessing paper-based, digital or electronic personnel records? Is it rare for files to be lost or misplaced or is this a common occurrence?
- What types of finding aids are available to find and retrieve personnel records?
- Are electronic records protected against unauthorised access, alteration or disposal?

Tracking

- Do working files move with staff members when they transfer from one employing agency to another?
- Do users have to sign for paper-based personnel records when they take them from storage areas? Are procedures (eg a 'file' census) in place for monitoring the movement and return of these records?

Disposition

- Are there systems and procedures in place for transferring closed or inactive records to separate storage? Where are semi-current or inactive records (paper, electronic and digital) held? Is there a records centre dedicated to storing semi-current records? Are any pay or personnel records transferred to the National Archives?
- Are all pay and personnel records (paper, electronic and digitised) covered by a records retention schedule/ disposition authority? Are the schedules government-wide or local? When were the schedules last reviewed and updated? Are they applied consistently?
- How are the retention schedules monitored for paper records, for digitised records and for electronic records?

Interview Sheets

Head of Civil Service Reform, Head of the Public Service Commission, Senior Staff

Name:	
Position:	
Ministry/Office:	
Place of Interview:	
Date of Interview:	
Time of Interview	

Accountant General, Permanent Secretary Ministry of Finance, Head of Establishment Office/Personnel Management Office and Senior Staff

Name:	
Position:	
Ministry/Office:	
Place of Interview:	
Date of Interview:	
Time of Interview	

Permanent Secretary, Heads of Personnel in the Ministries of Education, Health and Agriculture

Name:	
Position:	
Ministry/Office:	
Place of Interview:	
Date of Interview:	
Time of Interview	

Auditor General, Internal Auditor Ministry of Finance, Senior Audit Staff

3.7	
Name:	
Position:	
Position.	
Ministry/Office:	
J. 2	
Place of	
Interview:	
Date of	
Interview:	
T: £	
Time of	
Interview	
THE VIC V	

Pay and Personnel: Pay Systems and Human Resource Information Systems

Senior and Technical Information Systems Staff

Name	
Position	
Ministry/Office	
Place of Interview	
Date of Interview	
Time of Interview	

Records Management: Policies and Responsibilities

Permanent Secretary, Ministry with Responsibility for Records Management, National Archivist and Senior Staff, Payroll and Personnel Systems Senior Staff

Name:	
Position:	
Ministry/Office:	
Place of	
Interview:	
Date of	
Interview:	
Time of	
Interview	

Records Management: Control Systems

Ministry Officers with Responsibility for Records Management, Records/Registry Staff in Ministries, National Archives Records Inspectors, Payroll and Personnel Systems Staff

Name	
D ''	
Position	
Ministry/Office	
Place of	
Interview	
Date of	
Interview	
Time of	
Interview	

List of Contacts

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Gert van der Linde, Lead Financial Management Specialist, Africa Region

Yongmei Zhou, Africa Region

Country Notes

Internet sources

Basic information about the countries to be visited may be found at the following websites:

http://www.cia.gov/cia/publications/factbook

http://www.dfid.gov.uk/countries

http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/

Key statistics at a glance:

	Ghana	Lesotho		
Population (m)	22,409,572	2,022,331		
Unemployment	20% (1997 est.)	45% (2002)		
Population below poverty line	31.4% (1992 est.)	49% (1999)		
Budget: revenues	\$3.216 billion (2005 est)	\$738.5 million (2005 est)		
Budget: expenditure	\$3.506 billion (2005 est)	\$792.1 million (2005 est)		
External aid	\$6.9 billion (1999)	\$41.5 million (2000)		

House Style Manual

(to be added)