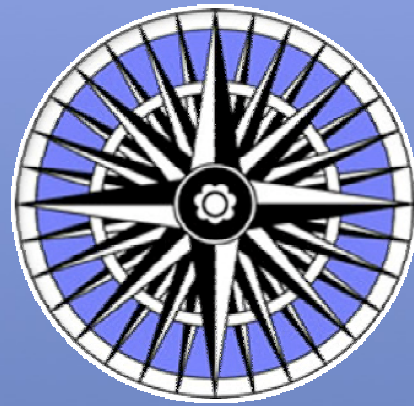


INTERNATIONAL RECORDS MANAGEMENT TRUST



SIERRA LEONE CASE STUDY

OCTOBER 2008

Fostering Trust and Transparency in Governance

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

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CONTENTS

	Page
Introduction	1
Executive Summary	1
Context	2
Historical Background	2
The Significance of Records Management for Governance	3
The Significance of Records for Employment and Payroll Controls	3
Records Management Initiative, 1994	4
Payroll Verification Initiatives, 1994 to 2002	5
Payroll Verification, 1994 to 1997	5
Payroll Verification, 1998 to 2002	7
Records Management Improvement Project, 2005 To 2006	9
The Requirement for Basic Controls	9
Focus on Personnel Records	10
Records and the Integrated Financial Information Management System (IFMIS)	11
Support from Senior Stakeholders	12
Building Controls for Personnel Files	13
File Completion Project	14
Multi Donor Budget Support Benchmark on Records Management	15
Anomalies Database	16
Pilot Civil Service Payroll Verification Project	17
Purpose of the Project	17
The Evidence-Based Approach and Traditional Censuses	18
Developing Data about Completeness of Personnel Information	19
Comparing Information between Datasets	20
Defining the Subset for Payroll Verification	21
Verification Interviews	22
Verifying Existing Data and Capturing Additional Data	24
Closing Anomalies	26
Outcomes	27
Areas for Further Analysis	28

Lessons Learnt		29
Appendix A	Computer Payroll Data Fields, 1994	33
Appendix B	Main Registration Form, Civil Service Verification Data Sheet	35
Appendix C	Closure of Anomalies by Type	37

INTRODUCTION

This case study explores successive efforts in Sierra Leone, over a period of 25 years, to establish employment and payroll controls, and it considers the lessons learned. It examines the deterioration of records control systems, the loss of control of personnel information, the link between corruption and weak records systems, and the consequences for payroll and personnel management. It describes in detail a successful pilot 'evidence-based' payroll verification project in 2008 that provides a new approach to establishing control of pay and personnel information. The pilot now has been expanded to a highly successful national verification exercise. Although the national exercise is beyond the scope of this study, it is significant that even the President of Sierra Leone has been verified as part of the process. The case study draws on reports of work carried out in Sierra Leone by the International Records Management Trust in 1994 and between 2005 and 2008.

EXECUTIVE SUMMARY

The deterioration of records systems in Sierra Leone during the 1980s and early 1990s was accelerated by a long internal war at the end of the century. The Government was left without the documentary evidence needed to manage the public service and in particular to maintain employment and payroll controls. After the war, efforts to verify the payroll and re-establish control failed repeatedly due to the lack of reliable records.

From 2005 onward, there was a positive effort to rebuild the structures required to manage records, with a particular focus on pay and personnel records. In the initial stages, this involved reorganising personnel records in payroll number order and systematically developing personnel files for all civil servants. Subsequently, it involved developing a new methodology for recording and capturing anomalies discovered on personnel files, verifying them through face-to-face interviews, and linking the findings systematically to the Human Capital Accountability Module (HCA) of the Integrated Financial Management Information System (IFMIS), ie the payroll. This methodology then was used to verify each individual in an initial subset of 2000 civil servants. Sixteen percent of the sub-set employees were suspended from the payroll as an immediate result of the exercise, with a potential for the number to increase through a process of further investigation.

The benefits of the records management improvements, in terms of strengthening payroll control, predicting retirements, managing retrenchment/restructuring and introducing enhanced accountability have relevance for other countries. The lessons learned, including the methodology for change, are summarised in the concluding section.

CONTEXT

Historical Background

At independence, Sierra Leone's Civil Service was one of the best in West Africa, and government records were well managed. Over time, political interference and military conflict led to a breakdown of government processes, and bribery and corruption were institutionalised; this had a serious consequence for the quality of recordkeeping systems. An eleven-year long internal war, between 1991 and 2002, accelerated these trends, as burning and looting contributed to the deterioration of Sierra's official evidence base. By the end of the war, records systems had collapsed.

Payroll control was seen as crucial to re-establishing political order, but a series of efforts, from the 1990s onward, to establish control were undermined by persistent problems in verifying information about civil servants. These problems stemmed from the breakdown of recordkeeping and the consequent loss of control of documentary evidence.

When the war ended in 2002, corruption remained a major impediment to the country's development, and peace and stability remained fragile. As development reforms in the areas of public finance and administration got underway, records management was recognised as part of the reform programme. By then, records systems in all areas of government had decayed into informality and there were no common policies, standards or procedures for recordkeeping. Controls were so weak, and the records were so incomplete that it was almost impossible to retrieve accurate and reliable information.

This situation contributed significantly to the downward spiral of corruption and inefficiency and affected the Government's ability to manage key resources, establish accountability, and protect citizens' rights and entitlements. Records staff were untrained and severely demoralised by the lack of equipment and supplies, leaving wide scope for bribery. These problems were especially severe in Sierra Leone, but they are nevertheless similar in essence to those experienced in other African countries in the same period.

When the Government began streamlining and upgrading the management of state functions and processes and moving into the electronic environment, the need for accurate and reliable records to support a transparent and accountable state became evident, particularly in the area of payroll management. A Records Management Improvement Project, which began in early 2005, gradually introduced a new methodology for rebuilding paper-based personnel records systems and linking them to the Human Capital Accountability Module of the new IFMIS.

The Records Management Improvement Team, set up to spearhead these measures, worked tirelessly to bring about remarkable changes in the state of documentary evidence in a short period of time. Its members deserve the highest professional praise. The Team Leader, Albert Moore, has demonstrated the true meaning of leadership, and the primary consultants to the project, Muniru Kawa and Dr Pino Akotia, have shown selfless devotion no matter what the challenges. Howard Tytherleigh has made an outstanding contribution to the information technology aspects of the project.

The Significance of Records Management for Governance

The purpose of records management in government, at any level and in any country, is to ensure that records are available to support business operations, services and decision-making, and to provide evidence of official policies, programmes, actions and transactions across all areas of governance. Without a structured and systematic approach to records management, records tend to be kept haphazardly, and government lacks the evidence it needs to plan, implement, manage, monitor, evaluate and audit its activities. Citizens do not have the evidence needed to protect their rights, and services for citizens cannot be provided consistently or efficiently. The misuse of funds or other resources is hard to trace or prove. Building a reliable evidence base is an essential aspect of development, and well managed personnel records are essential to support systemic employment and payroll controls.

The Significance of Records for Employment and Payroll Controls

For several decades, Sierra Leone has had a significant percentage of ‘ghost’ workers, that is people receiving salaries who either do not exist or who are not legally occupying the positions for which they are receiving pay. There is widespread recognition, in government and the development community, that reforms in the area of grading and salary structure are essential for public sector efficiency and that effective employment and payroll controls are fundamental to ensuring that the wage bill is not wasted on ghost workers.

Unskilled and semi-skilled positions, at Grades 1 and 2, make up nearly two-thirds of Sierra Leone’s public service, an unusually high percentage that will impede the development of the public sector if not addressed. However, resolving the problem requires accurate information about who is actually employed on what terms. It must be possible to identify ghost workers and workers past retirement age before decisions can be taken about the nature of the salary system needed to attract, retain and motivate staff with appropriate skill sets and to establish a fiscally sustainable wage bill.

In December 2007, a World Bank review mission on Human Resource Management in Sierra Leone noted that two ongoing initiatives in Sierra Leone were effectively supporting improved employment and payroll controls and that the completion of both initiatives should be high priorities for the Government. These were IFMIS, though its HCA Module, and the Records Management Improvement Project. IFMIS was providing a significantly improved capacity to monitor and control payroll throughout Sierra Leone’s public administration, not just in the Civil Service (which then comprised 16,473 employees and accounted for roughly 25% of Sierra Leone’s public employment), but for the teachers (43%) and the police (19%).

The Records Project was seen as providing an important complement to IFMIS. The project approach was to match employment records held by the Accountant General’s Office, (which managed the payroll), those held by the Employment Secretary’s Office (ESO) (which managed the Civil Service) and those held in the employing ministries, departments and agencies (MDAs). At the time of the Bank’s review mission, the Records Management

Improvement Team was identifying inconsistencies between these records, with the ultimate aim of creating a complete and up-to-date record of all public employees, purging the payroll of all 'ghosts' and establishing sustainable control of personnel information. The Bank's report noted that once the records project addressed records across the entire public administration, it would have made a significant contribution to improving employment and payroll controls.

RECORDS MANAGEMENT INITIATIVE, 1994¹

In the early 1990s, the Government of Sierra Leone asked the British Government to assist in strengthening records in the Civil Service, a long-standing area of concern. An evaluation report was commissioned in 1994, with emphasis on: 1) training, 2) determining what personnel information in the ESO could be transferred from paper files to a computerised personnel information system, and 3) defining the principles of an orderly system to underpin the payroll verification exercise for teachers that was about to commence in the Accountant General's Office.

Although the project was not implemented due to military conflict, the evaluation report captured a snapshot of the situation at the time. It noted that the collapse of records across government was severe and had consequences for practically every public service area. There were consistent reports of documents or whole files being stolen, files being hidden so that information could be sold, and records being used as wrapping paper in markets. Large quantities of closed and redundant files were occupying office space in virtually every department.

In the ESO, sampling indicated that approximately 60% of about 17,000 master personnel files² held in the Establishment Secretary's Office related to people who had died or were beyond retirement age. Partly because of the large volume of inactive records in the system, and partly because control systems had broken down, it was extremely difficult to find information about individual employees. There was no index to support retrieval, and staff had to scan through registers to find the files. This resulted in long delays in addressing human resource management issues, from leave to promotions to pensions.

However, the teachers' records in the Department of Education were in a worse state. Record cards were kept but no personnel files, so it was extremely difficult to get complete information about a teacher. The cards, which contained the date of birth, the date of first appointment and, usually, the signature of the teacher, were arranged by school. This made retrieval difficult, especially as teachers frequently moved from one school to another. Decisions affecting teachers were supposed to be noted on the record cards, but this tended not to happen, partly because the volume of information was greater than the staff could handle, and partly because there were no standards or procedures to ensure that information was kept up to date. There were many stories of teachers having to pay bribes to get

¹The report of a DFID funded evaluation mission in 1994 provided background for this section.

² This set of files held the core documentation for civil servants across the government.

information from the cards or waiting for weeks before their cards were found, if they could be found at all.

A UNESCO team, which was primarily interested in extracting statistical data, did make an effort to arrange the teachers' record cards in ring binder organised by school and kept in lockable glass fronted cabinets. However, this did not address the core problem. No attempt was made to establish control systems or to develop files for individual teachers. It was reported, moreover, that there was internal resistance to introducing controls that would limit the scope for profiting from the chaotic situation.

In this period, there were three positive records management initiatives. An interim records centre, or low cost storage area for inactive official records that still had value to the Government was established in the Civil Service Training College, with Commonwealth Secretariat support. Local records professionals were contracted by the World Bank to introduce records management improvements in the Department of Trade and the Income Tax Department. The Government initiated discussions with the World Bank about the possibility of constructing a purpose built intermediate records centre to serve the whole government.

At the same time, government stakeholders recognised official that tackling records management issues required an integrated national strategy. In late 1994, the Civil Service Reform Committee endorsed a coordinated policy on information management including:

- a national records law defining legal responsibility for records
- a management/organisational structure for records staff
- procedures manuals
- a comprehensive training programme
- construction of an intermediate records centre
- a systematic programme to restructure records in government agencies.

However, the war prevented the introduction of any of these measures.

PAYROLL VERIFICATION INITIATIVES, 1994 TO 2002³

Payroll Verification, 1994 to 1997

A series of donor initiatives, introduced from the early 1990s, aimed to strengthen financial, employment and payroll control. The initiatives were not always well coordinated, and plans

³ The primary source of information for this section is a case study produced by Roland Ulreich and made available by the World Bank:
<http://www1.worldbank.org/publicsector/civilservice/casestudy4sierraleone.pdf>

to strengthen control were repeatedly undermined by the poor state of accounting and personnel records.

By 1994, the European Commission was working with the Government to draft new financial legislation and instructions, establish control of accounting systems and introduce new computer payroll software. Working with the Accountant General's Office (AGO), they launched a verification exercise for civil servants, teachers and pensioners prior to introducing the software. The project recognised that paper records were a vital check point to ensure the validity of the data, create confidence in the computerised system and to make it transparent. They noted that when the new payroll was introduced, it would be important to cross verify the computerised payroll against the paper records. The data fields for the proposed computerised system are listed in Appendix A.

The teachers' payroll was of special concern. The AGO was paying approximately 19,000 teachers, while the Department of Education estimated the number of teachers at 17,000. Various initiatives, including two World Bank studies and one funded by the African Development Bank with support from UNESCO, had searched for a means of gaining control of information about teachers with limited success. The African Development Bank study was broader and looked at the teacher population as well as the number of school children and the architecture of school buildings.

Meanwhile, a World Bank study proposed a new computerised personnel information system. The proposal was not fully coordinated with the work underway on a computerised payroll system in the AGO. DELPHI software, a combined package for payroll and personnel information developed in the UK for local authorities, was to be used. A payroll verification exercise was conducted in 1996 in preparation for the new system. All civil servants, teachers, police and pensioners were asked to complete DELPHI forms covering personal, next of kin and employment details, which would be checked by the employing department against the staff list. The ESO was expected to verify the information for civil servants against the master personnel files, with the key data being the date of birth and date of confirmation of appointment. Similarly, the Education Department was to check teachers' forms against the personnel records held in the department before returning them to the AGO, where the data was to be compared with the current payroll.

When it became apparent that the ESO could not carry out meaningful verification because of the state of the records, there was a donor sponsored exercise to reorganise the files by employing department rather than by name. Unfortunately, this made them even more difficult to retrieve, particularly as employees were often transferred from one department to another.

Difficulties in verifying data against personnel records were compounded by the fact that ministries, departments and agencies (MDAs) had been able to appoint junior staff directly until 1992, and many people had been appointed on the basis of patronage or nepotism. Appointments for these unskilled staff (below Grade 3) did not pass through the Public Service Commission, as they did for permanent and pensionable staff. The normal appointment documents (the application for appointment, appointment letter, acceptance letter, medical certificate and copies of diplomas and educational certificates) were not

issued, and personnel files were not created. Letters of appointment, if they existed, were placed on subject files in the ESO and the MDAs. However, many cases, the minister simply sent a note to the ministry accountant instructing that someone be added to the payroll. There was, therefore, very little, if any, documentation for a large proportion of civil servants.

In early 1997, work commenced on the World Bank funded computerised personnel information system in the ESO, but it was disrupted by the military coup in May the same year. When the Treasury Building was burned, in the same month, large volumes of vouchers and other accounting records were destroyed. The remaining financial records were moved to the Ministry of Finance building across the road, and many were scattered through different offices, making verification still more difficult.

Payroll Verification, 1998 to 2002

With Sierra Leone facing a humanitarian crisis, establishing control of public financial management and verifying the public service payrolls was a high priority for the international development agencies; the World Bank, International Monetary Fund, African Development Bank and European Commission all were involved. Public financial management reform, including payroll verification, was a precondition for approval of a structural adjustment/budget support package that was to be disbursed by the European Commission. The aim was to address weak systems that made it easy to tamper with financial data. It was symptomatic that there had been no report published by the Auditor General since 1979.

In June 1998, the Government, working with the international community, launched a new series of reforms with the aim of establishing a clean, controllable and 'ghost-worker free' payroll. Tighter payroll controls were introduced, including photographic registration of civil servants and issuing identity cards. The European Commission employed consultants to fill key financial positions within government, with the aim of introducing proper accounting procedures and limiting the potential for corruption. The expatriate Accountant General recruited a team of accountants and IT experts and developed a bespoke Computerised Financial Management System (FMAS) to manage the payroll and expenditure control system.

The project also developed an MS Access Computerised Personnel Management Information System (CPMIS). The Establishment Secretary and the Accountant General set up a system whereby Personnel Information Numbers (PINs) would be issued to all legitimate public servants, including civil servants, police and teachers. Three databases, each with its own block of PINs, one for civil servants, one for teachers and one for police, were created. Security measures were introduced to protect the data, including weekly backups, with a full set of databases and images being kept outside the country.

Public servants across the country were required to complete personal and financial data forms (see Appendix B) and to provide documentary evidence of employment status before

a PIN could be issued. The minimum requirement was a letter of appointment; many of the letters submitted were found to be fictitious and were rejected.

Before the registration process could be completed, a digital photograph had to be taken of the individual. Photographs were captured for government employees using digital cameras and laptops in the field. The software automatically stored a unique PIN along with the name, designation, date of issue, work-unit and work location linked to the image file. Once authorisation was completed, the staff member was given a PIN, included on the payroll and issued with a photographic identification card. By the end of the project, nearly 45,000 digital images of staff on the civil servants', teachers' and police payrolls had been recorded.

As in the past, the poor quality of the records proved to be a stumbling block. A verification team was set up to check the data in the CPMIS against the personnel records in the ESO and/or the MDAs to ensure data integrity. Special attention was to be given to the appointing document, date of birth, first appointment start date, designation and salary grade-scale. However, the checks could not be carried out because of the incompleteness of the records and the difficulties in retrieving them. The forms could have been merged with the personnel files to make them more complete, but due to the high risk of theft they were stored separately, in PIN order, in conditions more secure than for the personnel files.

Teachers' verification was considered crucial. It was managed by a committee within the Department of Education. The exercise, with a 98% completion rate country wide, emphasised designations, grades/scale-points and staff ceilings for schools. All data from the schools was to be verified by the committee before payment could be authorised. However, the Department of Education was unable to produce appointment documents, staff lists, records on teachers or comprehensive registration papers for schools. Authorisation went ahead without verification against personnel records.

The verification project ran between 1999 and 2002. Progress was rapid except when military action intervened. As a result of the exercise, a significant number of people were removed from the payroll, nearly all of them teachers or people beyond retirement age. The teachers' payroll had climbed close to 23,000 in early 1999 during a period of great insecurity when payment audits were impossible. The payroll cleansing figures were:

Total staff removed from the payroll	6181
Teachers removed	c4600
Staff over retirement age removed	c1500
Other staff removed	c81

Exact financial savings were difficult to calculate since some allowances, deductions and salary-grades changed over the period of the project. However, basic salaries were increased, tax-rates were reduced, and additional allowances were introduced, notably a substantial transport allowance for all permanent and pensionable civil servants and teachers. The savings were roughly \$300,000 per month or \$3,600,000 per year and, because of the increases, the NET average addition to the wage bill was 25%. Shortly after the exercise was completed, the Permanent Secretary and several accountants in the Ministry of Education were charged with payroll-fraud, leading to prison sentences.

Despite these impressive achievements, payroll control remained a major issue in Sierra Leone. Controls still were not in place to regulate the employment of teachers, and there were no significant changes in the civil service payroll. The key data required for sustainable financial control still was not available. Between 2002 and 2008, the teachers' payroll nearly doubled. The absence of strong records management controls, resulting in a weak evidence base, was a significant part of the problem.

RECORDS MANAGEMENT IMPROVEMENT PROJECT, 2005 TO 2006

The Requirement for Basic Controls

The war ended in 2002, and the government planned a new set of civil service reforms, including records management improvement. In August 2003, the President noted, in a speech: 'The poor storage and retrieval of information slows down work of the public service and impacts negatively on policy formulation, planning and financial control. The improvement of record keeping is absolutely essential for moving the reform process forward.'

The following year, the World Bank Public Expenditure Review conducted in Sierra Leone confirmed that the condition of financial records was 'deplorable', that auditors had ongoing problems accessing documentation needed to complete audits and that the Anti-Corruption Commission had difficulty retrieving the documents it required. There was a lack of up-to-date socio-economic information on the poverty situation, and the IMF complained of substantial difficulties in tracking financial transactions that were not routed through the Central Bank.

Records management improvements began again in early 2005, with DFID funding, in a post-conflict situation. By this time, the morale of the Civil Service had deteriorated severely, and remuneration was the poorest in Africa; there was little transparency; establishment and financial regulations were not enforced. The aim of the records management improvement programme was to support the national recovery programme, including reducing the size of the Civil Service, strengthening pay and personnel controls, improving services to citizens, facilitating monitoring and moving toward decentralisation.

In 2005, chronic records management problems affected every MDA. Common problems included a lack of procedures for keeping records and very poor physical storage conditions. Most of the files in the record offices were inactive, while many important records were kept in officers rooms where they were largely inaccessible. The breakdown of records systems had been compounded by the fact that many crucial records had been lost during the conflict. In addition, records had been altered, and papers had been deliberately removed from files. Civil servants who were worried about how they would support themselves after retirement were known to remove or change evidence of their date of birth or the date of their appointment to the Civil Service so that they could continue working. Records controls needed to be almost entirely rebuilt.

Many government officials remembered the past good standard of records management and understood the consequences of the loss of control of documentary evidence. They supported records management improvements, but the lack of resources, trained records staff and low morale made rapid change difficult. As had been the case a decade earlier, the Government wanted an integrated national strategy for records management. Officials knew that even as computerised systems were developed, it was essential to tackle the management of paper-based records as part of a holistic approach.

As a starting point, a Records Management Improvement Team was appointed to build the basis for sustainable improvement in records management. With the Team playing a leading role, a records management improvement programme set out to achieve terms of reference that included:

- decongesting and restructuring registries in ministries
- producing retention schedules, good practice guides and training manuals
- drafting a records and archives law
- defining the regulatory and organisational framework for a new Department of Public Records and Archives and developing a scheme of service
- defining the requirements for a national records centre
- strengthening pay and personnel records
- training a local records management improvement team and registry staff.

The outstanding level of commitment and leadership by the Senior Government Archivist and the high calibre of the Records Management Improvement Team made it possible to achieve all of these objectives by mid-2006. In addition, the project built upon models, systems and procedures successfully developed for records management in Ghana, The Gambia, Tanzania and elsewhere. While it would take time to establish control of documentary evidence, the foundation had been laid for an effective records management regime.

Focus on Personnel Records

Although it addressed all of its terms of reference, the Records Management Improvement Project made personnel records its highest priority. The government aimed to introduce a new computerised human resource management system to provide easy access to information needed to support such processes as promotions, postings, training and retirement and to identify payments to non-existent workers. This required reliable, accurate and complete paper-based source documents.

The ESO held personnel files for all permanent staff, but for the most part it did not keep files for non-pensionable staff, who made up the majority of the Civil Service. Even where files were available, personnel information had become ever more difficult to access and virtually impossible to audit or match to the payroll. This situation caused numerous difficulties. It made it virtually impossible to identify ghost workers or workers past statutory retirement age. It undermined efficient personnel administration and planning for long-term staff development as it was difficult to determine skills, staffing requirements and vacancies. The civil service nominal roll was distorted, and civil servants experienced insecurity about claiming their pensions. When the National Social Security and Insurance Trust (NASSIT), a statutory body set up to administer Sierra Leone's National Pension Scheme, needed dates of birth to determine pension benefits, the ESO was expected to provide and sign off on accurate dates of birth, but it could not access the information. As a result, many inaccurate dates were captured in the system, and unfortunately, they were imbedded as component of the Social Security Numbers (SSNs).

The Records Team set about organising personnel files in payroll, or PIN, order, both in the ESO and in MDAs. The aim was to make it easier and faster to verify the payroll, staff lists and social security forms. Organising the files in relation to the payroll also would make it possible to determine the employees for whom no files existed, so that files could be created for all civil servants, including non-established employees.

Records and the Integrated Financial Information Management System (IFMIS)

Despite the substantial efforts in the 1990s to reform financial management, this remained a key area of concern after the war. When the Financial Management and Accounting System (FMAS) was reviewed, the major weaknesses identified included poor functionality and controls, a lack of system documentation, poor response time, a limited ability to generate reports and weak access security. To address these issues, a new Integrated Financial Management Information System (IFMIS), run on FreeBalance software, was launched in 2004 to integrate control of central government, donor and local council funds. It was designed to provide up-to-date and accurate information, tighten internal financial controls, and strengthen accountability and transparency by enabling financial information to be viewed at many points. Ultimately, IFMIS was intended to enable ministries to become paying authorities.

The new system relied on both paper and electronic documentation of about 40 types of financial transactions. It included many checks for information accuracy, but there still were issues with data integrity. The records management systems needed to control the integrity of the input documents were not part of system planning. There were gaps in the information, and the Accountant General's Department was not able to prepare financial statements. By 2005, the Acting Accountant General was taking steps to restore order to the vouchers (the key documentary evidence of financial transactions) by organising secure storerooms to which vouchers scattered throughout the Finance Building were moved. Many documents were missing and the facilities were poor, but now vouchers were batched

by department and by month, for salaries and other charges. The personnel files remained the glaring area of weakness.

In addition, the requirements for managing electronic records generated by or associated with the system had not been defined, although some security measures had been developed. IFMIS back-ups were to be held in the Bank of Sierra Leone, and the digital copies were to be encrypted. However, the full range of international standards needed to introduce and manage levels of responsibility; migration to new systems and metadata requirements (data describing the context, content and structure of records and their management through time) had not been examined.

The IFMIS modules were introduced in stages, with the HR/Payroll Module, known as the Human Capital Accountability Module, going live in April 2006. The plan was that the data entered in the module would be verified against files in the Establishment Secretary's Office. However, once again, the state of the files made it impossible to reconcile pay and personnel information.

A number of separate donor sponsored exercises tried to resolve this by introducing verification exercises in the ESO, AGO, Office of the President and the Decentralisation Secretariat. However, the personnel information could not be verified by the time the payroll was migrated to IFMIS. The old data from FMAS, with all of its gaps and inaccuracies was transferred to the new system. Moreover, the new IFMIS system included a large amount of meaningless default data, for example in the field for date of appointment. The IFMIS team acknowledged that documentary evidence was essential for accountability, that technology was not the primary issue and that records management should have been introduced before IFMIS was developed.

Support from Senior Stakeholders

Government stakeholders became increasingly concerned about difficulties in tracking and reporting changes to personnel establishment lists and about complying with internal and donor/lender audit requirements. In February 2006, senior officials, including the Establishment Secretary, the Accountant General, a senior assistant to the President, the Head of the Public Financial Management Reform Unit and the Capacity Building Manager in the Decentralisation Secretariat, met at the Office of the President to discuss the need to ensure that the payroll could be verified against reliable and trustworthy evidence. They agreed that:

- The national objective of developing effective and accountable management of human resources and personnel costs had been severely undermined by the poor quality and lack of control of the personnel information.
- There were significant implications for the rollout of IFMIS: the information in the Human Capital Accountability Module needed to be verified against reliable data and this had not proved possible.

- There was a need link records management work to the various payroll cleaning exercises underway in each of the key stakeholder areas.
- A comprehensive payroll audit was needed because the number of staff recruited could not be controlled without a record of who was employed on what basis.
- Payroll verification was urgent, not only for the civil service payroll, but for the teachers' payroll, which was significantly larger, and for the police payroll.
- The ESO needed to be able to monitor human resource requirements against accurate information.
- Well managed personnel records had implications for NASSIT, which was trying to get employees, including teachers, registered so that they could receive pension benefits.
- Records management would be critical to development in the districts and the efficient transfer of resources from central to local government.
- Scanning key documents should be considered in the future.
- Technology alone could not provide the controls required to achieve effective management of human resources and payroll.

Subsequently, the Government's Public Financial Management Oversight Committee appointed a Sub-Committee on Payroll and Personnel Records to monitor work on records management, with a target of ensuring that there were personnel records containing key documentation for all staff on the Civil Service payroll by December 2007. Records management was linked to other benchmarks, including a European Union budget support indicator measuring the completeness of personnel files. This gave records management a higher profile in public financial management and in public sector reform than it had had previously.

Building Controls for Personnel Files

As a starting point for restoring order to the personnel files, the Records Team matched the ESO files⁴ to a printout of the Personal Identity (PIN) Database for civil servants that had been developed in the late 1990s and was still maintained. The PIN was recorded on the top right hand corner of each personnel file, and the files were reorganised in PIN order. Manual control systems (indexing and tracking) were introduced, designed in such a way that they could easily be replaced with electronic systems in due course.

The Team soon discovered that over half of the files in the system related to people who were no longer on the payroll (ie, had died, left the service or retired). They closed these

⁴ In theory at least, the ESO kept files for civil servants across government.

files and transferred them to the Interim Records Centre that continued to operate in a Civil Service College building. In October 2005, they reported significant gaps in the file holdings:

ESO Master Files, October 2005		
Names in the Pin Database	15,900	100%
Files for staff on the payroll	6530	41%
Staff on the payroll but with no files	9370	59%
Files for staff no longer on the payroll that were transferred to the records centre	8646	54%

These figures were not surprising given that it had never been the practice in Sierra Leone to create files for unskilled and semi-skilled staff (Grades 1 and 2). Even for the 41% of employees where files did exist, the record was incomplete, as a result of the history of file creation, the loss of records through fire or theft and the lack of control systems for managing records efficiently.

The ESO Records Office was developed as a model for the Civil Service. A drop down counter, new locks and new racking were installed; the walls were painted and the furniture repaired. Staff morale improved immediately, and thereafter staff and users supported the records project warmly. Intensive work was undertaken to organise the files in PIN order and identify the gaps in the holdings.

Once work was underway in the ESO, work began on three additional pilot sites: the Ministry of Agriculture, Forestry and Food Security, the Ministry of Health and Sanitation and the Ministry of Education, Science and Technology. Establishing order was laborious and time consuming. Personnel files at all the pilot sites were very difficult to retrieve, and there was damage from rodents, wear and tear and poor storage. Numerous errors and anomalies were identified, including papers misfiled where people had similar names, duplicate PINs for the same person and dates of birth that had been altered.

File Completion Project

The Records Team achieved its terms of reference for the project against the available funding in May 2006. In November the same year, DFID made additional funding available for a new component of the project that involved developing complete files for every civil servant, one in the ESO and one in the MDA where the individual was employed. The expected benefits were:

- The files would be able to provide evidence for verifying the payroll, the PIN database, the MDA establishment lists and other government datasets.
- Gaps in the data held by the IFMIS HCA Module would be filled and the data verified.
- Key information would be available to support decentralisation or retrenchment.
- Evidence would be available to support national and international audit requirements.

Through painstaking reconstruction and discovery work the Team now developed the most complete possible documentary record of employment for each civil servant. They sought to ensure that as far as possible, every file for every civil servant contained the following five records: 1) Public Service Commission (PSC) application for employment form, 2) letter of appointment, 3) acceptance form, 4) medical examination certificate, 5) copies of diplomas/certificates of qualification. They added a checklist to each file indicating which key documents were available on the file and which documents were yet to be located.

The Team located copies of records missing from the files, document by document, from a number of sources. Many missing records were found in the ESO but not on personnel files. The following sources were exhaustively examined:

- PIN verification forms, to which were attached PSC application forms, letters of appointment and vital data about civil servants
- subject/policy files, which contained records relating to individual appointments, promotions and retirements of junior staff
- DELPHI forms, which also provided appointment information and other vital data
- subject/policy files in MDAs, which contained records about individual appointments, promotions and retirements of junior staff
- Auditor General's records, which contained the auditors' copies of letters regarding individual appointments, promotions and retirements of junior staff (the Accountant General's files proved less fruitful, largely because so many documents were lost when the Treasury was burned down during the war)
- individuals, who were asked to provide key documents relating to their employment history through their line managers.

Multi Donor Budget Support Benchmark on Records Management

At about the same time that records management improvements were launched, the Government had agreed to an annual benchmark measurement for records management as part of a wider set of multi-donor benchmarks for budget support. The benchmark was based on an ideal of good practice, that is, all five key documents of the key appointment documents (see above) would be available for all civil servants and that the Government should achieve, in annual increments, increasingly high targets for standards of completeness of personnel files. The benchmark was measured against a random sample of 10% of ESO files for Ministry of Health and Sanitation employees.

In the first two years that the benchmark measurement was taken the score was low; by 2007, when considerable work had been done on the personnel files in the pilot sites, it was hoped that a higher score could be achieved against a target of 60%. However, the benchmark did not take account of the history of the way records had been created or the

fact that records had been burned or destroyed during the war and afterwards. Complete sets of documents simply did not exist for all staff. Though the score did improve, there was a limit to what was possible. In May 2007, the results of the benchmark measurement for a sample of 611 master files for Ministry of Health and Sanitation staff were as follows:

Test Sample	
empty files	130 files (21.28%)
incomplete files	141 files (23.08%)
complete files	331 files (54.17%)
Could not be located	9 files (1.47%)

This did not represent a pass mark, but it is significant that of the 141 incomplete files, 44 (7%) were only missing the PSC interview form. These files were for staff below Grade 3, who were unlikely to have been interviewed by the PSC. The only legal way of ensuring that these and other staff had interview forms was to absorb them into the permanent establishment through a proper appointment process. However, the Government planned to carry out a retrenchment exercise to reduce the size of the Civil Service, and it was not appropriate to absorb all the unskilled workers without further investigation of their status. These workers now comprised approximately 66% of the payroll. The benchmark was unachievable until these issues could be resolved. In addition, even when all civil servants had been through a legal recruitment process, not all of them would have had formal education that would lead to an educational certificate.

The flaws in the benchmark were not apparent when it was developed, but when they did become evident, it was unfortunate that no action was taken to revise the benchmark. For the Records Team members, who had worked long hard hours and had been remarkably thorough and diligent in achieving the best possible target in the circumstances, failing an unachievable benchmark was demoralising. Even so, they continued their commitment to building records integrity.

Anomalies Database

Work on the personnel files had revealed a wide range and scale of anomalies affecting payroll accuracy and human resource management. Anomalies occurred where records and data were missing from a file, where there were inconsistencies between information on the file and the payroll data, or where there were inconsistencies in the information within the file. There were, for instance, discrepancies in names, dates of birth or other personal information for the same individual, as well as evidence that an individual had retired but was still on the payroll. They also included missing information such as the date of birth, date of first appointment or appointing authority. When it became impossible to manage and analyse the information through text based lists, the Records Team worked with the IFMIS Team and other key stakeholders to develop an electronic tool for managing the information systematically and facilitating payroll verification. An Anomalies Database was created to record and manage the anomalies discovered on personnel files.

Designed using MS Access, the Anomalies Database derived data initially from the IFMIS Human Capital Accountability (HCA) Module. The HCA Module comprised three linked files: the Employee File, the Position File and the Assignment File. AGO staff controlled the Position and Assignment Files, while the ESO managed the Employee File, which contained data on the individual employee. The ESO was responsible for entering approved data for new employees and for making amendments to data relating to existing employees as a result of promotions, transfers, retirements and other changes. To populate the Anomalies Database, the Employee File was migrated to the database, and additional fields were added to facilitate further data gathering and analysis. The database made it possible to investigate anomalies, update the information regularly as anomalies were resolved, manage and analyse the findings systematically and compare them with IFMIS data. The new accurate data then could be approved by the ESO and uploaded back to the Employment File with minimal risk of new discrepancies being created. PIN database photographs also were migrated to the anomalies database.

PILOT CIVIL SERVICE PAYROLL PILOT VERIFICATION PROJECT

Purpose of the Project

By the last quarter of 2007, work on file completeness had reached the point of diminishing returns. The file completion project had achieved its targets within the realm of possibility:

- Master files existed for all civil servants in the ESO. They were as complete as could be achieved from the available documentation and were organised in PIN order, with control systems in place.
- Working files containing copies of personnel documents had been created for all civil servants in the MDAs and were as complete as could be achieved; files were in PIN order and control systems were in place.
- The PIN database had been verified against the payroll to identify anomalies that could be resolved at the end of the verification exercise.

The Government now had addressed the stumbling block that had undermined all previous verification exercises: personnel files with a significant degree of completeness were available for the first time in decades. There was, moreover, a tool to support firm and sustainable evidentiary control. The Records Team then were able to use the database to develop a wholly new anomaly management and resolution methodology to underpin payroll verification.

A pilot verification project was planned to test the effectiveness of the new methodology before applying it to the whole Civil Service and possibly to other payrolls. The objectives were to: 1) verify that each individual on the payroll could be identified and matched against an established post, 2) resolve anomalies as far as possible, 3) confirm information about the each employee's status and pay level, and 4) make the confirmed data available to update the payroll. The exercise also gave civil servants an opportunity to set the record

straight by bringing copies of their employment documents for copying and addition to their personnel files.

The Evidence-Based Approach and Traditional Censuses

The evidence-based verification methodology developed in Sierra Leone differed from traditional censuses. Numerous civil service censuses had been conducted across Africa over the previous 30 years and a number had been undertaken in Sierra Leone. These exercises had sought to produce an accurate count of civil servants as a precondition of supporting reforms aimed at cutting costs, enhancing efficiency and restructuring public sector pay. Described variously as censuses, enumerations, headcounts, staff audits, payroll verifications and payroll reconciliations, they had been conducted using a range of methodologies, with limited success. While sometimes generating short-term savings by eliminating ghost workers and people past retirement age, they often failed to deliver sustainable improvements. Without institutionalised establishment controls and records management controls, ghosts found their way back onto the payroll.

These payroll verification methodologies can be categorised as three main approaches:

- *Physical headcounts* were used to determine the number of staff employed and whether the names on a payroll list belonged to genuine employees. Typically, they involved trained teams travelling to the census area, where individual employees presented themselves, often with identification and sometimes with documentation (such as photocopies of letters of appointment or birth records) and were checked off, usually against the payroll. In some cases, photographs or fingerprints were taken.
- *Questionnaires* tended to be used when more detailed data on human resources was needed for restructuring civil service salaries or for 'baselining' efforts. Typically, questionnaires were distributed to employees or employers, who submitted the information back up the line, taking responsibility for its accuracy. The data then were compiled in a database.
- *Payroll reconciliation* involved matching the payroll to alternative data sources, such as individual personnel files, the nominal roll, the establishment register or other databases. This tended to be the least favoured methodology because of the difficulty of identifying credible alternative data sources.

The Records Team utilised aspects of traditional methodologies, but they went further to build an evidentiary control system, linked to the IFMIS through PINs, as a basis for a new approach for establishing firm evidentiary control and facilitating payroll verification. The methodology that they developed and applied during the pilot payroll verification project is described below.

Developing Data about Completeness of Personnel Information

Once the Anomalies Database was functioning and data was added, it was possible to document the gaps in the holdings precisely and to carry out analyses that provided information about the structure of the civil service.

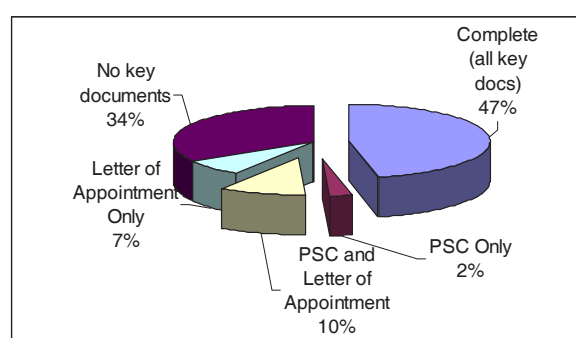
For instance, analysis showed that about a quarter of civil servants' files were only missing one document, most often an education certificate:

Missing only one document	4188
Missing just PSC Application form	25
Missing only letter of first appointment	36
Missing only letter of acceptance	43
Missing only medical certificate	111
Missing only education certificate	3973

Educational records tended to be available for employees at higher grades, but there was no record of education for about three quarters (12,580) of the civil servants. There was no grade available for about 60% of these employees, while about 40% were at Grade 3 or lower (unskilled or semi-skilled staff) and would not have been required to have educational qualifications to do their jobs.

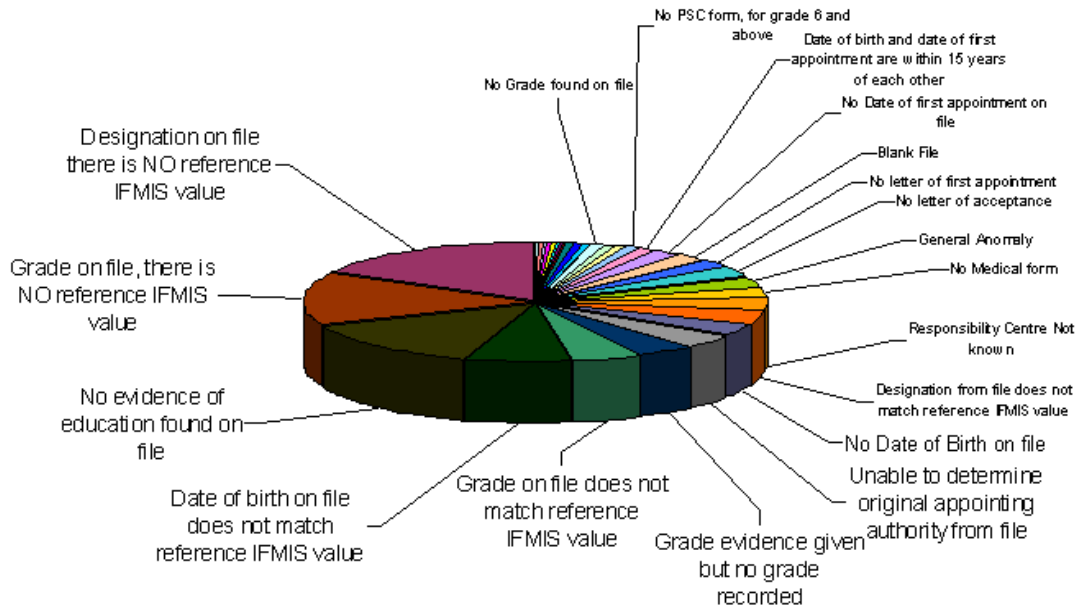
Staff with no record of education on file, by grade		
No grade	7507	60%
Grade 1	3251	26%
Grade 2	852	7%
Grade 3 or higher	969	8%

The analysis also showed that PSC forms had been located for 59% of the civil servants. This indicated both that a significant percentage of the junior staff at Grades 1 and 2 (who represented 66%) of the Civil Service, had been absorbed as permanent and pensionable civil servants.



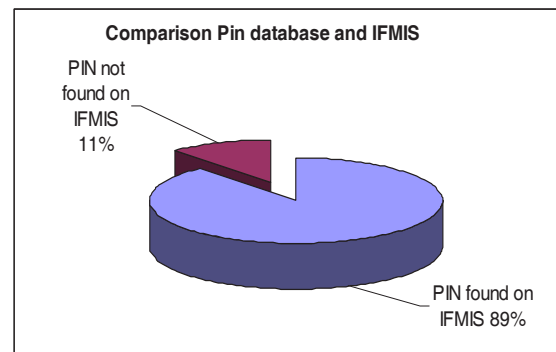
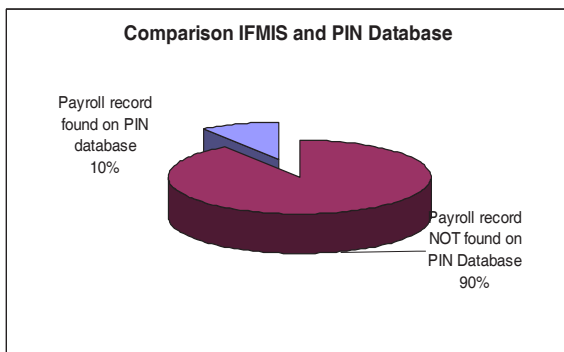
An analysis of the Anomalies Database, following data gathering, showed the categories and percentages of anomalies to be resolved, as follows:

Anomalies by type



Comparing Information between Datasets

The enormous potential for using verified data as a basis for identifying anomalies in different government datasets was explored. When PIN numbers were matched between the IFMIS payroll records and PIN database, about 10% of entries in each source was not found on the other. IFMIS records for which there were no PIN database entries were identified as a set of anomalies that urgently required further investigation.



Where there was a match between the IFMIS and PIN datasets, the surname and grade values for the records were compared. It was discovered that 1809, about one eighth, of the surnames of individuals recorded in the IFMIS differed from the matching entry in the PIN Database. Many mismatches were simply input errors, but there was a need for a careful manual check of each to identify names that needed a more detailed investigation so that a consolidated list of surnames could be provided.

When the grade recorded in the PIN Database at the time of employment was compared to the grade in IFMIS (if a grade existed), in 208 cases the IFMIS grade was actually lower than in the PIN Database. However, the IFMIS had grade information for only 43% of civil

servants, while only half the files contained grade evidence. Clearly, significant work was needed to fill the gaps in information relating to grades. Similarly, when civil service data from establishment lists or gathered during manpower hearings was compared to data from the PIN Database and the anomalies data, there was a very high discrepancy rate. All of these areas required further investigation.

The Records Team also explored possibilities for exchanging data with the National Social Security and Insurance Trust. While NASSIT was not legally able to give out some categories of personal data, it could share information about social security numbers, dates of birth and dates of first appointment. NASSIT officials noted that they would find it very valuable to have reports on anomalies between their data and the Anomalies Database. In particular, the NASSIT Team wanted to be made aware of:

- double registration of names and PIN codes in their system
- errors in PIN codes
- names in their system that did not match names in the payroll
- people with identical names
- inconsistent uses of prefixes, suffixes, middle initials and punctuation in names.

They also recognised an opportunity to work with the Records Team on gathering biometric data. NASSIT was testing biometric technology that would permit unique recognition of individuals and was age-independent, including finger prints and facial checks. NASSIT was confident that this information eventually would support voter registration identification and establishment of a National ID database that would assign social security numbers at birth. This also required further investigation.

Defining the Subset for the Pilot Verification

The pilot verification project involved performing 2000 interviews with a randomly selected subset of civil servants drawn from the Ministry of Health and Sanitation in the Western region of Sierra Leone. The IFMIS data contained a region code that made it possible to create a list of PIN numbers for civil servants in the Western Area. The ESO wanted staff at higher grades to be interviewed, so the 1901 staff at Grade 2 or higher were selected, along with a random sample of Grade 1 staff to make up the 2000 benchmark sub-set. For this subset, 6586 anomalies of various types had been recorded in the Anomalies Database. This worked out at an average of 3.29 anomalies for each civil servant, with a maximum of 13 for any individual. In the course of the exercise, every member of the 2000 person subset was either authenticated through a face-to-face interview against the evidence in the Anomalies Database or, if they failed to attend an interview, identified as a ghost worker.

Discussions with stakeholders now identified an additional benchmark measurement to assess performance for the civil service payroll: resolution of 95% of all anomalies in the agreed subset, or evidence that the resolution process was outside government control, for example, it involved a decision by a court of law or through an appeals process.

Verification Interviews

The Interview Process

Authentication of civil servants was achieved against a number of indicators, most of which required physical attendance at an interview. By attending and successfully completing the interview, employees demonstrated that they were contactable through their place of work and that they were drawing salaries legitimately. The fact that they were willing to be photographed, fingerprinted and interviewed in the presence of impartial observers provided a further level of authentication. At the outset of the exercise, the Establishment Secretary indicated in a letter to all staff in the subset that they were required to attend and that his office would take non attendance very seriously.

In February 2008, the Team split into two to begin interviews at 'responsibility centres'. They visited larger sites as a priority so that the highest possible percentage of staff was interviewed early in the programme, thus allowing time for anomaly resolution and for contacting those who missed appointments. The two teams worked in geographical areas covering roughly the east and west of Freetown. Some larger sites, for instance the major government hospital, required the attendance of both teams over several days. At smaller sites, all staff were interviewed, not just those in the subset, in order to avoid going back to the sites in the future. This added another 188 individuals to the subset. These additional interviews were not, however, counted as part of the subset for benchmarking purposes.

Each team consisted of a team leader/photographer, three interviewers, a driver, and two roving observers allocated from the ESO and the Accountant General's Office. Each team was assigned a vehicle and a full set of equipment including generator, camera, laptops loaded with copies of the Anomalies Database, photocopier and fingerprint equipment. There also were teams based in the ESO and the project headquarters in the Governance Reform Secretariat who helped to coordinate the exercise.

Using IFMIS data, interview lists were produced for each responsibility centre and posted at the sites prior to interview. It soon became apparent that these lists were only 60% accurate, and that many of the staff invited to attend at one location actually were based in another. Indeed one whole location had been closed for refurbishment for at least six months and had no staff. Many staff in the subset were invited to attend at inconvenient locations, and delivering invitations was difficult. Information about changes in locations was fed back to IFMIS to create a more accurate record of staff posting.

On average an interview lasted just over 14 minutes, during which time the interviewer used five approaches to check the employee's details and to determine whether he or she was legitimately working at the location being tested:

- 1 verifying existing data and capturing additional data and supporting documentation, including copies of key documents and NASSIT numbers
- 2 verifying existing photograph and age, where available (85% of the staff had an existing photograph on record in the PIN Database)

- 3 identifying colleagues (interviewees were asked to identify and name staff at the same location and/or with a similar designation)
- 4 naming references (interviewees were asked to name their manager and two other colleagues on the payroll)
- 5 capturing biometrics (fingerprint and photograph).

During the interview process, the Team gathered an unexpectedly large amount of additional information about individual employees that was potentially important but not immediately useable. For example, staff and managers provided information about individuals who attended interview and were on the payroll but were not working or were working for other organisations. Many of the staff who had not been working attended work on the day of the interview, prompting the senior matron at one hospital to say that she had ‘never seen so many nurses in the wards in pristine white uniforms’. When the Team reviewed the payroll list with senior managers at the major sites, the managers noted repeatedly that they knew that staff were not turning up for work. However, after the pay method was changed, from cash payments collected by employees on the work site to bank transfers, there was no longer a simple method of checking who was collecting a salary.

In addition, because only a subset of staff at a given site was to be interviewed, a list of staff scheduled for interviews was posted in a public location several weeks before the interviews. The visibility of the lists and the availability of a private interview with a team member encouraged staff to provide details of individuals known not to be working. Many staff stated that they had never seen the payroll list and had no idea that so many people were supposed to work at a site. They had assumed that staff had left to attend training, were on study-leave or had left the service. There was real passion and enthusiasm for getting the record straight and there was potential for posting the pay list regularly in the future as a way of working toward a self cleaning payroll. It was beyond the scope of the project to act upon this information, but it was collected impartially and passed on to the ESO for action.

When additional information was received that raised doubts about the legitimacy of employees, for example that staff held other jobs, this did not affect their ‘authentication’. They still were the individuals identified on the payroll. The additional intelligence gathered during the interviews was not analysed as part of the pilot exercise, but it was noted in the anomalies database and passed to the ESO for later use.

Ensuring Attendance at Interviews

Given the unreliability of the information provided by IFMIS about responsibility centres, a series of actions was taken to ensure that staff were aware of their interviews and attended them:

- 1 A newspaper article was commissioned to sensitise people to the start of the project and the purpose of the interviews.

- 2 Reminder letters were sent to the individuals' last known responsibility centres.
- 3 A list of staff who had not attended interviews was posted for three weeks in three major sites covering central, western and eastern Freetown. The notice asked friends and colleagues of the staff listed to contact them and let them know that they needed to report for interview.
- 4 Radio announcements were made on five major radio stations alerting people to the location and nature of these lists and making final appeals.
- 5 A further newspaper article was commissioned to alert people to the fact that people had missed interviews and should make every effort to attend.

Verifying Existing Data and Capturing Additional Data

Identifying Colleagues

Every project laptop was pre-loaded staff images drawn from the PIN Database representing over 85% of the payroll. Images were indexed by location, grade and designation. Staff were shown photographs migrated from the PIN Database of people matching their designation, location or grade. Each image of these people was shown with a list of four randomly selected real names of other colleagues with the matching criteria and a random photograph that did match the criteria. Interviewees were asked to try to find and name three or more colleagues that they recognised. Random guessing would give correct identifications of between 25% and 33%; greater than 50% was regarded as a 'pass'. Of those interviewed, 69% were able to identify 50% or more of their colleagues.

One of the advantages of this approach was that each correct choice provided evidence that both the person choosing and the people being identified as colleagues were working at the same location or were at least known at the location. The failure to identify colleagues with whom, according to the payroll listing, they would be working, did not affect authentication, but it was noted, and the information was passed to the ESO.

Verifying Photographs

The photographs that had been migrated to the Anomalies Database from the PIN Database were used to verify the interviewee's identity and also to establish the accuracy of the PIN Database. The interview software presented the stored image so that the interviewers could confirm whether or not it matched the appearance of the interviewee. In addition, if the date of birth was available from the file, the interviewer was asked to check whether there was a reasonable correlation between the age of the person in the photograph and the age of the person being interviewed. Of the 1954 staff interviewed, the interviewers accepted that 1859 people were the same person in their photograph. The remaining 95 were mostly people for whom no photo was available.

Naming References

Every person interviewed was asked to name three people on the payroll as references, ideally the line manager and two colleagues. The interview software searched the entire payroll by partial name and surname matches and showed the designation, and a confirmation photograph where available, thus validating the accuracy of the selection. The statistics were:

people unable to supply any reference	108
people able to supply three or more references	1110

No further analysis of this data was conducted, but it was captured and made available for future analysis.

Collecting Fingerprints

The fingerprint readers used initially had difficulty obtaining results for people with darker, older skin, scarring on fingers, low blood pressure or similar problems that lowered contrast. Interviewers were trained to try each finger until one was found that could be read consistently three times and where all three scans matched. Later, an improved reader was acquired and provided far better results, with an accurate reading the first time in almost every instance. Of the 1954 staff interviewed, 1851 (95%) staff provided fingerprints, the primary reason for failure being the reader's inability to produce an image from any finger.

No further analysis of this data has been conducted, but it was captured and is available for further analysis. It could be used, for instance, to identify attendance at more than one interview.

Capturing Photographs

New photographs were captured during the interviews. Every person interviewed was photographed twice, once holding a paper indicating in large type the PIN number and once without the PIN to provide a 'clean' image for later use. The photographs were taken on stand-alone 3 mega pixel digital cameras and subsequently manually matched to the PINs as recorded in the Anomalies Database. The photographs, together with the database indexing them to PINs, were delivered to the ESO.

Gathering Key Documents

Interviewees were asked to provide copies of key documents missing from their personnel files, and these were photocopied on the spot and returned immediately. The surprising quantity of documentation that people brought to interview was an unexpected benefit of the exercise.

Collecting NASSIT Reference Numbers

Each person attending interview was asked to present his or her NASSIT card to provide evidence of enrolment in the NASSIT pension scheme. The Social Security Number was captured at interview, but 490 members of staff, nearly 25% of the subset, were not able to present an SSN number, which reflected the fact that a significant number of employees had not registered for the scheme. The list of captured SSN numbers was delivered to the Establishment Secretary's Office.

Closing Anomalies

The key measure of the success of the records-based verification approach was the closure of anomalies. During the interviews, every anomaly recorded for every civil servant was discussed; recommendations for resolution were captured in the Anomalies Database and reviewed later by a team member not involved in the interview against the evidence on the personnel file. If the documentary evidence clearly confirmed an error in the IFMIS data, the change was approved by the ESO, and the data uploaded to IFMIS.

Some anomalies related to differences between different records on the same file (for example, inconsistencies in the spelling of a name), and some of these needed further investigation. Certain types of resolved anomalies, for instance, verified dates of birth or first appointment, could be uploaded to IFMIS en-masse rather than individually. In the cases of the 234 civil servants who did not attend interviews, the anomalies were closed when the individual was suspended from the payroll. The personnel file then was closed and sent to the Records Centre.

During the pilot project, the files were repeatedly checked and updated as new information was received and anomalies were closed. In many cases, this activity resulted in the creation or discovery of additional anomalies. For example, in some cases, documents provided during the interviews contradicted existing documents held on file. Wherever possible, these 'new' anomalies were addressed and closed, but they were not recorded in the benchmark closure results, which measured the closure of the original set of anomalies. 'Blank files', containing no documents, were recorded in a separate category. If one or more of the missing documents was found or presented during the interview, then this anomaly was closed. Anomalies then were created for the key documents still missing.

At the end of the pilot stage, every file in the subset was reviewed, and the anomalies, interview recommendations and new information that had been received were assessed. A worksheet was prepared giving the final set of verified information for each individual. The approved worksheet, along with the sheets detailing interview actions and initial anomalies, were filed as a verifiable record of the anomaly resolution and data capture.

The breakdown of staff members for whom some, all or no anomalies were closed is as follows:

	All staff	%	Authenticated	%
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			(attended interviews)	
total	2000		1766	
all anomalies closed	1860	93.00%	1679	95.07%
some anomalies closed	49	2.45%	33	1.87%
no anomalies closed	32	1.60%	4	0.40%
staff with no anomalies	59	2.95%	47	2.66%

It was significant that of the 2000 person subset, only 47 people had no anomalies. For 97% of the authenticated staff, some or all of the anomalies were closed. Of the original 6586 anomalies in the subset, 6473 (98%) were closed.

initial number of anomalies	6586
anomalies closed at interview	4704
anomalies closed by methods other than interview	1769
final number of closed anomalies	6473 (98%)

Outcomes

At the end of the exercise, essential management information had been captured and verified for each person left on the payroll. After the interviews were completed, a list of the staff who did not attend was compiled and reviewed by the ESO as well as by the Ministry of Health and Sanitation. Interviews were completed for 1766 staff from the subset; the remaining 234 (11%) did not attend interviews and were suspended on 10 May 2008 by order of the Establishment Secretary. A very small number of the staff recommended for suspension had legitimate grounds for appeal; the ESO assessed each case for re-instatement and made a recommendation of appropriate action to the Accountant General. Mandating staff to attend interviews and removing staff who did not attend was a politically sensitive issue and was evidence of the robust level of senior level support for the project.

The initial impact of the pilot exercise was to reduce the total payroll by approximately \$18,600 a month. In addition, the availability of new or corrected dates of birth resulted in a list of 100 staff members (5% of the payroll) who were past retirement age. The list was forwarded to the ESO, and if all of these staff were retired, there would be additional savings of over \$8000 per month when the retirement was processed. If these savings were replicated across the entire Civil Service, there was a potential for an annual savings in the region of \$2.6 million.

These direct savings were a measurable headline figure for the impact of the exercise. The availability of good quality hard copy personnel records, along with the capture and verification of the key details in the anomalies database, were expected to enable a range of longer-term benefits, including the ability to:

- manage the payroll effectively from a basis of reliable documentary evidence
- measure and predict the cost of retirements

- coordinate retirement with NASSIT
- plan and manage a retrenchment /restructuring programme strategically.

Areas for Further Analysis

Management Information Suggesting Irregularities

When the entire Civil Service has been verified, and individuals who have not attended interviews or are past retirement age have been suspended from the payroll, there still will be significant potential for tightening control of employment and payroll data by using the information in the Anomalies Database to investigate cases where there is doubt about the employee's work status. A substantial amount of additional information requiring further investigation will have been gathered and reported to the ESO. It is likely that more individuals on the payroll who are not actually working should be suspended from the payroll. Follow-up investigations could include individuals who:

- 1 failed to identify photographs of colleagues with whom, according to the payroll, they should be working, particularly people failing to identify 50% of colleagues
- 2 failed to name three people on the payroll as references
- 3 were reported by managers or colleagues as not working or working elsewhere
- 4 have no information on their files
- 5 attended more than one interview on the basis of an analysis of fingerprints.

Data Comparisons

There still is enormous potential for using data comparisons to strengthen government control systems. For instance, verified data could be used to:

- 1 investigate cases in which the grade recorded at the time of employment is lower in the IFMIS than the grade captured in the PIN Database and identify individuals whose grade needs to be clarified
- 2 identify anomalies in manpower hearing data and establishment lists
- 3 strengthen the NASSIT database, for instance by developing lists of anomalies in dates of birth used by NASSIT and of individuals without SSNs.

LESSONS LEARNT

Summary of Issues Arising from the Verification Exercises

Sierra Leone's sound and innovative approach to tackling records management problems as part of the process of conducting payroll verification exercises and of introducing controls can provide valuable lessons for other countries facing the same generic issues.

- 1 Technology is only part of the solution to establishing control of employment and payroll information; developing and managing complete and reliable personnel records is an essential aspect to payroll control.
- 2 Personnel records must be managed effectively if they are to provide a reliable data source for computerised pay and personnel systems; inputs from records professionals are vital if the evidence in computerised systems is to be reliable.
- 3 Without routine records management controls, ghost workers will find their way back on the payroll no matter how good the verification methodology.
- 4 Records management controls should be introduced before computerised systems are introduced. To ignore this requirement leads to a waste of time and money as efforts to establish control produce less than optimum results or have to be repeated.
- 5 The requirements for managing electronic records generated by or associated with computerised systems must be defined as part of the systems development planning process and should take account of international records management standards.
- 6 Records procedures must be designed and integrated with business processes connected with pay and personnel management to ensure that the evidence of employment is up to date.
- 7 The design of verification methodologies and IT systems must include an analysis of data sources, business processes and the viability of records management systems.
- 8 The hr/payroll module of an IFMIS needs to be continually monitored and updated to insure that data fields critical to functionality (particularly for the dates of birth or grade data) are populated with complete and accurate data derived from reliable data sources.
- 9 Computer technology can be harnessed to manage and enhance file completion exercises and to establish a direct link between paper-based and electronic pay and personnel information.
- 10 It is essential that there should be high-level ownership of the goal of establishing accurate documentary evidence for employment and payroll management. Key stakeholders should be involved in the design and oversight of programmes for managing records as evidence

- 11 Local records staff must be thoroughly committed to and feel ownership of records management improvement programmes; they must be recognised for their essential contribution to data integrity.
- 12 Ways should be found for local managers and employees to take ownership of the accuracy of payroll information; their input can make a vital contribution toward fostering a self-cleansing payroll.
- 13 Donor benchmarks in relation to pay and personnel information must be realistic in relation to records management realities, past and present; donors need to take action if it is discovered that a benchmark is not achievable.
- 14 Allowing non-records professionals to make 'improvements' to records systems creates more problems than it solves.

Overview of the Verification Methodology

Sierra Leone's successful methodology for establishing control of employment and payroll information can be summarised as follows:

Phase One: File Completion

- 1 Prepare personnel file for every staff member on the payroll, record the payroll number (Personal Identity Number or PIN) on the file cover and arrange files in PIN order.
- 2 Conduct exhaustive search for missing files.
- 3 Train and equip records management staff.
- 4 Remove files for employees who have left the Civil Service for any reason to inactive storage
- 5 Define the key documents that should be available on every file, and add a check list to the record to record the availability of these key records.
- 6 Introduce indexing and file tracking control systems.
- 7 Refurbish records offices, including, repairing furniture, constructing counters to restrict access, strengthening locks and security, installing metal racks.

Phase Two: Data Verification

- 1 Using worksheets or locating computers in records office for direct data entry, capture essential details of each file into an anomalies database.
- 2 Record on worksheets the existence of missing documents and of anomalies discovered in relation to the documents.
- 3 Use personnel files and anomalies list as basis for staff verification interviews, addressing each anomaly:
 - ◇ Verify existing data, capture additional data and make copies of supporting documentation provided by employees.
 - ◇ Where possible, verify existing photograph and age against the PIN Database.
 - ◇ Identify colleagues: ask interviewees to identify and name staff with similar location and/or designation.
 - ◇ Name the manager and two other colleagues on the payroll.
 - ◇ Capture biometrics (fingerprint and photograph).
- 6 Make copies of documents provided at interview and add to personnel files; capture additional management information, collate and verify results.
- 7 Make recommendations to the appropriate department to resolve anomalies.
- 8 Update personnel file and payroll details to resolve anomalies, closing the anomaly once the file and payroll records are updated.

Computer Payroll Data Fields, 1994

Personal Details

title
surname
first name/second name
sex
marital status
maiden name
address
date of birth
start date with government
date of birth
start date with government
date confirmed
bank name
branch
account number
account name

Position Details

department
payroll
division
location
employment category
taxable (yes/no)
salary scale
level
step
increment date
job description
allowances – code/value
deductions – code/value

Main Registration Form, Civil Service Verification Data Sheet

1. First/Other Name(s):

2. Title/Surname:

3. Designation:

Please write only your present substantive designation which must be indicated on your letter of appointment attached and not your acting

4. Employment Status: (select one)

Permanent & Pensionable Class II Pensionable Work

Service Employee

Temporary Daily Waged

Contract

Others (state)...

PIN Code: (For Official Use Only)

6. Date of Birth:

19....

7. Gender

Male

Female

8. Marital Status

Married

Single

date month year Select one Select one

9. Residential Address:

10. Residential Phone No: 11. Work Place Phone No:

12. Next Of Kin:

13. Date of First Appointment:

19...

14. Date of Present Appointment: 19...

date month year date month year

15. Date of letter present Appointment:

19...

16. Department

No.:

17. Programme

No.

date month year

18. Status in the Service: In Post Vacation leave Terminal Leave Interdiction Study Leave with Pay

16

Study Leave without Pay No Pay Leave Temporary transfer (On Assignment)

Sick Leave Indefinite Leave

Commenced Date..... Expiry Date.....

Signature of Applicant

Date

Signature of Unit Head

(Supervisor of the Duty

Station)

Date

Name of Unit (Duty

Station)

Address of Unit

Signature of Vote

Controller
Date

Must be completed by the Accounts Office

Computer Number Basic Monthly Salary

Salary

Level:

Spinal

Point:

Allowances (per month)

Medical Allowance:

Transport Allowance:

Rent Allowance:

Full Acting Allowance: *

Special Acting Allowance: *

E.S.O. Letter Reference and

Date

Responsibility Allowance: *

E.S.O. Letter Reference and

Date

Domestic Allowance: *

E.S.O. Letter Reference and

Date

Remote Area Allowance:

E.S.O. Letter Reference and

Date

* Please note that the above allowances can only be paid if there is a supporting document from ESO

Deductions (per month)

Widow & Orphans Deduction:

Income Tax Deduction:

Union Dues Deduction:

Advance Repaid Deduction:

1/2 Pay Deduction:

Light Deduction:

Telephone Deduction:

Rent Deduction:

Financial Details Entered by Date

Database Entry by Date

Verification / Clearance by Date

Card Produced by Date

Closure of Anomalies by Type

The following is a breakdown of the status of the anomalies from the subset by the type of anomaly. 'Closed' refers to an anomaly that was resolved or that was beyond government control.

Key Documentation Anomalies				
Type Code	Description	Initial Count	Remaining	% closed
1	No letter of first appointment	156	5	97%
2	No letter of acceptance	174	23	86%
3	No PSC form	66	11	83%
4	No medical form	225	0	100%
9	No evidence of education found on file	905	0	100%
99	Blank File	149	33	98%
Anomalies Affecting Key Payroll Dates				
Type Code	Description	Initial Count	Remaining	% closed
5	No date of birth on file	233	17	92%
6	No date of first appointment on file	142	12	91%
7	Date of birth and date of first appointment are within 15 years of each other	75	1	98%
11	Date of birth greater than retirement age	17	0	100%
44	Evidence on file that person should be retired (date of birth inspection stage)	14	0	100%
Minor Administrative Anomalies				
Type Code	Description	Initial Count	Remaining	% closed
16	Responsibility centre not known	225	0	100%
8	Unable to determine original appointing authority from file	248	0	100%
10	PIN Number not in original IFMIS July reference.	16	0	100%
Procedural Anomalies Generated Within the Project (always closed by checking and review)				
Type Code	Description	Initial Count	Remaining	% closed
12	Date of the evidence for grade was before the date of first appointment	36	0	100%
13	Date of the evidence for acceptance letter was before the date of first appointment	57	0	100%
14	Date of the evidence for designation was before the date of first appointment	36	0	100%
24	Invalid date of birth (>100 years old) taken from worksheet	7	0	100%

Type Code	Description	Initial Count	Remaining	% closed
25	Invalid date of birth (<15 years old) taken from worksheet	15	0	100%
26	Grade evidence, date given but description missing	6	0	100%
27	Grade given but no evidence details recorded	37	0	100%
28	Grade evidence given but no grade recorded	265	0	100%
30	Designation evidence, date given but description missing	7	0	100%
31	Designation given but no evidence details recorded	24	0	100%
32	Letter of promotion date given but no description entered	6	0	100%
33	Pension letter date given but no description entered	2	0	100%

Anomalies between File and Reference IFMIS Payroll

Reference Payroll was July 07 - closed by bulk upload of checked Grade, Designation, DoB and DoFA to IFMIS

Type Code	Description	Initial Count	Remaining	% closed
17	Designation from file does not match reference IFMIS value	232	0	100%
18	Designation available on file, there is no reference IFMIS value	1109	0	100%
19	Grade on file does not match reference IFMIS value	333	0	100%
20	Grade available on file, there is no reference IFMIS value	956	0	100%
21	Date of birth on file does not match reference IFMIS value	492	0	100%
22	Date of birth file, no IFMIS reference value or default reference value	59	0	100%
23	Date of birth on file gives day and month information for 'default' IFMIS value	8	0	100%
42	Name on file differs from reference IFMIS value	17	0	100%
98	Invalid PIN number	13	0	100%
29	No grade found on file	49	0	100%

Other Anomalies

Type Code	Description	Initial Count	Remaining	% closed
0	Manual anomaly, a manually detected and entered anomaly not classified elsewhere	175	5	97%

Totals

		Total anomalies	Total remaining	% closed
		6586	113	98.3%

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