MODERNISATION PROGRAMME

BLUEPRINT

REGISTRY/E-FILING WORKSTREAM

DOTP 0908008 (E-file)

1 October 2009

Ref. no.: M.P. 4/2

INDEX

1. INTRODUCTION

1.1 Mandate

The mandate and purpose of this workstream was to draft and develop a blueprint to:

- optimise existing filing systems and introduce a uniform e-filing system as practice in the PGWC
- address duplication, legal compliance and accessibility, and
- safeguard institutional memory and information.

1.2 The business case

Electronic filing is a big issue in the Governments today. The Public CIO survey ranked electronic content and document management as the number one technology priority for 2009 (Gov-Log website).

The problem with managing paper and electronic documents has been a complex issue in the SA public sector for years and has grown considerably and even more complex today. Between the Government's historical archives and the myriad of forms used to transact business, paper management is still a major challenge. The Government is barely able to keep up with how it manages all the information it creates and captures.

According to research conducted by the Gartner Group, the implementation of a digital document management solution can reduce overall document-related costs by 40% in general.

The purpose of e-filing or electronic document management is to use ICTs that leverage enterprise-content management technologies to reduce implementation cost while simultaneously shrinking workflow (document management) and labour costs.

Electronic document management traditionally revolves around the management of paper documents which are converted to digital images through a process known as imaging. An extension of this is the requirement to route these electronic images around a business and thereby automating existing business processes, replacing the physical paper and reducing storage space, usually still housed in expensive office space.

With an increase in costs and in the demand for office space, the use of current office areas as registry areas is simply unacceptable. The growth of paper documents continues unabated and it is estimated that the amount of documents within government departments will double within the next 10 years. This will provide a major challenge for the departments and best practise would be to manage this growth through an electronic document management or e-filing solution, which will save on the cost for additional space.

The explosion of unstructured information continues. It is estimated that only 20% of data is structured, while the majority (80%) is unstructured. Examples of unstructured content (data) are paper records that were digitised (scanned), faxes, electronic documents (MS Word, MS Excel, MS PowerPoint, etc.), web pages, e-mails, images, videos, etc.

Up to 40% of time goes into looking for information and this results in 70% of the content being recreated. The challenge is to manage unstructured data in such a manner that it becomes an information asset. In order to achieve this, it became clear that all departments would need a new generation of tools to process and to extract value from this information.

The major staff-productivity impact is that files will not go missing and documents will be available instantly. Any document can be found and used simultaneously. The need for duplicate files will be reduced and will lead to a saving in photocopying costs. It would also have a positive impact on the environment by reducing paper use. Further benefits relate to having a full audit history of all documents which includes fail-safe and back-up features.

Primary amongst these benefits is the ability to provide immediate responses to customer enquiries. This is done through accessing documentation at the service workstation. Time delays for file retrievals are reduced or eliminated.

The Department of Transport and Public Works realised the advantage of document management in 2002 when they embarked on a project to scan and track the movement of physical files (e-Filing) within the department via an electronic barcode scanning system (the File Tracking Project). The **Department of Social Development** also adopted an e-Filing solution. The **Department of Health** is the latest to embark on the implementation of an e-Filing solution and the **Western Cape Education Department** is following suite.

Although there is an electronic document management solution currently in use in the PGWC, it is not running optimally in some of the departments where it was implemented, whilst in others it has made tremendous in-roads. It is also not running across all the departments in the province in a standardised and integrated approach, where economies of scale is taken advantage of and duplication is reduced or eliminated. The architecture implemented needs to be reviewed and refined. The network itself is being reviewed to cater for greater bandwidth.

In order to address the above, a provincial **Enterprise-Content Management Forum (ECMF)** was established by the Ce-I to address enterprise-content management, which includes document management, archiving of e-mail and the like. This forum will now act as the provincial steering committee for the implementation of e-Filing or e-Registry across the PGWC. The ECMF already comprises of representatives from all provincial departments and other key role players.

A tangible return on investment (ROI) can be measured in bottom-line currency savings by determining metrics of current practices as a baseline, setting goals, and measuring against those goals.

Paper processes can cost as much as 24 times the electronic route and this is done by measuring how long it takes to process paper today, setting a clear savings objective, and measuring again after automation.

Dramatic time-savings and increased service to constituents can also be achieved. Measuring intangible return by tying content-management deployments to a specific initiative that has metrics of success, for example, being able to deliver a document to a constituent in three to five seconds instead of three to fives days will yield measurable improved service to the constituents.

Bottom line
The ROI on ECM, and this case the e-Filing initiative, is reduced costs, increased time savings and improved service delivery.

1.3 The scope of the workstream

The scope was limited to a detailed plan, with costing, for the implementation of e-Filing in the Province.

It also includes measures to institutionalise use.

2. METHODOLOGY

2.1 Project management

A project management approach linked to the TOR for e-Filing was used to develop the blueprint where milestones were measured and deliverable quality assured.

2.2 Project documentation and distribution

A project management documentation linked to the TOR for e-Filing as reflected below:

Version #:	**Date:**
Final draft	1/10/2010

REVISION HISTORY

Draft	**Date**	**Summary of Changes**	**Author**
Draft 1	31/7/2009	Draft framework and first draft finalised	A. de Freitas
Draft 2	15/9/2009	2nd draft finalised	A. de Freitas
Draft 3	20/9/2009	3rd draft finalised	A. de Freitas
Final draft	1/10/2009	Final draft	A. de Freitas

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Programme Office	Modernisation Programme Co-ordination	NA
CTM	Ce-I Management	NA
ECM Forum	Stakeholder forum	NA
CITCOM	Stakeholder forum	NA

2.3 Project structure

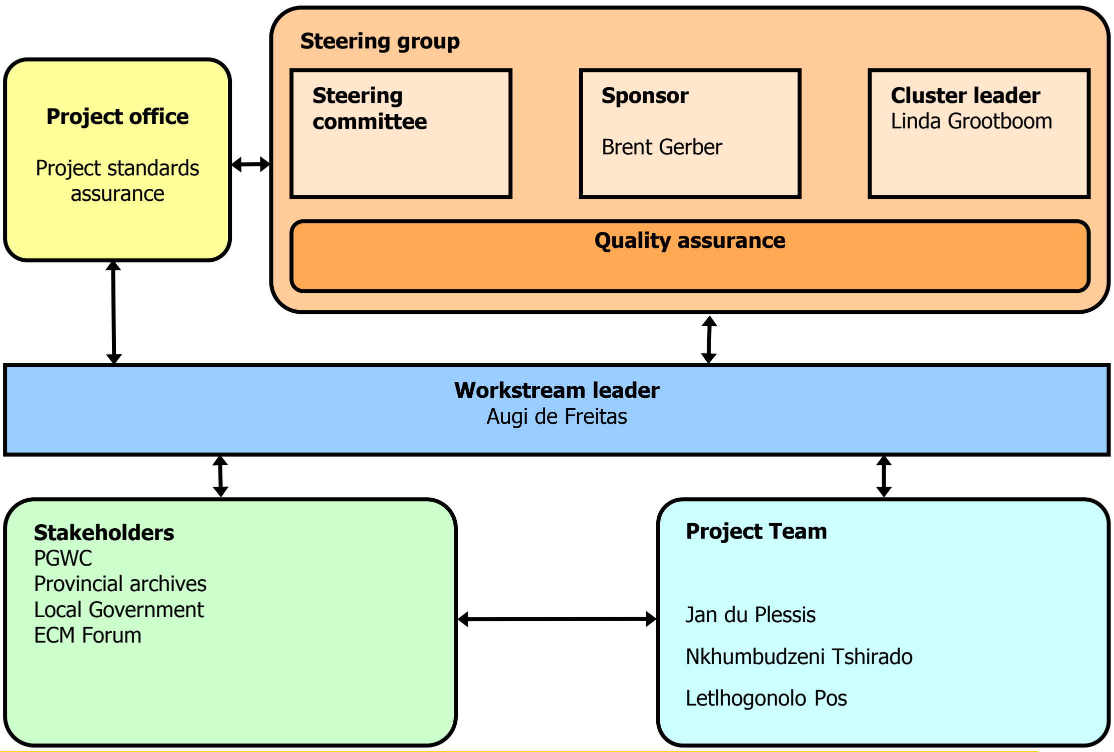
The following is a summary of the project structure:

PROJECT STRUCTURE	
PROGRAMME NAME	Modernisation of the PGWC
CLUSTER AREA NAME	E-governance
PROJECT NAME	E-filing (e-registry, e-documentation)
CLUSTER LEADER	Linda Grootboom, DDG
WORKSTREAM LEADER	Augi de Freitas, CD: GMS
PROJECT TEAM	Department of Transport and Public Works: Jan du Plessis Department of Cultural Affairs and Sport: Nkhumbudzeni Tshirado Cameron Pos Centre for e-Innovation: Augi de Freitas Emelda de Bruyn Egsaan Samaai

CO-OPTED PROJECT TEAM MEMBERS	Hilton Arendse (CeI) Dr Andrew Kok (Department of Social Development) Craig Knight (Health Department of Health) Sanjith Hansraj (Western Cape Education Department)
R&D PARTNERS	GARTNER DataCentrix/Sintrix SITA
PROJECT START DATE	13 July 2009
PROJECT COMPLETION DATE	30 October 2009

2.4 Project-management structure

The project-management structure used for the workstream has been defined and it is recommended that a similar approach be used for the implementation of the proposals emanating from the blueprint:



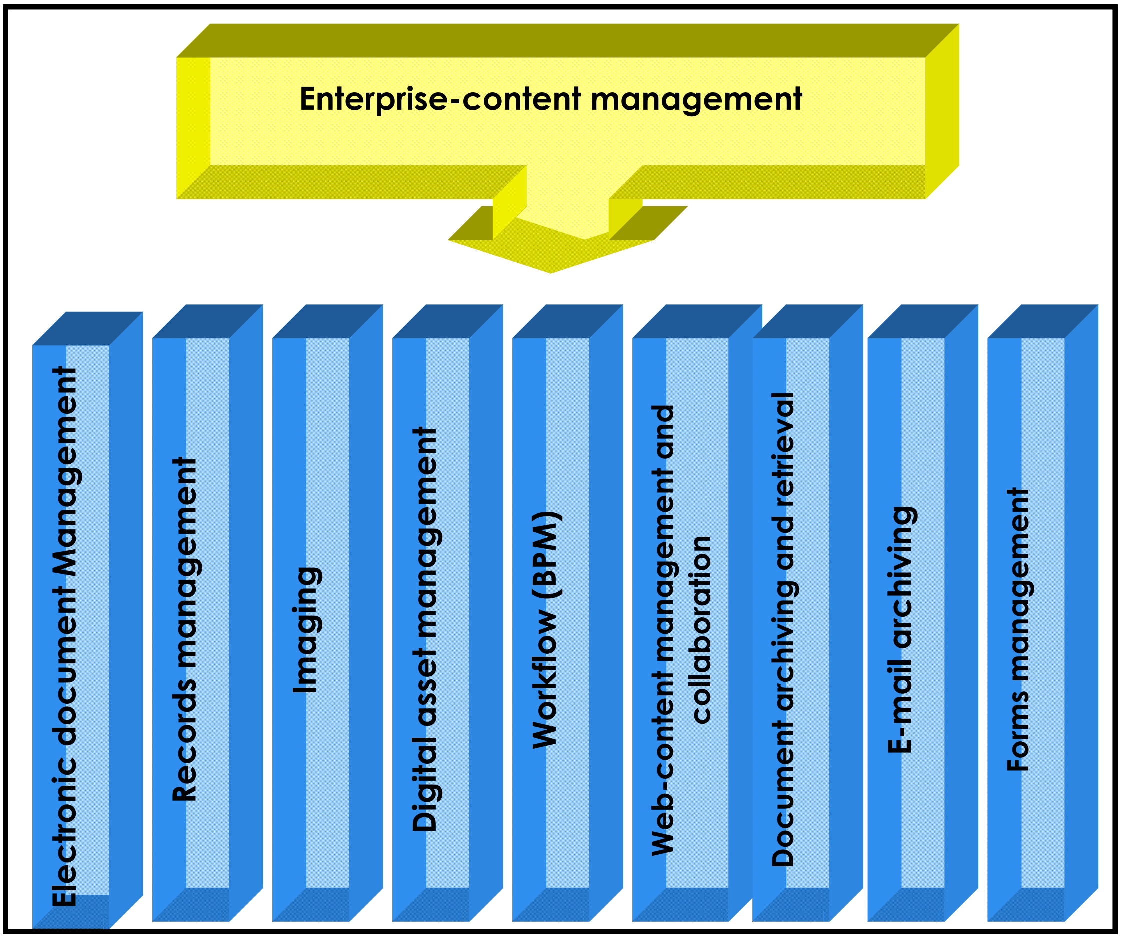
Project Management Principles and a Project Management Methodology must be adopted with the implementation of all projects related to e-Filing and e-Documentation.

2.5 Extensive research and consultation

Extensive research, consultation and engagement with local and international experts and organisations were required and carried out at technical, conceptual, architectural and business levels.

2.6 Enterprise content-management model

The typical enterprise content-management structure usually comprises the following components and was therefore also used in the approach to the development of the e-Filing blueprint:



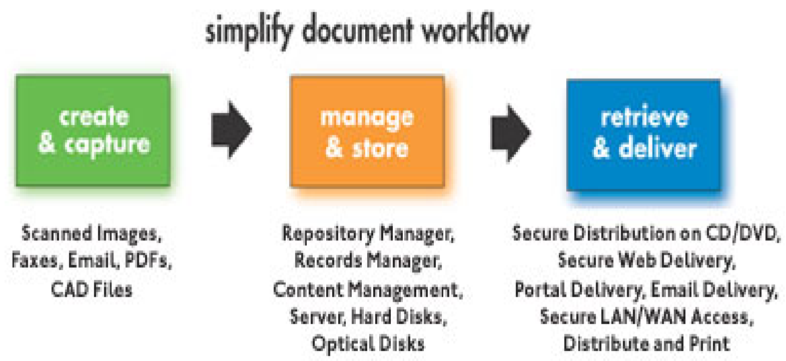
2.7 Expected outcomes

The expected outcomes of the project are proposals addressing the following key areas relating to e-Filing in the PGWC:

- A centralised and standardised e-Filing proposal for the Province.
- A plan to consolidate the current e-Filing solutions (TPW, DSD, DoH).
- A plan to pilot e-Filing in DotP.
- A plan to roll out e-Filing throughout the province, particularly in the departments with no e-Filing solution.
- The network-impact assessment report – for a centralised e-Filing solution.
- The hardware and licensing requirements.
- The cost for roll-out across the province, most likely over a period of 12-48 months.
- Measures to institutionalise usage.
- Proposed archives-approved file plans for the PGWC, including the disposal of records.
- Proposed records-management structure (with a focus on e-Filing).

2.8 Objective of ECM

Once implemented, e-Filing can simplify document workflow and increase the efficiency and cost-effectiveness of document management, as reflected below:



2.9 Risk management

All projects that arise out of this Modernisation Process will be supported by a Risk Mitigation Plan. Furthermore, an iterative and phased approach will be used to roll out the implementation of the projects.

ICT change-management processes will be applied to ensure that standardised methods and procedures are used for efficient and prompt handling of all changes, in order to minimise the impact of change-related incidents upon service quality and consequently to improve the day-to-day operations of the organisation.

3. KEY FINDINGS

3.1 General

The records management situation, managing physical and electronic records, has been a challenge for many years, particularly in organisations that experienced frequent organisational changes such as the PGWC.

In general the situation is not much better globally and the following sentiment is a reflection thereof:

> *"Are we heading for the **Digital Dark Age**?"*
>
> *"Institutions are grappling with ensuring **the longevity** of digital art, electronic court files, online journals, music, photographs, e-mails, etc."*
>
> *"**Doomsday book**: While scholars can still read the 1086 tome, the digital version needs customised software and hardware that are breaking from old age…"*
>
> ***"NASA's early space records can't be read as magnetic tapes from 1976 Viking landings on Mars.*** *Programmers have died or left NASA. Experts are calling for the application of universal standards in programming to overcome the problems."*

Recently the worldwide challenging economic environment has also focused the attention of the general public, as well as of business and industry, on government, and its role in stimulating economic recovery and renewal.

The strategic value of ICTs is also evidenced by the following:

Millennium Development Goals (MDGs): Target 18 refers to the making available of the benefits of new technologies, especially information and communications, which focuses on the contribution ICTs can make to meet basic development needs and the enabling role of ICTs in the development process.

New Partnership for Africa Development (NEPAD): Reference is made to the narrowing of the digital divide. There are also references to the Information Society and the use of ICTs to facilitate progress towards the MDGs. The NEPAD ICT Infrastructure Programme aims to connect all African countries to one another and, in turn, to the rest of the world through broadband fibre-optic submarine cables.

Information Society and Development (ISAD) **Imperatives** which focus on attaining a knowledge-based society, as well as building and further developing a public service network, and ensuring public access to government services and information.

Based on recent market research, Gartner identified seven key interventions for the IT infrastructure and operations environment, one being the **virtualisation and consolidation area** which is a key element in electronic filing or electronic registry and electronic documentation and the management thereof.

In essence there is a clear industry trend that a key area of focus in any modernisation project of an organisation must be e-filing/e-documentation. In other words: **Move physical records to an electronic platform and ensure that there is a structure for the management of both physical and electronic records**. Records are a key asset and are also a critical component of the corporate memory of an organisation.

Bottom line
Records are a strategic asset and ICT solutions enable the better management of physical records by converting it into electronic records and making it possible for the records to be available to anyone in any way without the risk of the physical record being lost in transit.

3.2 Records management

Information-retention management remains a high priority for many organisations and although a few have made major progress, there is still a lot of work to do when it comes to information management.

Records management (RM) technologies enable organisations to enforce the policies and rules for the retention and disposition of content required for documenting business activities and to automate their retention policies. These technologies, implemented with well-formulated and consistently enforced RM strategies and policies, form an essential part of the organisation-wide life-cycle management of records. Many organisations have adopted, or are considering adopting, RM technologies because of the collective impact of worldwide legislation passed since 2002.

Because records management is a term that has specific connotations from the world of managing paper, as well as a market definition for a specific kind of software used, the more generic and accurate term is really information-retention management. This term is media independent (paper and any form of dynamic or static electronic storage) and encompasses all types of data and content.

3.3 The need for an information-retention policy and information-retention management

Unmanaged content and the uncontrolled growth of storage constitute unnecessary risks and costs for a business. All organisations have more data than they think they need, they do not know where or what all of it is and without incentives to do otherwise, users will continue to save everything they create.

Ultimately it is the responsibility of the legal officers of organisations to decide from a legal perspective what to retain and what to dispose of. Any retention rules that are put in place must be reviewed and approved by your legal department. However, legal departments are frequently unwilling to step up to this responsibility. Advising business users and IT departments to "save everything" does not constitute a sustainable strategy, nor does the blanket statement to "dispose of as much as possible."

If IT and legal services reach an impasse, then engaging outside experts to help and to advise becomes necessary. Operations managers and business users also bear the responsibility for deciding what needs to be kept for business-continuity reasons. It is impractical to ask business users to "clean house" manually. They should be able to specify the policies they want to implement and IT should be responsible for automating the policies that systematically archive or delete old, redundant and useless data.

In the case of the PGWC, the responsibility of information-retention management policies is that of the "records manager" as approved by NARS.

3.4 Enforcement of archiving and deletion efforts

Decreasing mailbox sizes and charging for storage are two ways to encourage users to make business decisions about content that really does or does not have value. The problem with unlimited storage is that it comes out of the IT budget and is therefore "free" for business units. Anything you can do to make business units pay, really pay, for the storage they consume, will go a long way towards solving the problem of each department's demand to keep everything.

IT is under constant pressure to optimise operations. Business rules dictate what to keep, what to dispose of and what to move to cheaper storage for long-term retention. These are the important considerations for IT and business users to agree on and develop to build a framework which can be implemented by IT to meet its own operational goals.

3.5 Best practices for managing information on hard drives and shared-file systems

Gartner does not recommend the policing of individual hard drives. Anything that constitutes a business record must be kept in an information system that is accessible to legal and compliance officers, finance and IT departments. It must be protected from tampering and tagged with retention information.

Therefore, we start from the premise that anything on a local hard drive is not a business record. We do have a handful of clients who have locked-down hard drives on individual PCs. We do not recommend that as a policy, as it will interfere too much with people getting their work done. We do not recommend that you try to control what users keep on their hard drives (with the exception of local e-mail files) with a host of retention policies. Unless you block all means of writing local files, including the use of a memory stick or other outside storage device, you will simply cause even greater accessibility problems as users will avail themselves of third party online storage or removable storage devices that they own and control.

Best practice is to have policies that guide users and inform them of their rights and responsibilities regarding their own machines as well as periodic audits. However, content stored on hard drives is still discoverable and can be accessed either openly or by stealth using forensic software.

If you suspect inappropriate conduct, such as fraud, by individual users, it is possible to investigate and even collect anything that is on a network-connected machine with the appropriate legal advice. When it comes to shared systems such as e-mail servers and storage, file shares, document-management systems, transactional systems and databases, the rules are different.

Users should be encouraged to set policies or to co-operate in their formulation. IT should then enforce those policies with as much automation as possible. There should be hard and fast limits on how long files can be kept on shared drives before they are moved into a records repository or an archive. All files should have retention information attached to them, either implicitly or explicitly, via document templates, or automatic tagging with retention rules. It can be as simple as a public folder on a shared drive called "retain" with everything else being subject to periodic deletion.

Users can not be relied upon to clean up legacy data or to follow rules regarding the creation of new documents and data. Use document templates, embedded retention information, implicit rules and other methods that can then be used to move, copy or delete files using code.

3.6 Best practices for deciding how to separate information that should or should not be kept

There are no general rules in this case. Only a detailed analysis will suffice. Here we offer a way of thinking about the problem that may enable you to make some headway towards a solution. As a first step, identify the originator of a document via its metadata. Next, create a working list of departments, roles or functions that create content that needs to be kept for legal or regulatory purposes.

Human resources, finance and accounting, legal and executive-level managers are the usual candidates. Then, using automated or manual means, identify what, if any, of the following types of documents exist outside managed repository systems: contracts, HR documents, general corporate records, legal files and papers, pension data, personnel records, insurance records, health and safety information, policies and procedures, finance and accounting records, tax records or payroll records, that you believe might be subject to legislation or needed for business-continuity purposes.

Creation and modification dates are also important. It is not as simple as merely deleting old records. It is more about looking at a combination of creator, role, document type, date and keywords, that will enable you to write some simple rules that will at least separate documents into labelled piles for sampling. Keywords might include all proper names or key identifiers, like social security numbers, credit card numbers, or other easily identifiable data. You must then use automated means to find and sample files, to show to the business owners and the legal department in order to obtain their explicit permission to delete what you all believe to be redundant, outdated or of no business value.

3.7 Best practices in applying records-management processes, including retention, to electronic records

Very few companies have "best-in-class" retention-management practices across the board. Those that are moving toward a fully managed information environment admit that the journey will take them between three and five years. Having accumulated data for a very long time, the problems will not be solved overnight.

Best practices that are emerging are as follows:

- Corporate council and senior management are fully informed and supportive of information-retention initiatives.
- Key people are identified in each department, function or associated with each critical business process, who are responsible for coming up with initial records-management policies and for maintaining them.

- They have stopped looking for technical solutions alone to solve the problem.
- They are no longer thinking about enterprise-wide implementation, but are rather considering a series of smaller initiatives that add up, eventually, to having all information under control.
- They have identified key departments and documents and are working with them first. The usual candidates include legal, HR, finance and tax.

3.8 E-mail – The BIG challenge

E-mail has been called:

> *"The Biographer's curse as the proliferation of e-mail means a valuable source of information for the writers of life histories is drying up. Fire and flood are the biographer's enemy as they wreak devastation on historically valuable documents vital to their research; today, that duo is joined by another force of destruction – **the "delete" button**!"*

E-mail-retention policies should balance the needs of users, legal, the IT group, compliance officers and records managers — which is no easy feat. As long as external legal e-mail-retention requirements are met, organisations are generally free to establish whatever policy they desire.

However, the retention policy should be consistent, consistently enforced and combined with user education and regular auditing to ensure compliance. Organisations may need to apply different policies, depending on the geography. In the event of threatened or existing court actions or government investigations, organisations may be obliged to deviate from established policies and preserve all or some messages.

The real dispute in e-mail-retention strategies is end users' desire for unlimited lifetime storage vs. IT operations and legal council's desire for small stores and regular purging. We estimate that the majority of organisations use a mailbox cap — **clients indicate an industry average of 150MB** — and approximately half of those companies also purge e-mail. An industry average is companies **purging messages after 60 to 90 days and folders after 12 to 24 months**. However, in most cases, the creation of local archives is allowed, which is counter-productive to overall attempts to control e-mail better. Despite this being the norm in organisations, Google **allows free e-mailboxes up to 6GB,** which is about 40 times more than the average corporate environment. **In the PGWC, e-mailbox sizes are being capped at 4GB** with the intention to reduce it to 5MB over the next few months. This will bring it closer to industry norms.

Applying true records-management discipline to e-mail is rarely seen — less than 10% of organisations are currently applying RM policies to e-mail — but that percentage will grow rapidly during the next several years.

The most common approach that organisations are using to apply RM discipline to e-mail is the creation of category-specific folders that correspond to corporate RM policies, both for subject and length of retention. All messages related to an HR dispute, for example, can be moved by the user to a folder with a three-year retention period, or messages dragged to a real-estate portfolio-management folder can be preserved for seven years. Messages can be kept in the folders, or they can be copied to an external repository such as a third-party e-mail archive.

Most e-mail archive vendors offer this folder structure and Exchange 2007 provides this service (called Managed Custom Folders), which is part of the new Enterprise Client Access Licence.

The downside to this folder approach is that it requires education and effort to make users perform appropriate message categorisation. Organisations which have this approach report that users who typically file mail on receipt (known as filers) have an easier time complying with categorisation requirements, but that users who do not do a lot of filing (known as pilers), have proven to be a challenge. What enterprises really need (and want), is a mechanism that automatically classifies messages by records management type (typically less than 3% of all mail) without user intervention. However, auto-classification is in its infancy but due to demand we expect it to mature rapidly. There are many information-access vendors that have strong capabilities in this area. So look for partnerships to emerge or, if your needs are immediate, consider doing your own implementation of archiving as well as classification and categorisation software.

A Live Link module for e-mail would be appropriate and desired in the case of the PGWC.

Bottom line

The archiving of e-mail as official records in or integrated with the Live Link platform is a must.

3.9 Record categories

Here are the sorts of categories you would find in a general records-retention schedule:

- General corporate records
- Legal files and papers
- Contracts
- Pension data
- Personnel records.
- Insurance records
- Finance and accounting
- Tax
- Payroll
- Buildings and plant
- Research and development

However, in the context of the Public Service of SA, the National Archives Regulations has clear guidelines on the categorisation of records in the public service which is applicable to all departments.

The National Archives and Records Services define a record as:

> *"Any information generated electronically, stored by means of computer technology, created or received by a governmental body in pursuance of its activities, is a **public record!**"*

3.10 The role of National and Provincial Archives and Records Service of South Africa

In the Public Service of South Africa the management and care of public records in the custody of governmental bodies is vested in the National and Provincial Archives and Records Services. The National Archives and Records Service (NARS) is responsible for the records of the National Government and the Provincial Archives and Records Services (PARS) for records of their respective provincial governments and local authorities. The NARS issues regulations and guidelines to departments for the management of records in their custody. This includes best practices and guidelines on the management of both physical and electronic records, including the migration and/or conversion of physical records to electronic records. The Western Cape Archives and Records Service have adopted the NARS records-management guidelines for use throughout the Province.

The NARS has recognised that the management of records through electronic means holds tremendous efficiency benefits for the effectiveness of the Public

Service. Thus the NARS has also issued a specific guideline for the management of electronic records which includes best practices to be adopted by departments.

The local Provincial Archives and Records Services also provide provincial oversight over the management of records in all provincial departments of the PGWC.

Bottom line
NARS prescripts and guidelines determine records management including categorisation of records for departments

3.11 Strategic and operational objectives and benefits particular to the PGWC

The ECM Programme proposed in this document has two main objectives, firstly to align with business objectives and strategies and secondly to improve operational efficiencies and effectiveness in support of the business objectives and strategies.

Further, it will also bring departments in line with the requirements of the various acts that control the functioning of the Provincial Government. In this respect, the full spectrum of Document Management, Records Management and Archiving will assist in achieving this state.

In order to obtain an appropriate solution, departments must ensure the following is understood:

- How your Department currently organises documents?
- What type of information is currently filed and retrieved?
- Specific rules and regulations that must be adhered to (p.?).

3.11.1 Strategic objectives

The strategic objectives of all departments should be aligned with that of iKapa elihlumayo (PGDS or any new one that follows) and Batho Pele. By supporting these two initiatives, the ECM Programme supports the strategic objectives of the PGWC.

The objectives of the **iKapa elihlumayo** initiative are quite clear and the ECM Programme will support the initiative.

- Human resource development and job creation will be supported by broadening the employee skills base, appointing interns to participate and obtain business knowledge and creating new job opportunities.

- With the Strategic Infrastructure Plan, which should be compiled by each department, a big focus is put in improving the Western Cape's infrastructure, also with the 2010 Soccer World Cup coming up. This programme can provide an electronic system for all plans and promote effective collaboration through online project workspaces in order to improve efficiency.

- Through encouraging collaboration across government spheres, implementing records management etc. business processes will be improved by co-ordinating policies and procedures more efficiently.

The **Batho Pele** initiative's focus is to get public servants to be service-orientated, to strive for excellence in service delivery and to commit to continuous service-delivery improvement.

It is basically a transparent mechanism which allows customers to hold public servants accountable for the type of service they deliver. The ECM programme will empower and equip public servants with the right tools and information to ensure service excellence.

- Public servants will be provided with technology that enables them to consult through connecting people with content…and people with people, i.e. public servants with information…and public servants with the public.

- Service standards will be improved by optimising business processes and making information easily accessible.

- An open and transparent information structure should be established in order to collaborate efficiently without compromising security.

- Through an open and transparent information structure, teamwork will also be encouraged across branches. Information will be shared and a greater awareness of service offerings will be created.

3.11.2 Operational objectives

The ECM solution proposed is also about improving operational efficiencies and effectiveness within the various units of each department. This will be achieved by reducing paper consumption in inefficient processes, reducing the amount of documents being lost and curtailing the amount of duplicate paper kept because of this, making available the ability to measure process execution time and improve service-delivery times to the public. Examples for such improvements should be investigated in the environment of each department and can be listed for base-lining.

3.11.3 Organisational benefits

By applying document management, these are the organisational benefits that can be realised:

- Eliminate paper, save office space and reduce file-retrieval time
- Reduces costs of handling, storing, and duplicating paper documents
- Reduces the time employees spend looking for information
- Increase customer service through immediate access to customer documents
- Strengthen your disaster recovery plan by ensuring your data is secure and easily accessible to remote users
- Guarantee business continuity, 24x7x365
- Ensures legal and regulatory compliance

Take for instance the HR component that is relevant to most departments: departments must show the business value obtained in all their business areas. Business value can immediately be obtained in the following areas:

- HR records
- Leave application
- Bursary application
- Wellness programmes
- Training programmes, etc.

By applying document management, imaging, workflow and collaboration functionality, the following benefits will also be obtained:

- Secure information
- Provide version control of documents
- Documents (policies, templates, reports, employee files) will be available immediately online
- Accurate search functionality
- Reduction of paper by reducing the movement of physical files and photocopying
- Reduce the loss of missing information through simultaneous accessibility
- Instant communication
- Faster processing of leave and bursary applications
- Simultaneous access to files
- Provide trace ability with audit trails
- Status visibility
- Improve management Information
- Process automation

Bottom line

The implementation of ECM makes "file-tracking" obsolete as the movement of physical records and files is reduced dramatically or eliminated entirely.

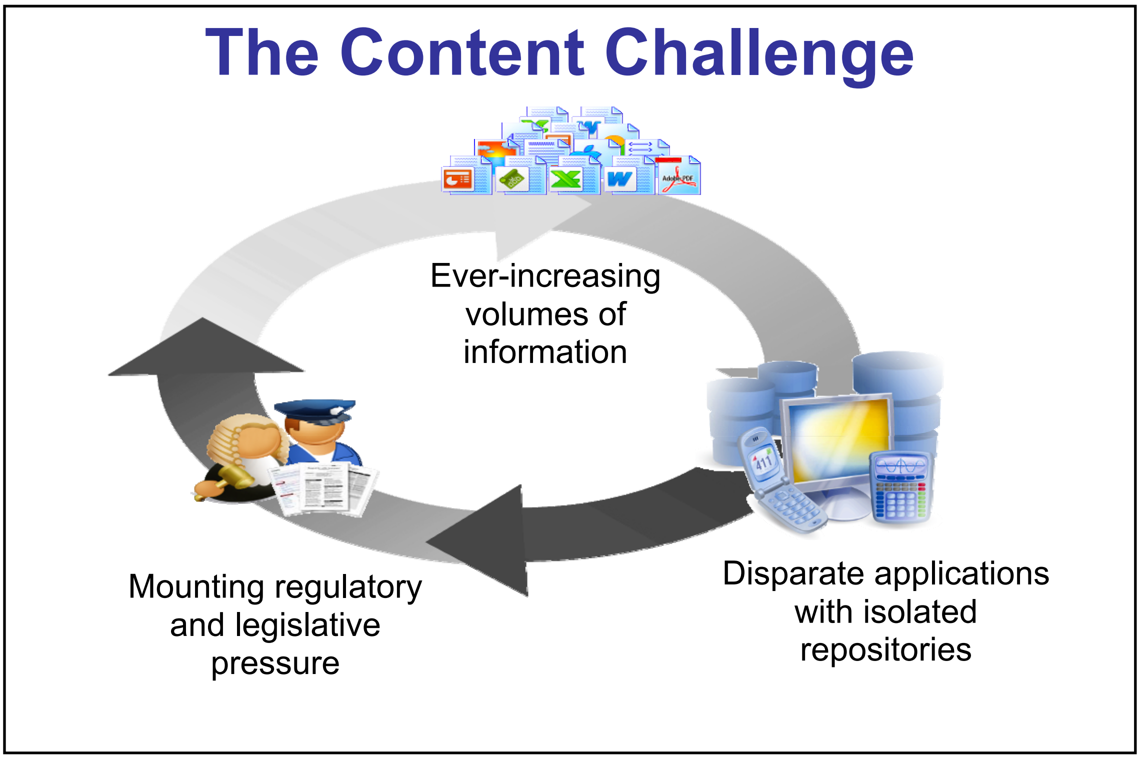
3.12 Changing challenges and the evolving ECM

Records-management systems have evolved from little more than the creation of indexes and tracking mechanisms for the preservation of paper documents to the preservation of electronic documents.

As the range of digital content types continues to grow, electronic records-management systems should now include mechanisms for dealing with audio, video and web content. The emergence of wikis, blogs and social networking platforms also requires policies and approaches for retention of user-generated content.

E-mail has proved to be especially problematic when it comes to maintaining business records.

While e-mail active archiving systems support role-based and event-based retention, records management is still needed for those e-mails that must be retained as records. As reflected below, content remains a huge challenge.



3.13 Standards

Standards have been established in many countries to provide local requirements for records management. These standards include how different record types should be managed, rules for meta-data creation, security definitions and implementation guidelines.

Many of these standards have released their second versions. These standards can be used as a foundation and guideline for the evaluation and implementation of records management products.

The **DoD 5015.2 standard is well-established** and is the only one that has a formal certification process. It is the de facto benchmark for records-management products and acts as certification for essential product functionality.

Gartner recommends that enterprises use the **DoD 5015.2 STD 2007, version 3** standard as a key requirement when acquiring any records-management product, along with consideration of local standards.

Gartner also believes that **DoD 5015.2 certification is a key selection criterion** because it ensures that the records-management product provides at least the basic functionality required.

The management and facilitation of unstructured content and the generation of information and data by social-networking tools and services is probably the next biggest challenge for the organisation and is one that all organisations will have to face and deal with.

90% of all information and data generated today by the organisation is unstructured, usually outside of the organisation by its employees, using social-networking tools and a variety of personal devices, most of which cannot be accessed or managed by the employer.

The **generation of content** (information and data) will need to be managed at enterprise or organisational-wide live i.e. at provincial level across the PGWC. In doing so, centralised deployment and standardisation across the PGWC is critical for optimisation of resourcing, skills and the capacity to deliver.

The focus therefore will have to be on the management of the **convergence of content** by facilitating and mainstreaming the adoption of social-network tools, accounts and services into and/or by the organisation.

Change management, fostering the adoption of ECM solutions and resistance to change are key challenges that departments and the PGWC will have to address when implementing ECM solutions (such as the proposed e-filing).

Bottom line
"Cloud computing" is already here and employees of the organisation are using it for their personal space which is converging into the work space. The organisation will have to manage changing challenges that comes with Generation X or "Z".

3.14 Information security

Information security is all about the protection and safekeeping of departmental systems, assets, information and services against deliberate and accidental threats to:

- the confidentiality of information
- the integrity of processes and data
- the availability of data, systems, and services.

Effective information security is required to protect sensitive records and ensure their safe-keeping:

Sensitive records that must be protected:

- employees' files: personnel, medical, security
- business-confidential information: farmers, producers
- sensitive files from other government departments
- advice to the Minister

We may be in difficult situations and must know what to do with respect to:

- bomb threats, fire alarms, suspicious packages, etc.
- angry, frustrated clients in the field and on government premises

We sometimes work in "unfriendly" environments and must know what to do to protect ourselves:

- laboratories, hospitals, schools, farms, etc.
- operating equipment, etc.

The **Minimum Information Security Standards (MISS)** guidelines issued by NIA must be adhered to at all times in e-file or ECM implementation initiatives.

3.15 Information interoperability

Information interoperability is essential and just as important as information security and essential to effective information management.

It is well known that information systems have the potential to transform the Government and service delivery to the public. But without consistent policies and standards to underpin those systems it will not be possible to work together to deliver collaborative services across departments and achieving an e-government.

The Minimum Information Interoperability Standards can enable the information to flow seamlessly across the public sector and provide citizens and businesses with better access to government services and information. By adopting the standards that align the Government with the rest of industry, it also serves as a basis for reducing the costs and risks associated with carrying out major IT projects.

The MIOS sets out the Government's technical policies and standards for achieving interoperability and information systems coherence across the public service and also defines the essential pre-requisite for a "joined-up and web-enabled" government.

The Minimum Information Interoperability Standards (MIOS), which are issued by the Office of the Government Chief Information Officer (OGCIO), are applicable to e-filing or ECM implementation initiatives.

4. DISCUSSION

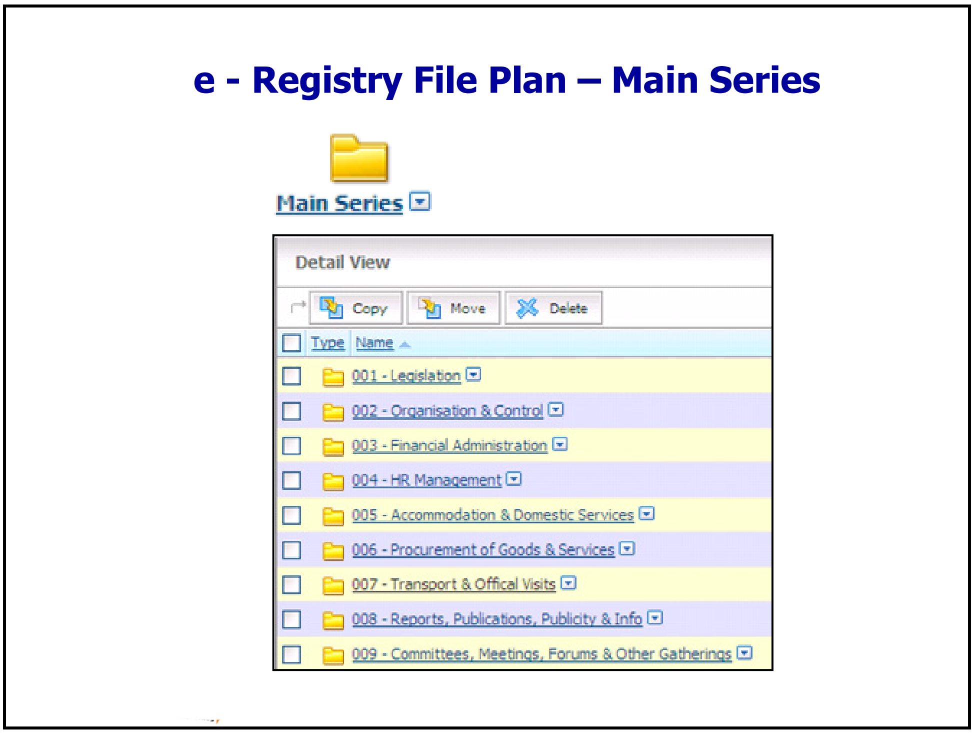
The team tackled each of the following areas and key issues and recommendations were discussed and finalised. They are actually specific outcomes of the TOR for this workstream.

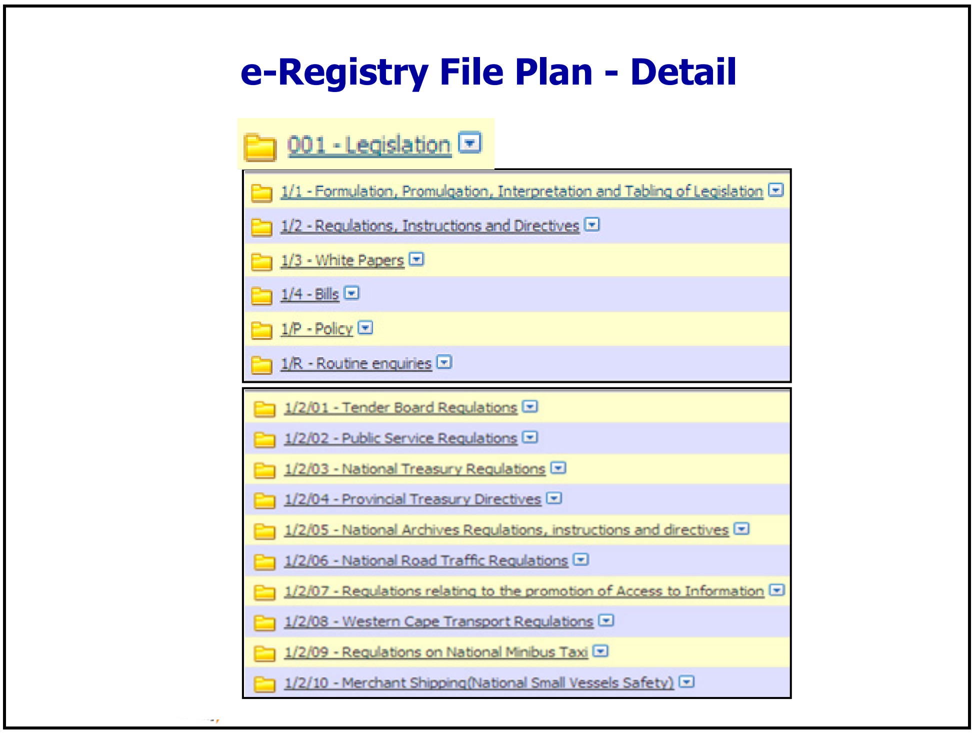
4.1 Centralised and standardised e-file plan: proposal for the PGWC

In order to ensure standardisation and consistency across the PGWC, it is critical that the provincial archives maintain a standardised and generic e-file plan for the departments of the PGWC.

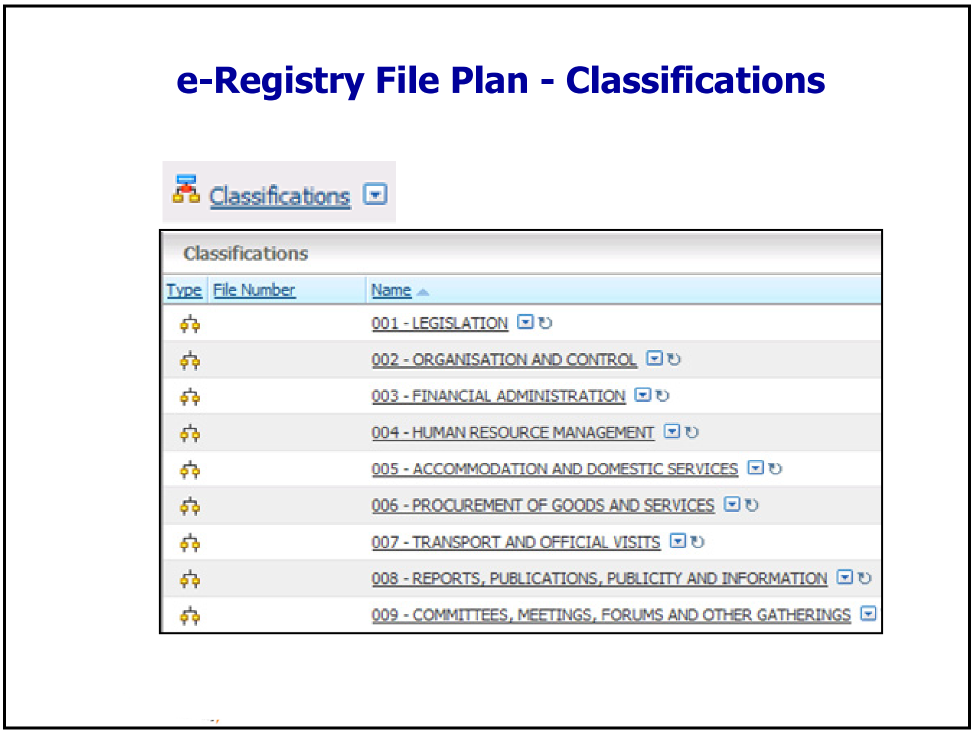
The **Provincial Records Management Forum** initiated by the provincial archives, as a result of the e-filing workstream, will provide on-going guidance and support in ensuring that the e-file plan is maintained and updated.

It is proposed that the **main series** of the e-file plan be modelled as follows:

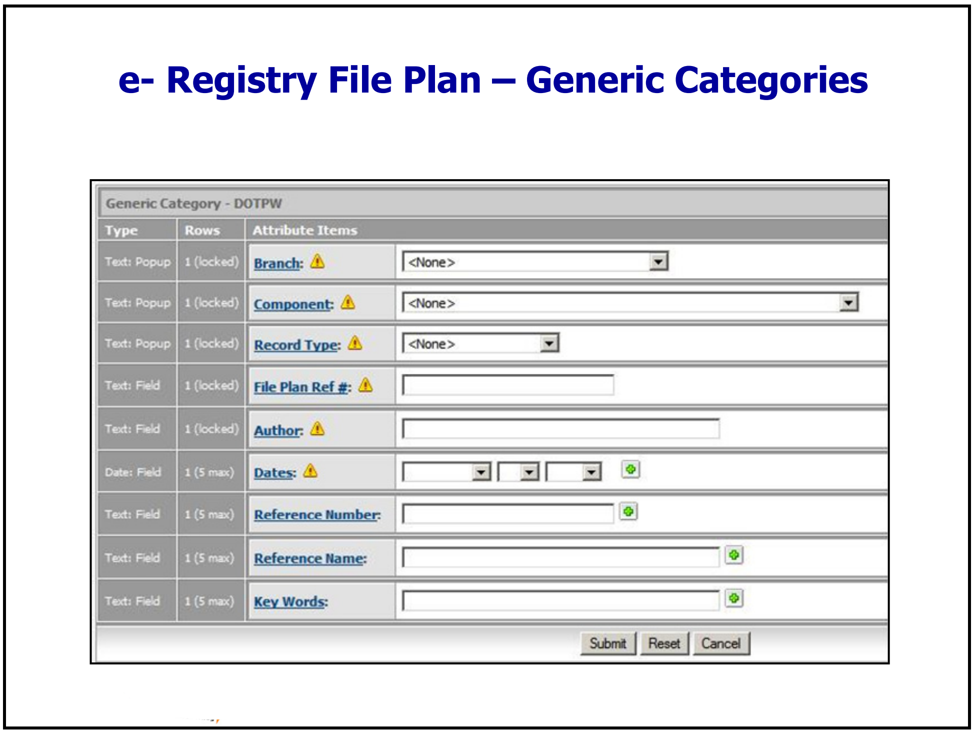




It is proposed that the **classifications** of the file plan be modelled as follows:



It is proposed that the **generic categories** of the file plan be modelled as follows:



The **implementation** of the **e-file plan** must ensure that the following areas are addressed and that these areas are covered in a detailed project plan that must be developed for and by each department:

- Creation of users and groups
- Application of user permissions to folder structure
- The set-up of main series 1 to 9 folder structure
- The set-up of records management main series 1 to 9 classifications
- Creation of index category
- Application of index category to folder structures
- Quality-assurance application
- Change management
- Programme/project management
- Architecture

The **institutionalisation** of the e-file plan must have detailed plans pertaining to the following key areas as the key to its success is the people and support:

- Change management
- Training/skills transfer
- User support
- Technical support

It is also crucial that an **Accelerated Institutionalisation Programme (AIP)** be implemented so that the PGWC can provide the bulk of the operational user-support staff and that this phase forms the start of the e-file project in order to accelerate the skills transfer from the relevant service provider to the PGWC departments, Ce-I and even SITA.

4.2 Plan to consolidate the current e-file solutions in the PGWC

The current e-file solution used in the PGWC is Open Text's Livelink which is being used in the Department of Transport and Public Works, the Department of Social Development and to a limited extent is being piloted in the Department of Health.

According to Gartner's latest research on the enterprise-content management solutions providers, they rate Open Text as "*strong positive*" which is the highest rating they give to vendors that make it to their top-vendor list. This rating basically implies the vendor is viewed as a provider of strategic products, services or solutions that:

Customers: Continue with planned investments.

Potential customers: Consider this vendor a strong choice for strategic investments.

The following is a general summary of Gartner's **rating of Open Text's Livelink** currently in use in the PGWC:

General

*Open Text has records-management products for each of its ECM suites. **Livelink ECM-Records Management** is for Livelink ECM-Enterprise Server. It has a strong set of e-mail management, classification and archiving components, including Livelink ECM-E-mail Management, Livelink Classification Professional, and Livelink ECM-E-mail Archiving, all of which extend its records management capabilities. Livelink ECM-Records Management also has DOD 5015.2-STD certified integration with SAP and Microsoft Office Server SharePoint 2003 and 2007.*

Open Text also enables in-place records management for external content repositories using its Enterprise Library Services. Livelink ECM-eDOCS RM is for its Livelink ECM-eDOCS Suite. Open Text's records-management products have a substantial installed base of users, good functionality (including strong physical records management capabilities), and extensive file plan and records retention schedule development features.

Its products also have good workflow capabilities to manage the records management process. Open Text also has a DOMEA-based version of its records management product sold in Germany. The company intends to continue to support both of its records management products.

However, existing customers with Livelink ECM-eDOCS 2004 and later versions that require a common records-management programme across multiple content repositories should consider deploying Livelink ECM-Records Management, using Enterprise Library Services which provides better integration and functionality.

As with other ECM platforms, Open Text records-management products should be considered based on the specific ECM suite in use.

Strengths

Open Text's Livelink ECM-Extended Collaboration solution includes good-enough functionality for community self-service, discussions and basic blogs and wikis. It has a long track record in large enterprise deployments for structured collaboration that require task management, workflow, calendar integration and basic project management.

Open Text's collaboration offering is aligned with a very broad range of related offerings for content and document management, real-time collaboration and, in particular, integration with Open Text web-content management capabilities (from the RedDot product line), which can be used to deliver Livelink content to external communities.

Open Text has an enterprise focus with vertical differentiation, and a broad geographic presence.

Cautions

Despite capability enhancements in Livelink ECM-Extended Collaboration and the RedDot product line, some gaps will remain (for example, rich profiles, social tagging, social analytics and mobile support) until the release of new social computing offerings currently in production materialises.

In essence though, the current investment is protected and justified. Furthermore, the previous decision by Ce-I that Open Text's Livelink continues as the provincial standard is justified for the ECM space.

The following is a general summary of Gartner's **rating of Open Text's Records Management**, which also received a rating of "*strong positive*":

General

Open Text-Records Management is a fully integrated component of the Open Text ECM Suite and can be used to support enterprise applications such as SAP and Microsoft SharePoint.

Open Text enables in-place records management for external-content repositories using a variety of different options including web services, Open Text Doorways and third-party solutions. Open Text's records-management products have a substantial installed base of users, good functionality (including strong physical records-management capabilities), and extensive file plan and records-retention schedule development features. Its product also has good workflow capabilities to manage the records-management process.

Open Text has a records-management product for its ECM suite in addition to specialised records-management products for specific verticals and compliance to various international ad regional standards as indicated below:

- *DOMEA Records Management is an Open Text implementation for German government agencies using the DOMEA records-management standard*
- *R/KYV and Open Text Records Management is for UK government agencies*
- *eDOCS RM is for managing eDOCS-record content*

*Open Text has provided the eDOCS customer base with the ability to leverage the ECM Suite, certifying eDOCS DM and Open Text Records Management against **DoD 5015.2-STD**.*

Open Text is rated a "strong positive" *for the records-management capabilities provided by Open Text Records Management and its federated records-management capabilities, especially its support for SAP and Microsoft platforms.*

As with other ECM platforms, Open Text records-management products being considered, should be based on the specific Open Text ECM product in use, but strong consideration should also be given to its lead records-management product, Open Text Records Management, or at least an understanding should be gained of what migration plans exist.

To date the experience of the departments using Livelink is that their **return on investment** (ROI) of electronic-records management has been as follows:

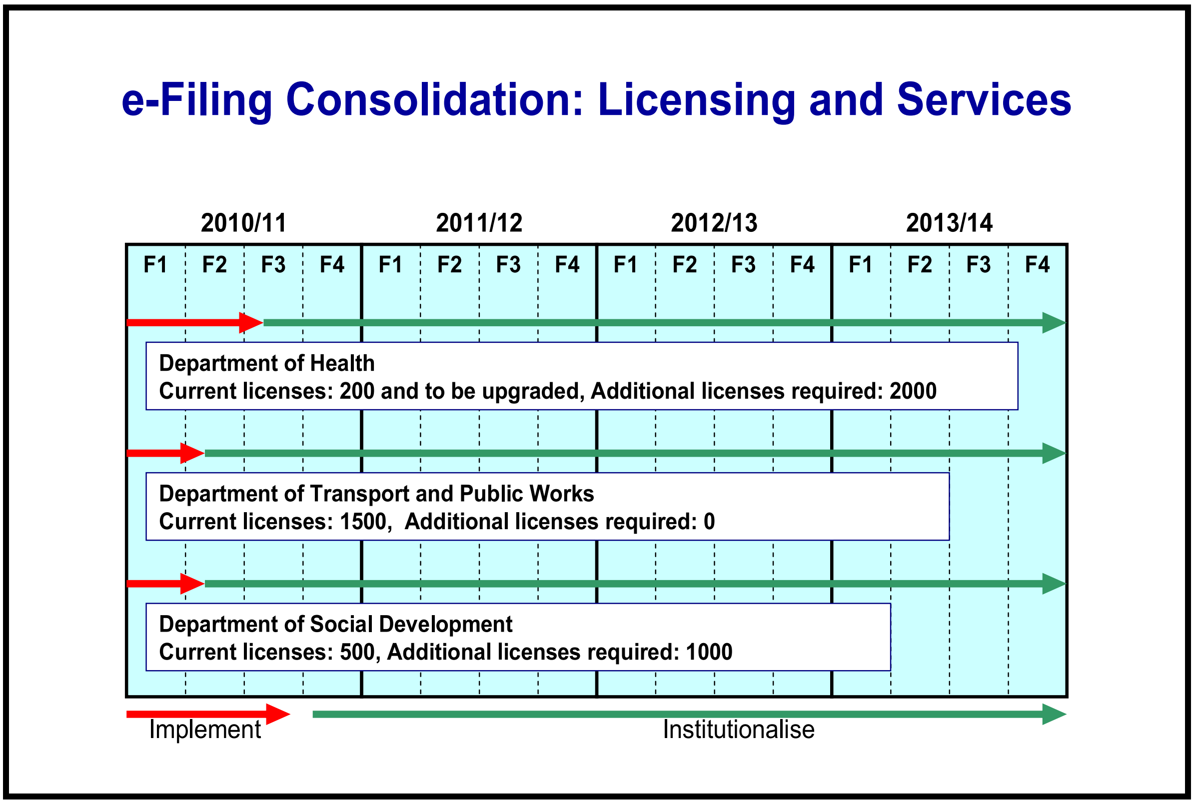
- A structured, controlled and managed tracking system with audit trails
- Significant saving on paper and printers and related consumables
- Significant saving on network traffic and reduction of files transversing the network as attachments to e-mail
- Significant saving on e-mail and individual/shared-server disk space
- Significant increase in collaboration of teams and within teams
- Systems integration made possible as well a single log-on to system resources
- Significant improvement in document-version management
- Significant improvement in document security and document controls
- Significant improvement in the sharing of knowledge and intellectual capital
- Significant improvement in the retention of records and reduction of loss of records
- Significant improvement in the structure of records
- Improvement and better understanding of the file plan by staff in general

Bottom line
Departments that have implemented Open Text's Livelink have realised good returns on their investment.

In summary there is no reason why the PGWC should not continue with Livelink as it is the provincial standard enterprise-content management (ECM) programme.

Bottom line
Open Text's Livelink remains and is confirmed as the provincial standard for the PGWC for enterprise content management.

The following is a summary of Livelink licences and services which need to be consolidated as currently used and envisaged in the departments using e-filing solutions of some sort or the other:



In summary the plan to consolidate Livelink as the e-file solution for the PGWC by 1 April 2010 is a follows:

- Consolidate the licences used by the Departments of Transport and Public Works, Social Development and Health in a provincial licence so that a central pool of licences is managed optimally.
- Consolidate the existing technology platforms and house or host at SITA, with the emphasis being on hosting as priority one and server housing being existing server-hardware investments only until the hardware is due for replacement.

Major concern A key concern raised in Gartner's research is that the licencing cost of ECM software solutions is based on "per seat" use and this makes it expensive to implement and maintain.

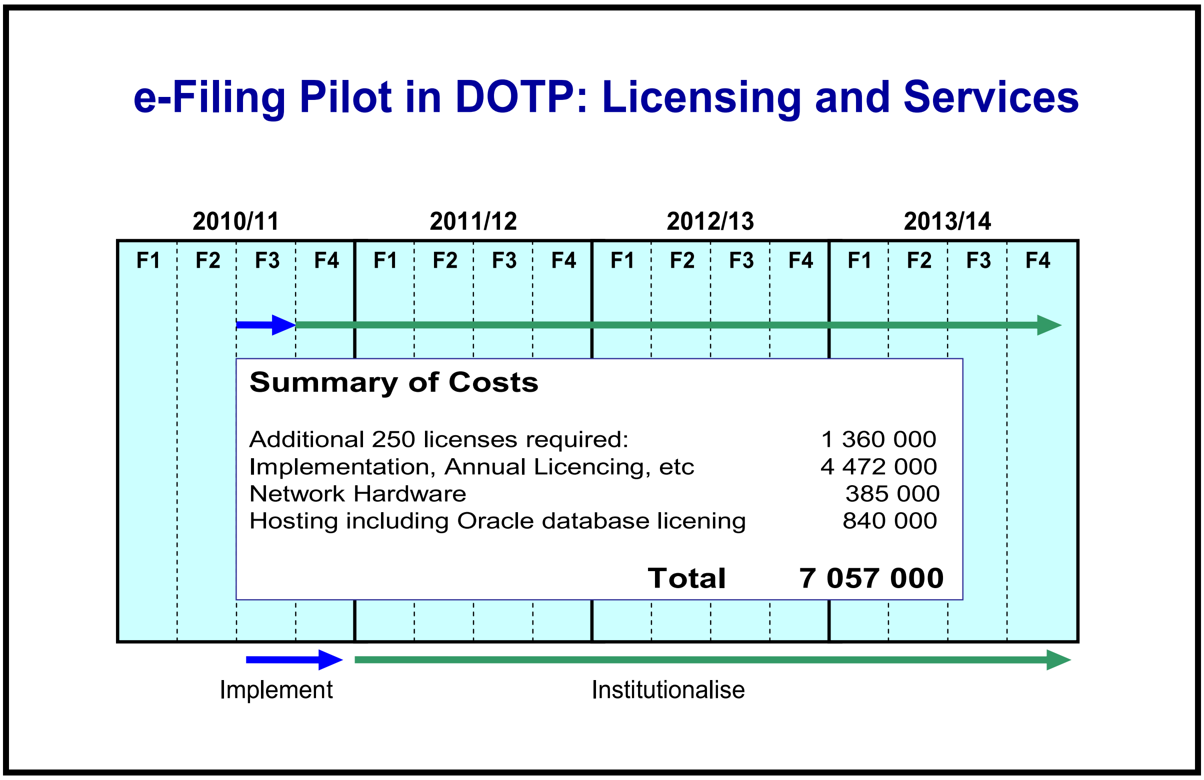
4.3 Plan to prioritise the implementation of e-filing in DotP

It is recommended that a consolidated provincial pilot project takes place in the DotP with the following order of priority:

- Cabinet services
- Office of the Premier
- Office of the DG and Provincial Programme Office
- Rest of DotP

The possibly for the inclusion of a "shared services department" is also recommended with the provision that it should adopt and build on the e-file initiatives and developments to date in the Department of Transport and Public Works. This will eliminate duplication and unnecessary effort as there is huge government-specific domain intellectual capital that has been developed over the years which can simply be taken advantage of.

The following is a summary of estimated **deployment in the DotP and as a provincial pilot**, including Cabinet Services, the Office of the Premier, the Office of the DG and provincial programme Office and eventually the rest of DotP and possibly the "shared services department":



The envisaged time frame for DotP is to spread implementation and institutionalisation across 2010/11 and 2011/12, effective from 1 April 2010 and the deliverables effective from 1 October 2010.

4.4 Plan to roll-out e-filing throughout the PGWC

It is probably best to start with the intended destination regarding a plan to roll-out e-filing or ECM across the departments of the PGWC. We need to get to a stage where the PGWC is characterised by the following:

- Automated rules, controls and functions are possible
- Digitalisation is embraced
- The difference between managing business records and knowledge content, information management and records management is rationalised and understood
- The functions of classifying, finding and organising information are separated.
- New ways of working, new roles, new skills and accountabilities are socialised with employees.

It is also essential that there is a clear understanding of the difference between records classification, the finding of information and the organising of information as reflected below:

Classify

Based on business function and record-keeping requirements
Defined by statutes or instruments establishing the business
Can be automated based on by whom or where the content is generated
End-user does not need to understand the logic
Retention rules based on business function

Find

Done through search function
Supported by automatic indexing of content/capture of meta-data
Search capacity across entire repository
No longer where did I put it, but what is it about

Organize

User-controlled
Supports user's mental models and ways of working
Enables "customisation" by different users without affecting enterprise-content items in the repository

The roll-out of e-filing throughout the PGWC is dependent on the following critical success factors:

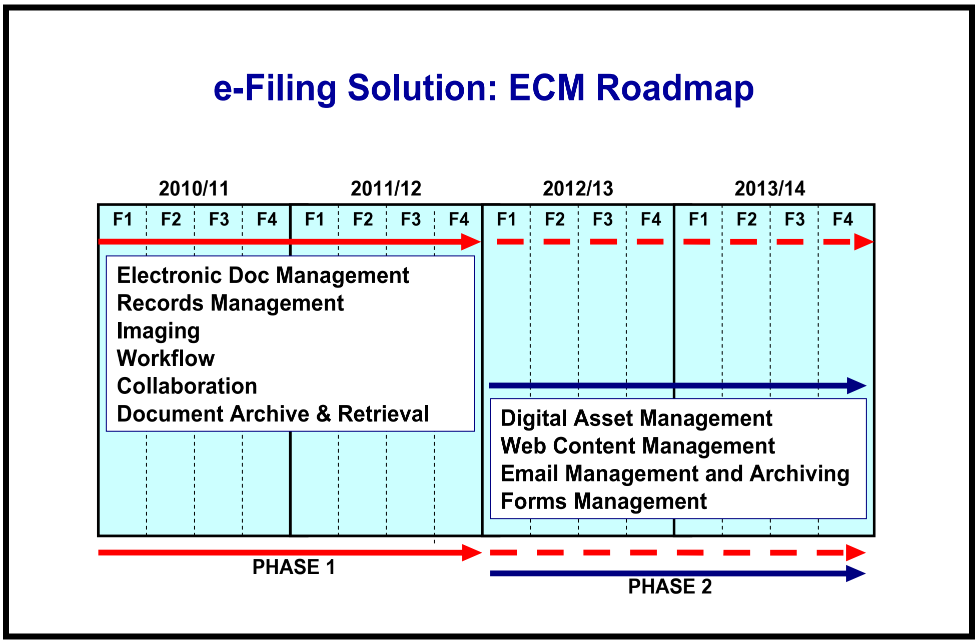
- Change management to embed e-filing in the work culture of the PGWC
- Change management initiatives to be used to promote the use thereof.
- Measures to be adapted regarding e-file adoption
- Staff training
- Skills transfer and development
- Effective and ongoing communication plan

Furthermore the institutionalisation of e-file solutions throughout the departments of the PGWC is probably the most critical success factor as work culture and processes will have to be re-engineered or simply changed for optimisation through improved effectiveness and efficiencies.

The institutionalisation process itself will have to encompass the following key areas and at all levels:

- Change management
- Deployment in each department
- Processes refinement/adaptation
- Training
- Skills transfer
- User support
- Technical support
- Specialised support

The following is the proposed **Enterprise Content-Management Roadmap** with a focus on e-filing for the PGWC:



Phase 1 focuses on a core set of basic solutions all of which are essential for the implementation of e-filing in the PGWC.

- Electronic-document management
- Records management
- Imaging
- Workflow
- Collaboration
- Document archiving and retrieval

Phase 2 focuses on exploiting the foundation laid in Phase 1 and continues with the adoption of electronic enterprise content management but adding the following to the core set of basic solutions:

- Digital-asset management
- Web-content management
- E-mail management and archiving

- Forms management.

The **proposed plan for the roll-out of e-filing** throughout the PGWC is based on the following options and recommendations:

Consolidation: Option 1

Consolidation of existing licences
Consolidation of technology platforms and servers

Consolidation: Option 2

Departments with e-filing/ECM initiatives
Departments of T&PW, SD and Health

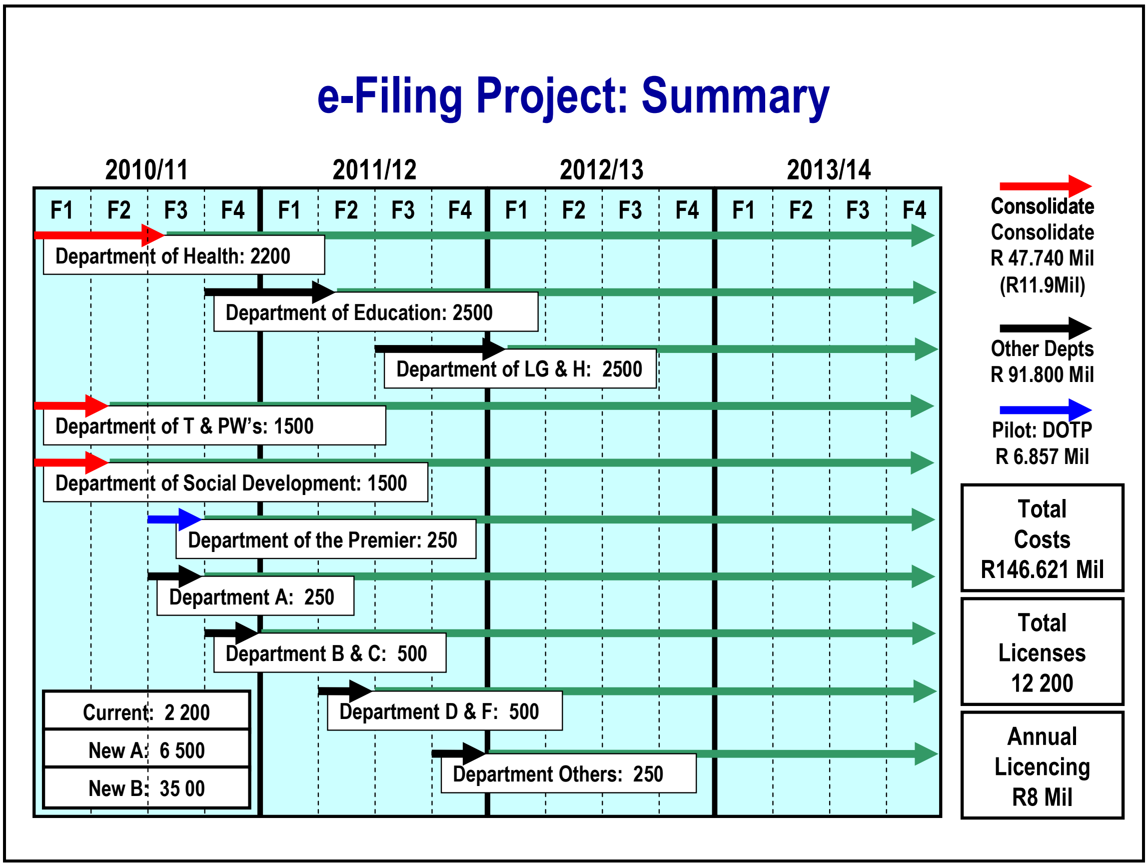
Deployment of DotP as consolidated provincial pilot

Cabinet services
Office of the Premier
Office of the DG and Provincial Programme Office
Rest of DotP
Possibly the "shared services department"

Deployment in remaining departments

All other departments whether they are split or not. e.g.:
Western Cape Education Department
Cultural Affairs and Sport
Local Government and Housing
Environmental Affairs and Planning
Finance and Treasury
Economic Development and Tourism
Agriculture

The following is a summary of the **proposed roll-out plan of e-filing** for the departments of the PGWC, including an indication of the number of licences needed as well as the costs involved:



Departments A to F and others are the existing departments and any other changes which may arise in future (such as a possible splitting of Transport and Public Works, Local Government and Housing, and the creation of a "shared services department").

This will allow for flexibility as departments adopt the e-file solution and as budgets become available within the MTEF framework and time frames.

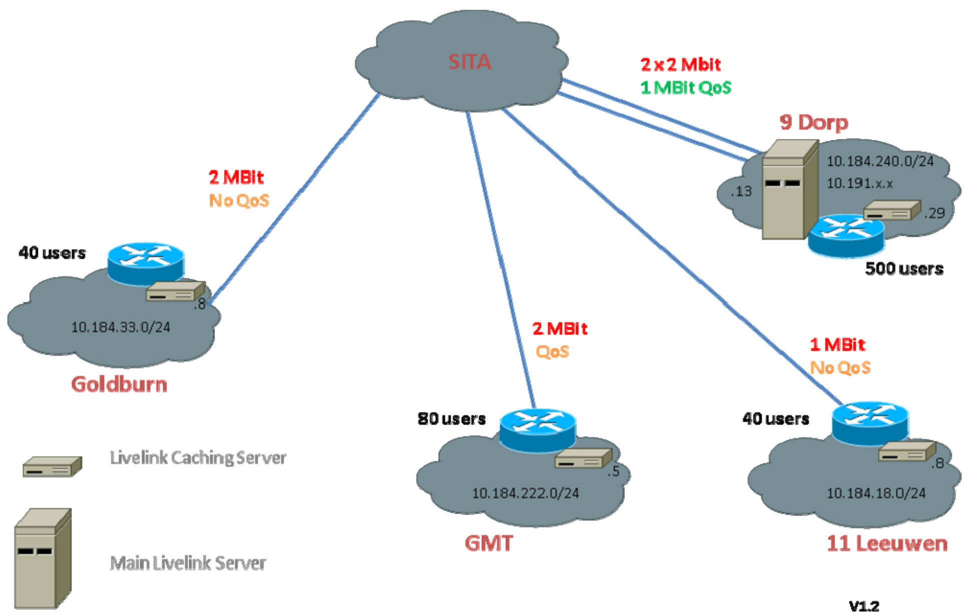
The roll-out plan is **phased over 48 months** but will obviously go beyond that as it gets adopted widely and used for the management of electronic content in further areas within departments.

4.5 Network impact assessment

Electronic-content management or e-filing has been implemented in three departments of the PGWC to a lesser or greater degree and the sites of these departments where Livelink has been implemented provide a sound basis for what is required from a network-infrastructure perspective.

One of the areas of concern is the impact on the WAN (Wide Area Network) and therefore a network-impact assessment on the WAN was carried out to examine the feasibility of (a) collapsing all the implementations into one instance and (b) the extension of the Livelink project to approximately 12 200 users.

The Department of Transport and Public Works was used as the baseline because of the extend of Livelink already being deployed at 9 Dorp Street, Goldburn Centre, GMT Roeland Street and 11 Leeuwen Street. The main Livelink production server (and the database) is housed at 9 Dorp Street and each site connects via the SITA MPLS cloud as reflected below:



This is not an effective architectural model and therefore consolidation is required with a star configuration.

Various techniques were used to capture network traffic and gather network information to provide an accurate assessment. Netflow was enabled on the remote sites, interface use gathered via SNMP and a Sintrex probe installed at 9 Dorp Street to capture all information going to and from the main Livelink server. Although most of the statistics produced was derived from the statistics gathered by the probe, the other techniques produced a better overall view and could verify the statistics produced by the probe.

One of the initial challenges to overcome was to get rid of all the "noise" in the captured data. This included traffic related to back-up, broadcasts, the active directory, etc. Once this data was removed, the top talkers and listeners to the Livelink server were identified.

The top talkers were the Livelink caching server at Goldburn as well as the server at 9 Dorp Street. Goldburn is quite involved with back-scanning and workflow which can explain this entry to feature at the top and of course the main Livelink server is at 9 Dorp Street.

The top listener by far is the server at 9 Dorp Street which be can explained as it is the location of the main Livelink server housed in 9 Dorp Street.

Traffic patterns for each site were also captured and analysed. The amount of WAN bandwidth used and the amount of bandwidth **per user** was also analysed.

Extensive discussions were held with the service provider and the Livelink team and it became apparent that users have to be divided into two categories:

- The "normal" day-to-day users, and
- The users responsible for back-scanning and workflow activities. These type of users are also referred to as "power users".

Further discussions also indicated that although there are 40 active Livelink users at Goldburn, about five users are responsible for most of the Livelink activities. This would indicate that instead of a power user needing just over 2Kbits/sec, the requirement will go up to almost 25Kbits/sec for this specific type of user. Goldburn has a Livelink caching server and it will influence performance and statistics considerably.

It is envisaged that of the 12 200 users to be deployed, approximately 200 will be power users. If the five users at Goldburn can be regarded as a typical power user and the users at 9 Dorp Street and GMT as your normal day-to day users, the following assumptions can be made:

Type	Amount	bits/sec	Total
Power users	200	24 640	4 928 000
Normal users	12 000	775	9 145 000
Total	12 200		14 073 000

From the above assumptions and calculations it appears that an additional **14 Mbits/sec** capacity on the WAN should be planned for the Livelink roll-out to 12 000 users.

What must be taken into consideration are the facts that:

- The period in which this investigation was done was exceptionally short
- This is a ***very conservative*** estimate deduced from averages, ignoring the bottom 25% of observations and using a percentile of .99.
- The results were not verified with other sources like Netflow etc.
- The 200 "power users" is a rough estimate and could change in the future.

In summary, the network impact assessment suggests that it is best to have the main Livelink servers housed in a central point, such as SITA Mowbray, where most of the data lines from the PGWC sites terminate. The following is summary of the sample used:

Name	Users	WAN link	QoS	Power users
9 Dorp Street	500	4 Meg	Y	N
Goldburn	40	2 Meg	N	Y
GMT	80	2 Meg	Y	N
11 Leeuwen	40	1 Meg	N	N

The network impact assessment suggests that where Livelink is implemented, data lines should be a minimum of 2MB to 4MB depending on the number of users on the site and that quality of service techniques and/or bandwidth optimisation equipment will also have to be implemented. For large sites at least a 10MB will be required.

The findings of the network impact assessment have been incorporated into the workings of the IT Services workstream where the Wide Area Network is a focus area. Here alternatives are being pursued in order to provide low-cost high bandwidth links to sites of the departments of the PGWC.

One example is the use of the fibre optic cable that the City of Cape Town is deploying for its own use as well as for use by government organs such as the PGWC. Here a minimum of 100MB link is a certainty to the large sites of the PGWC and the bandwidth constraints will no loner be a limitation in the deployment of the e-file proposals. Furthermore the cost of 100MB link should be less than the current copper based data lines provided by Telkom.

4.6 Hardware and software licensing requirements

The following is a summary of hardware requirements for the server environment for the housing or hosting of the Livelink application:

- Processing platforms and virtualisation - coverage for failover
- Database - coverage for failover
- Storage - minimum of 16TB online and 23TB near-line
- Data protection - coverage of fail-over and data integrity
- Remote cache - 10 or more remote cache servers
- Implementation server
- Central optimisation
- Department server optimisation
- Network switching – LAN and WAN optimisation

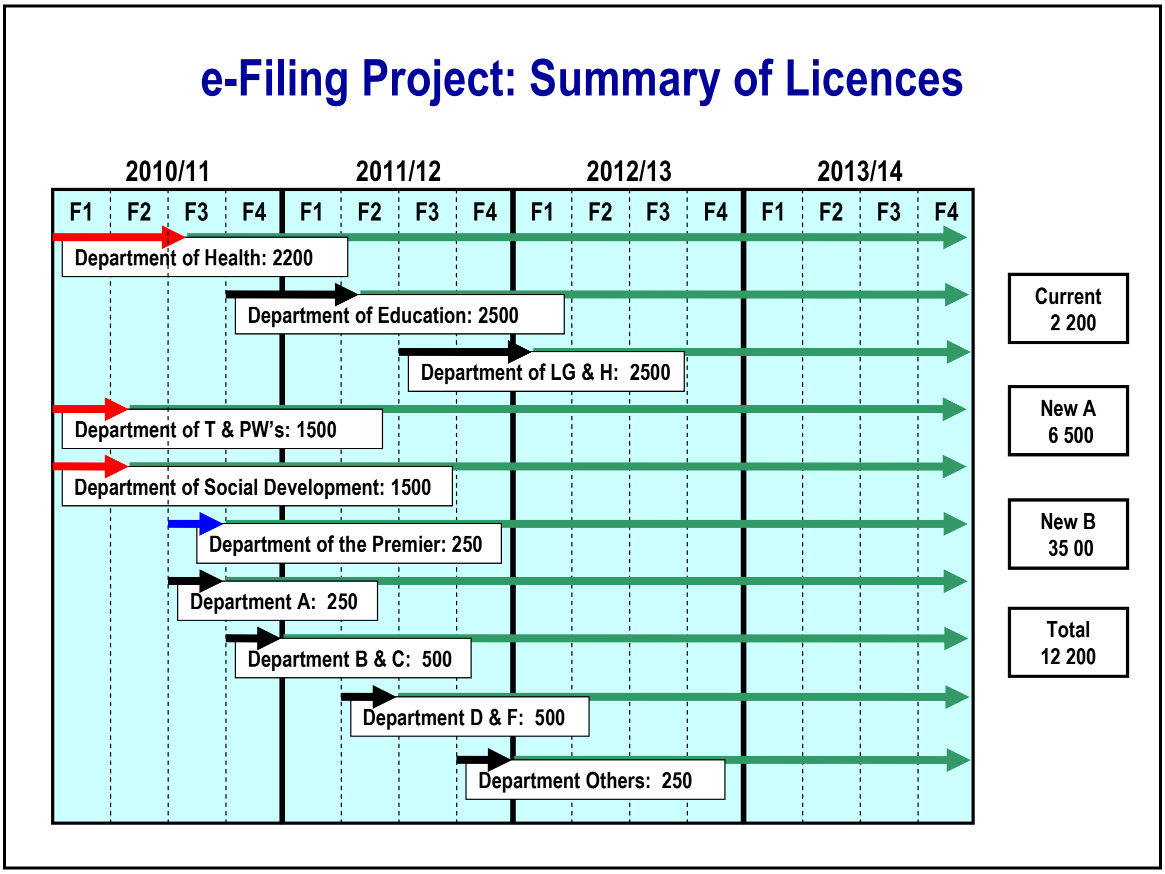
The above is based on the basic assumption and requirement of two servers for processing and failover and two servers for databases and for failover.

Storage is also a high requirement as well as high server performance.

Archiving tape facilities or similar has to be included and catering for off-site storage for disaster recovery purposes is essential.

Remote cache servers may vary depending on the bandwidth available and the final architecture per department.

The following is a summary of the estimates licences required for Livelink:



The following is a summary of **software, hosting and hardware** costs:

	HSD/TPW/SD	DOTP	WCED & DEPTS
Licencing	13 040 000	1 360 000	24 500 000
Hardware	8 600 000	385 000	6 600 000
Hosting	2 400 000	840 000	3 400 000

4.7 Measure to institutionalise use

It is essential that measures be taken to institutionalise the usage of e-file on the Livelink solution platform. Paramount to the institutionalisation process is the implementation of a change management process underpinned by an effective communication plan as well as effective and sound project management.

A change management plan and activities are required to support the Livelink departmental deployments. The plan can further be enhanced by ECM programme-change management initiatives.

In compiling measures to institutionalise the use of e-file, the following sources of information are necessary:

- The relevant Project Initiation Document (PID)
- The feedback from the Livelink forum survey polls
- The Change Readiness Assessment on the department
- Feedback provided by project sponsors on the specific challenges likely to be faced

Once the new or revised business processes and the Livelink technical specification have been signed off, the following activities should be completed prior to technical "go live":

- Identify the impact on the organisational structure.
- Identify the impact on individual positions (activities and IPDP implications).
- Document and notify management of implementation.
- Identify any new skill requirements and ensure that needs are met via the learning and development plan

Once implemented, monitor the performance per project-user support plan.

This area of change management focuses primarily on two issues:

- Change resistance management
- Education of supervisors/managers on managing a changing environment.

The following activities are to be scheduled into the project plan. These activities also form part of the wider ECM programme change strategy:

- A "Leadership Through Change" workshop for supervisory staff (combined with their colleagues from other areas).

- "Change Education" workshops for individual staff members. Groups of plus-minus 15 in one workshop. Again, groups from different components may be combined.

Both workshops are approximately three hours in duration and it is recommended that they are completed off-site. Timing should be as early as is practicable in the project and obviously before "going live".

At an ECM programme level a number of skills requirements are being identified that will facilitate the implementation of Livelink department-wide, for example generic computer skills and basic production control and management. However, once the new business process model, technical specification and required skills are identified, it will be possible to develop the training strategy and plan for this specific project implementation. The plan will identify the following:

- The various training audiences and their specific needs.

- The training requirements in terms of knowledge, skills and abilities for the audiences identified.

- Training delivery approaches for each skills area (e.g. face-to-face classroom, one-on-one, self-learning, CBT, etc.).

- Proposed delegate lists.

- The plan for training-material development (as required).

- The actual training activities and associated schedule of timing.

The focus of the activities completed under this heading is to ensure that the project team members are all clear about their roles, the business case for the project and the communication and reporting activities required of them. For this project the following activities are in place or have been completed:

- Weekly project-team meetings

- Steercom meetings

- Technical meetings

The change plan is specific to a Livelink Departmental project that is a component of the wider ECM Programme of a department. When the project plan is initialised, the activities may further be integrated in terms of appropriate timing.

The delivery of these activities will be the primary responsibility of the appointed change consultant supported by the ECM programme-change manager and in accordance with the direction of the programme and project managers.

Annexure E provides a more detailed change management plan and templates for departments to use.

4.8 Proposed archives-approved file plans for the PGWC

The management of records is carried out within the legal context for the public service, taking the following key legislation into consideration:

- The Constitution of South Africa
- The Promotion of Access to Information Act of 2000
- The Promotion of Administrative Justice Act of 2000
- The Public Financial Management Act of 1999
- The National Archives and Records Services of South Africa Act (No 43 of 1996), which empowers NARS to regulate records of the National Government and provide advice to the Provincial Archives and Records Services (PARS).
- The Provincial Archives and Records Services of the Western Cape Act (No 3 of 2005), which empowers the Provincial Archives and Records Service of the Western Cape to regulate records of provincial government and the local authorities.
- National Archives Handout ARH 15/1/1
- Policy Guidelines for the Management of Electronic Records in Government Bodies, 1st Edition, April 2003
- Electronic Communications and Transactions Act of 2002

The following is a summary of the proposed Provincial Archives-approved file plans for departments in the PGWC (Annexure F provides the detailed file plan).

LIST OF MAIN SERIES

1. STATUTORY AND REGULATORY FRAMEWORK

2. ORGANISATION AND CONTROL

3. HUMAN RESOURCE MANAGEMENT

4. INTERNAL FINANCIAL MANAGEMENT

5. SUPPLY CHAIN MANAGEMENT

6. INTERNAL FACILITIES MANAGEMENT

7. INTERNAL TRAVEL AND TRANSPORT SERVICES

8. INTERNAL INFORMATION SERVICES

9. INTERNAL COMMUNICATIONS

10. LEGAL SERVICES

11. ATTENDING AND HOSTING MEETINGS AND OTHER GATHERINGS

LIST OF SERIES OF SEPARATE CASE FILES

Personal files

Employee personal confidential file
(This file contains personal matters of a confidential nature, e.g. letter of appointment, promotion and merit documentation, etc.)

Leave file
(This file contains routine matters in respect of this subject, e.g. leave forms and correspondence on leave matters.)

Financial file
(This file contains financial matters, e.g. transfer costs, subsistence allowances, transport matters, home owners' allowances, banking arrangements, etc.)

Occupational diseases and injuries file
(This file contains correspondence in respect of injuries sustained while on duty.)

Performance assessment confidential file
(This file contains performance agreement, assessment forms, review forms, reports and correspondence on this subject.)

Temporary workers personal confidential file

(This file contains personal matters of a confidential nature of contract workers, consultants, etc., e.g. application, letter of appointment, etc.)

<u>Patient files</u>
(This file contains personal matters of a confidential nature of patients, e.g. medical reports, treatments and related documentation.)

5. CONCLUSION

5.1 Summary of purpose of e-file workstream

The purpose of this workstream was to draft and develop a blueprint to:

a) optimise existing filing systems and introduce a uniform e-filing system as practice in the PGWC

b) address duplication, legal compliance and accessibility, and

c) safeguard institutional memory and information.

5.2 E-file and e-government

The very reasons for pursuing an e-file or ECM solution for the PGWC are the key business drivers that are basically the drivers for e-government as reflected below:

- Ongoing pressures to deliver more services to citizens and business at the same or lower cost
- The need to build an information-management infrastructure to support the flood of new electronic information
- Compliance with Freedom of Information and Archives mandates that cover electronic as well as physical records
- Governments need to build information-management infrastructures to support the flood of new electronic communication these e-government initiatives will encourage

5.3 Records management

In essence, it support **the management of records** by using ICTs and leveraging enterprise content-management technologies in particular to reduce costs, increase efficiencies, improve effectiveness and ultimately improve service delivery all round.

Records are a strategic asset and ICT solutions enable the better management of physical records by converting it into electronic records and making it possible to be available to anyone in any way without the risk of the physical record being lost in transit.

5.4 Forums

The **Provincial Records Managers Forum** should be formally approved and be led by Provincial Archives who should also provide oversight and guidance to departments in the management of records but with a focus on electronic records management.

The **Enterprise Content Management Forum** comprising of departmental representatives should be formally approved and continued to be led by Ce-I, the purpose of which is to address electronic or digital content management. All further implementation of the e-File proposals will be vested with the ECM Forum who will also be the Provincial Steering Committee for e-filing in the PGWC.

5.5 E-file is googlelising

The business driver for e-file is not records management per se but is rather and must be the management of information whereby information can be stored and accessed easily by any one, from anywhere, at any time and for the purposes required such as better and quicker decision-making and ultimately better service delivery. In a way the objective of e-file is ***"googlelising"*** information in the organisation. It is the ability to access and retrieve content in context from the native application interface, the web and/or desktop through a familiar user environment viz. the web browser.

In essence e-file or ECM contributes to the transformation (or modernisation) of the PGWC organisation in a substantial way.

5.6 Recommendation

It is recommended that the proposals in this document be approved in principle and implemented within the relevant budget allocation over the next 48 to 60 months.

5.7 Conclusion

In conclusion e-file or ECM can assist the PGWC to protect corporate memory and institutional knowledge by consolidating implicit knowledge through structured workflow into managed-content repositories and preserve information that could be lost during staff turnover or through the loss of physical records.

6. RECOMMENDATIONS

6.1 Lessons learnt

Lessons learnt from past implementation most often provide a good insight into future implementation.

The following is a summary of the key **lessons learnt with the implementation of e-file initiatives in the PGWC** by the Department of Transport and Public |Works, the Department of Social Development and the Department of Health:

Lessons learnt and steps taken to achieve the business objectives intended for the project:

- Creation of users and groups
- Implemented a centralised repository based on the approved file plan
- Set-up of required hardware and network infrastructure
- Created users and groups for security and access control
- Change-management initiatives driving adoption
- Training and knowledge transfer to all users
- Continued on-site user and technical-support provision
- BPM workflow solutions for business processes

Lessons learnt from the general reaction of employees of the department to the solution:

- Initial trepidation followed by acceptance and adoption achieved due to change management and training initiatives
- Now questions are coming in on "where are we in the roll-out priority or can we not be next?"

Lessons and steps taken to encourage user adoption solution at all levels in the department:

- Change-management initiatives
- Hosting of knowledge café

- Appointment and education of departmental change agents/champions and custodians
- Regular targeted communication with stakeholders
- Poster and newsletter campaign
- User-of-the-month awards
- Training and knowledge transfer
- ECM and EDMS orientation sessions
- General Livelink training for all users
- Specialised training for custodians, champions, change agents and senior users

Best practices learnt through the experience of implementation of solution:

- Top-down approach: executive buy-in of top management from inception, including commitment for funding for the long implementation and institutionalisation process
- Use of Prince 2 project-management methodology and strong disciplined project management
- Change-management approach
- Benefits of formal training
- High degree of executive involvement
- Identify the "golden nugget" of information that all users need to access

Most valuable lessons learnt during the deployment:

- When challenges arise, resolve the issue, do not treat the symptoms
- Client participation at all stages of the programme
- Keep the solution simple and user-friendly
- Use a service provider that understands and is knowledgeable in both the ECM technology and the government domain
- Use a service provider that understands the product itself, namely Livelink, and how to implement it in the government environment

- Focus on quick-wins and regular deliverables as this is a long, multi-year initiative

Lessons learnt with particular obstacles that had to be overcome, risks that had to be re-assessed, planning that had to be revisited, improve the planning and preparation of the project:

- Network Infrastructure upgrades had been deferred for some years which had to be resurrected to support the solution
- IT illiteracy across a large percentage of the user-base
- Timely procurement of necessary hardware
- Lack of production and process-management skills
- Change-management plan to include all staff at all levels
- Ensure sufficient funds for the "unknown" factors or "surprises"

The following is summary of key lessons learnt from the implementation of ECM or e-file initiatives **internationally** in the public sector:

- The public sector is mission oriented, rather than profit driven, limiting motivation for risk-taking and increasing internal organisation and management.
- Public sector organisations are not expected to turn a profit, their leaders measure a new technology's benefits differently than their peers in the private sector. "It is more about return on value than return on investment".
- Large populations need to be able to access government contacts as well as public information, turning governments towards the convenience of web-centric outreach
- The public sector has a security-sensitive internal requirement for collaboration and creation. They must control their own data and their own security in order to avoid the possibility of political scandal.
- Records management and archiving is essential to maintain effective legislative and political flow.
- Maintain control through proper governance, project planning and architecture.

- Maintain a flexible implementation framework and approach and use common sense and leverage external expertise.

- Manage change requests thoroughly and start planning for the future now. The future changes will fit into your communication strategy and show solution evolution with your clients during implementation.

- Do not over-train, provide minimal training and let the user play with the solution on his or her own, however follow up with intensive coaching afterwards.

However, the very reasons for pursuing an e-file or ECM solution for the PGWC must remain the key drivers. These are also similar to the drivers for e-government as reflected below:

- Ongoing pressures to deliver more services to citizens and business at the same or lower cost

- The need to build an information-management infrastructure to support the flood of new electronic information

- Compliance with Freedom of Information and Archives mandates covers electronic as well as physical records

- Governments need to build information-management infrastructures to support the flood of new electronic communication these e-government initiatives will encourage.

6.2 Implementation plan: Principles

The following **principles** are essential and are therefore recommended for the implementation of the e-file solution across the departments of the PGWC.

- Each department must have an approved file plan(s) as this is critical for the success of the deployment of any e-filing solution. No approved plan means that a department cannot proceed ahead with e-file.

- Departments must identify and approve their own scanning requirements. There are enormous amounts of physical records that need to be converted into electronic records. Options such as "conversion on demand" can also be exploited.

- Departmental resources must be considered first for scanning roles as this will reduce costs substantially.

- E-file must also consider any back-scanning of content or capability that maybe required. Options available are scanning on demand for example.

- No interventions in the existing paper storage and paper processes.
- Each department is to use one Generic Indexing and Search Template for all content.
- A three to four year budget allocation is a certainty due to the nature of e-file deployments and the implications thereof on work culture and processes.
- Appropriate and up to date end-user hardware is essential and this should be part of existing annual technology refreshes or updates.
- Hosting of e-file databases at SITA must be considered first as this can reduce costs and also increase response times as all data lines terminate at SITA anyway.
- Forward planning is required to ensure that sufficient bandwidth exists to the sites where e-file is to be deployed.
- Departments draft and develop detailed project plans using the Ce-I project approach and templates.

Sometimes a philosophical approach and some principles in this regard can bring a sense of reality and pragmatism in approaching massive initiatives of the nature e-file or ECM. Some are listed below:

- Show leadership commitment and demonstrate value
- Ignore the lazy ones
- It is a partnership, not client-service
- Create the value-web, not a value-chain
- Use social networks and opinion leaders
- Show empathy to users
- It is a journey, not a Sunday drive: there will be detours and the road is anything but straight
- Work smarter and deliver value

6.3Implementation plan: Summary of options

As mentioned earlier and discussed in the report the proposed implementation plan for the roll-out of e-file through out the PGWC is based on the following options and recommendations:

Consolidation: Option 1

Consolidation of existing licences
Consolidation of technology platforms and servers

Consolidation: Option 2

Departments with e-filing or ECM initiatives
Department of Transport and Public Works, the Department of Social Development and the Department of Health

Deployment in DOTP as consolidated provincial pilot

Cabinet Services
Office of the Premier
Office of the Director-General and Provincial Programme Office
Rest of DotP
Possibly the "shared services department"

Deployment in remaining departments

All other departments including the WCED

6.4 Implementation plan towards 1 April 2010

The consolidation of software licences and technology-hardware platforms and services should be completed by 1 April 2010.

Departments with existing initiatives are encouraged to continue with their preparation and planning for the 2010/11 MTEF period and beyond.

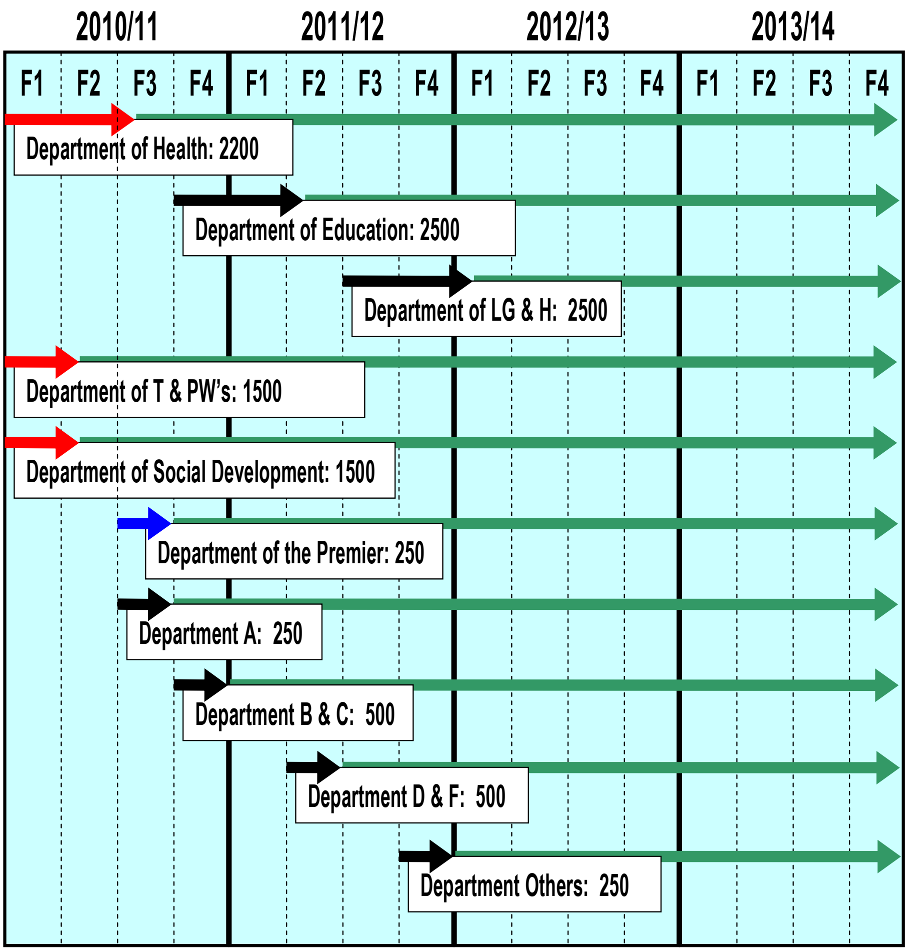
The provincial pilot for Cabinet Services and Office of the Premier, followed by the Office of the Director-General and the Programme Office to be pursued provided that funding is made available. Preparation and planning can commence prior to 1 April 2010.

As SITA has a transversal contract for the supply of Livelink application software and related support, maintenance, development and implementation services, the procurement process is substantially reduced as no massive tender process is required.

6.5 Implementation plan: High-level summary

The following is a **proposed plan for the roll-out of e-filing** throughout the departments of the PGWC spread over a 48-month period time frame:

e-Filing Project: Proposed Implementation Plam



6.6 Implementation plan: Template developed for use by departments

The following templates have been developed which departments can use for the preparation, planning, implementation and institutionalisation of the e-file solution:

- Template for the implementation of a documents management system (e-file) in a department. (See attached Annexure C.)
- Template to determine and measure the return-on-investment in an e-file solution. (See attached Annexure D.)
- Template for a change-management plan for the implementation of an e-file solution. (See attached Annexure E.)
- Template for a provincial, uniform file plan. (See attached Annexure F.)
- Project template for an e-file or ECM project. (See attached Annexure G.)
- Project-management templates which are available from the Ce-I project office.

6.7 Implementation plan: Conclusion

In conclusion, it is recommended that the proposals in this document be approved in principle and implemented within the relevant budget allocation over the next 48 to 60 months.

7. HUMAN RESOURCE IMPLICATION

7.1 Implication for records-management structures

The implications of the e-file recommendations will be on the staff responsible for records management including the registries where the focus will now on electronic records.

The organisational structure can be defined as "the pattern of jobs in an organisation". It seeks to clarify how people in an organisation are placed together to perform certain activities. The structure is informed by the strategic goals of an organisation and as a result, a good structure should enable the effective implementation of the strategy. Organisational structure or chart, processes-design and job-design are vital elements in strategy implementation. Strength in a structure may create competitive advantages in delivering desired goals whereas weaknesses, at the same time, may have the opposite effect.

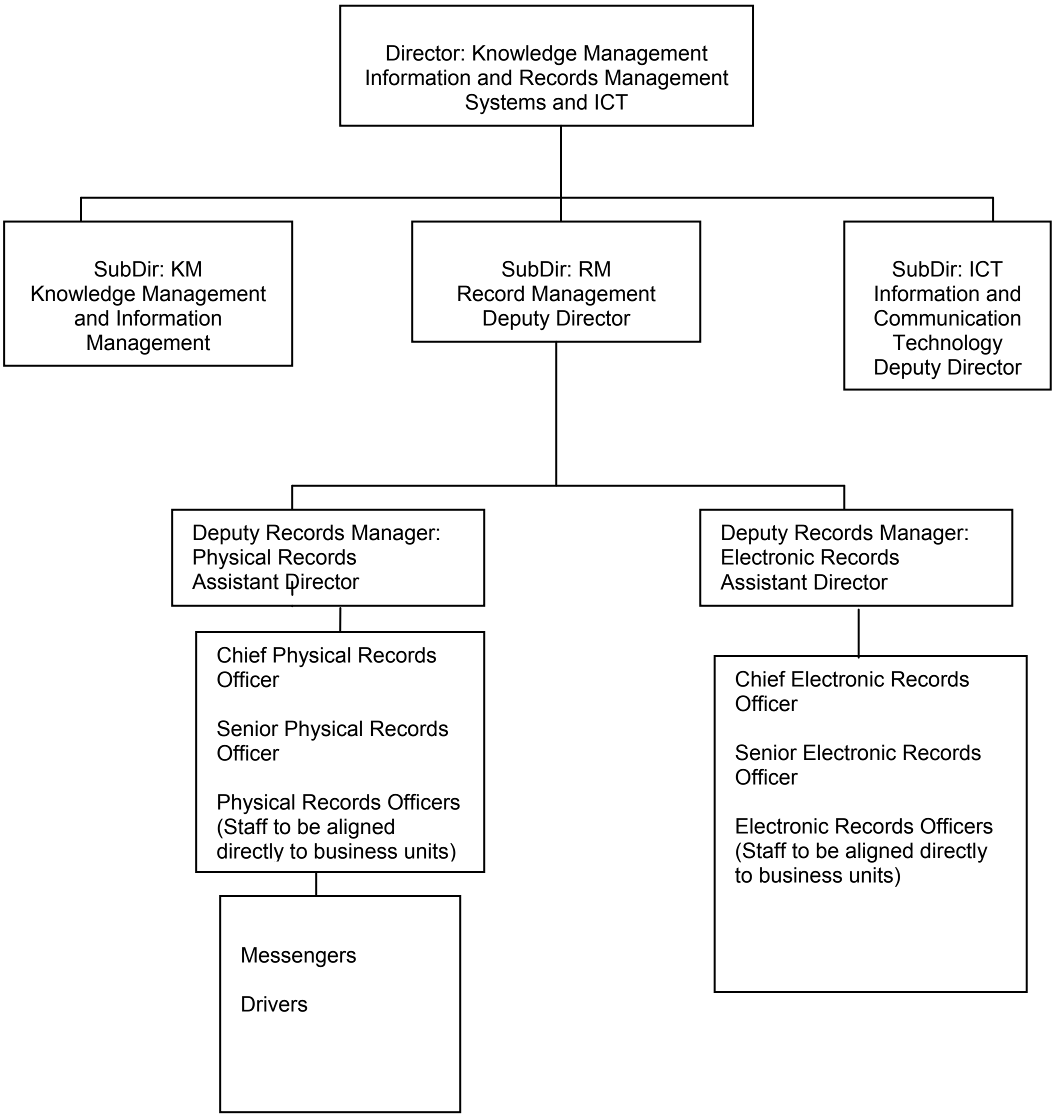
In essence, managers must ensure that the structure supports strategy and direct work and talent effectively. In the case where an organisational strategy changes, the structure should be modified or realigned to the changing strategic needs or it will simply become irrelevant to the changing external and internal environment (Lee 2008: 2-5).

The PGWC has thus acknowledged the changes in the global economy, where information has became a means of production and a source of competitive advantage and subsequently introduced e-file. This necessitates the modification of the organisational structure in order to reorganise the information related disciplines: information management, records management, knowledge management and information technology. The envisaged modification of these information disciplines include, amongst others, formalising all these functions under a single component across the departments in the Province in order to achieve optimal co-operation, to develop a single strategy and to create the necessary synergy across these currently independently managed disciplines for better service delivery.

The Organisational Design Unit has already captured this development and adjusted the organisational structure of the Western Cape Education Department accordingly.

7.2 Proposed structure

Herewith the proposed prototype structure for the use by all the departments in the Province.



7.3 Motivation for the proposed structure

The recommendations are basically informed by the following:

- Lack of comprehensive information strategies for departments.
- Lack of integration amongst the information sectors: information technology, records management and knowledge management, although a part of the information sector are grouped separately and functions as autonomous divisions with no integration at all levels.
- Information disciplines operating in silos and graded differently as management and support functions respectively.
- To make provision in the records-management function to cater for the needs of e-filing.
- Lack of sound records-management practices in many departments in the Province and compliance with Provincial Archives and Records Service of the Western Cape Act, 2005 (Act 3 of 2005).
- To address the lack of consistency in the organisational structure across the departments.
- The need to expand or formalise the scope of records managers to cover the ministries in order to mitigate the negative impact of the constant changes of ministries staff in the proper management of records.
- To root out ineffective designated records managers across the departments and replace them with fully dedicated and qualified records managers according to the requirement of the Provincial Archives and Records Service Act.

7.4 Advantages of the proposed structure

This structure offers the following advantages:

- It enables the formulation of an integrated provincial and departmental information-management, records-management and knowledge-management strategy.
- It develops the information-management, records-management and knowledge-management capacity across the Province.
- It promotes co-operation among the three information sectors and creates the necessary synergies required for better service delivery.
- It provides the opportunity for information-management and knowledge-management staff to collaborate and work together as one homogenous group.
- It facilitates the development of training in respect of information-related disciplines within our tertiary institutions which are increasingly becoming scarce skills.
- It facilitates in-service training of staff within and across the departments.

- It results in joint capacity building across departments with the intervention of service providers that can easily be integrated.
- It aligns allocation of staff below managers directly to business units, thereby creating an environment that promotes the following:
  - Permits information officers to gather specialist information about the business unit.
  - Renders information support instantly and on a continuous basis.
  - Builds trust between business units and the information support staff.
  - Troubleshoots problems as they arise and reports immediately to the manager.

- It is susceptible to split and restructure departments when necessary with the minimum disruption of service.
- It can be used by big, medium and small departments alike, and the only difference will be the levels of supervisory and management staff due to the span of control of the respective positions across the departments.

7.5 Further refinement of the proposed structure

The proposed organisational structure for a records-management environment, incorporating electronic-records management, is only a proposed structure as a basis for further refinement by the organisational development unit. This will have to include additional or amended job descriptions or posts.

8. FINANCIAL IMPLICATION

8.1 Summary of proposed plan for roll-out of e-file

As mentioned earlier, the **proposed plan for the roll-out of e-file** through out the PGWC is based on the following options and recommendations:

Consolidation: Option 1

Consolidation of existing licences
Consolidation of technology platforms and servers

Consolidation: Option 2

Departments with e-filing or ECM initiatives
Department of Transport and Public Works, the Department of Social Development and the Department of Health

Deployment in DotP as consolidated provincial pilot

Cabinet Services
Office of the Premier
Office of the Director-General and Provincial Programme Office
Rest of DotP
Possibly the "shared services department"

Deployment in remaining departments

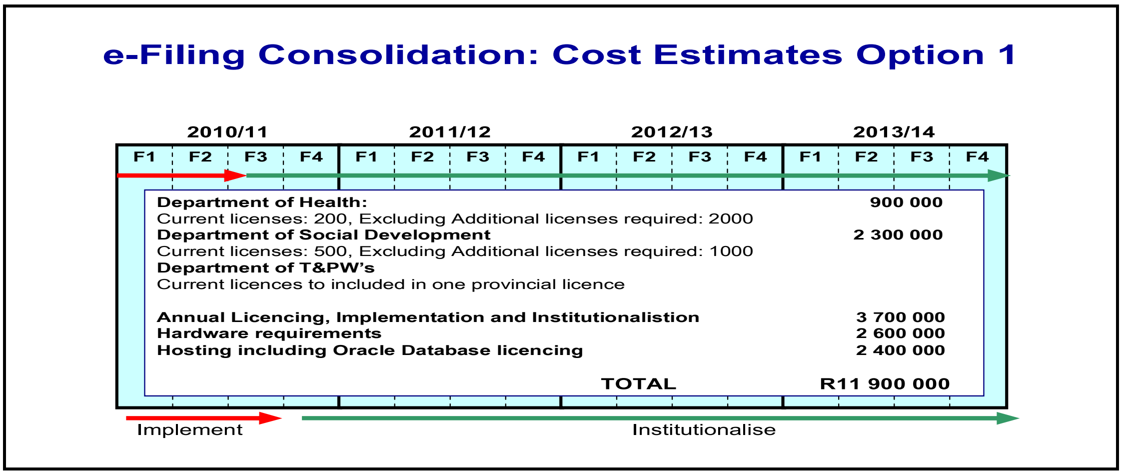
All other departments whether they are split or not e.g.
Western Cape Education Department
Cultural Affairs and Sport
Local Government and Housing
Environmental Affairs and Planning
Finance and Treasury
Economic Development and Tourism
Agriculture

The costing and budget implications for the above plan is detailed below and is focused primarily on the conversion of the existing physical records housed in the human resource, finance and general registries throughout the departments of the PGWC.

Further costing may be required should departments pursue the conversion of massive line-function areas such as patient files.

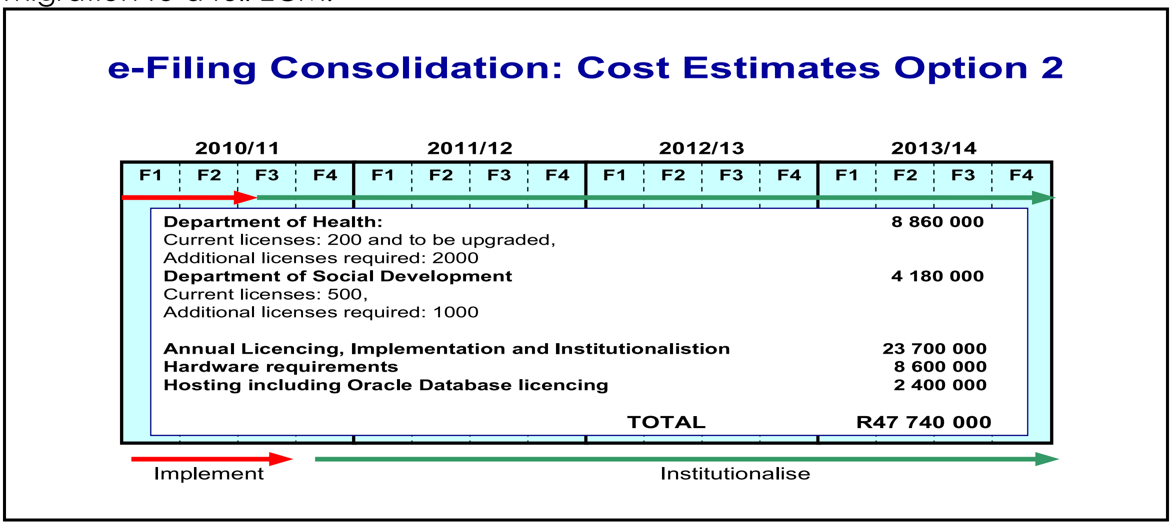
8.2 Consolidation: Option 1

The following is a summary of estimated **costing for Option 1** which is basically a consolidation of the existing e-file initiatives in the Departments of Health, Social Development and Transport and Public Works and excludes expansion or migration to a full ECM:



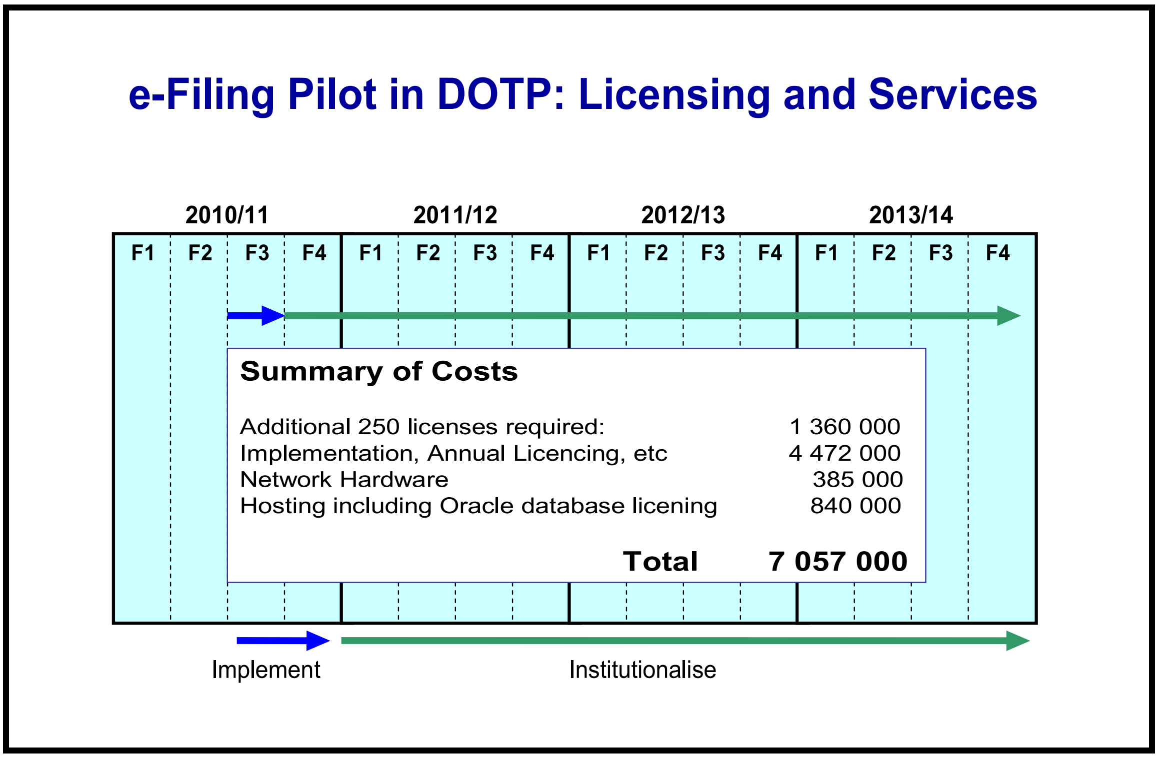
8.3 Consolidation: Option 2: Transport and Public Works, Health and Social Development

The following is a summary of estimated **costing for Option 1** which is basically a consolidation of the existing e-file initiatives in the Departments of Health, Social Development and Transport and Public Works **but** includes expansion and migration to a full ECM:



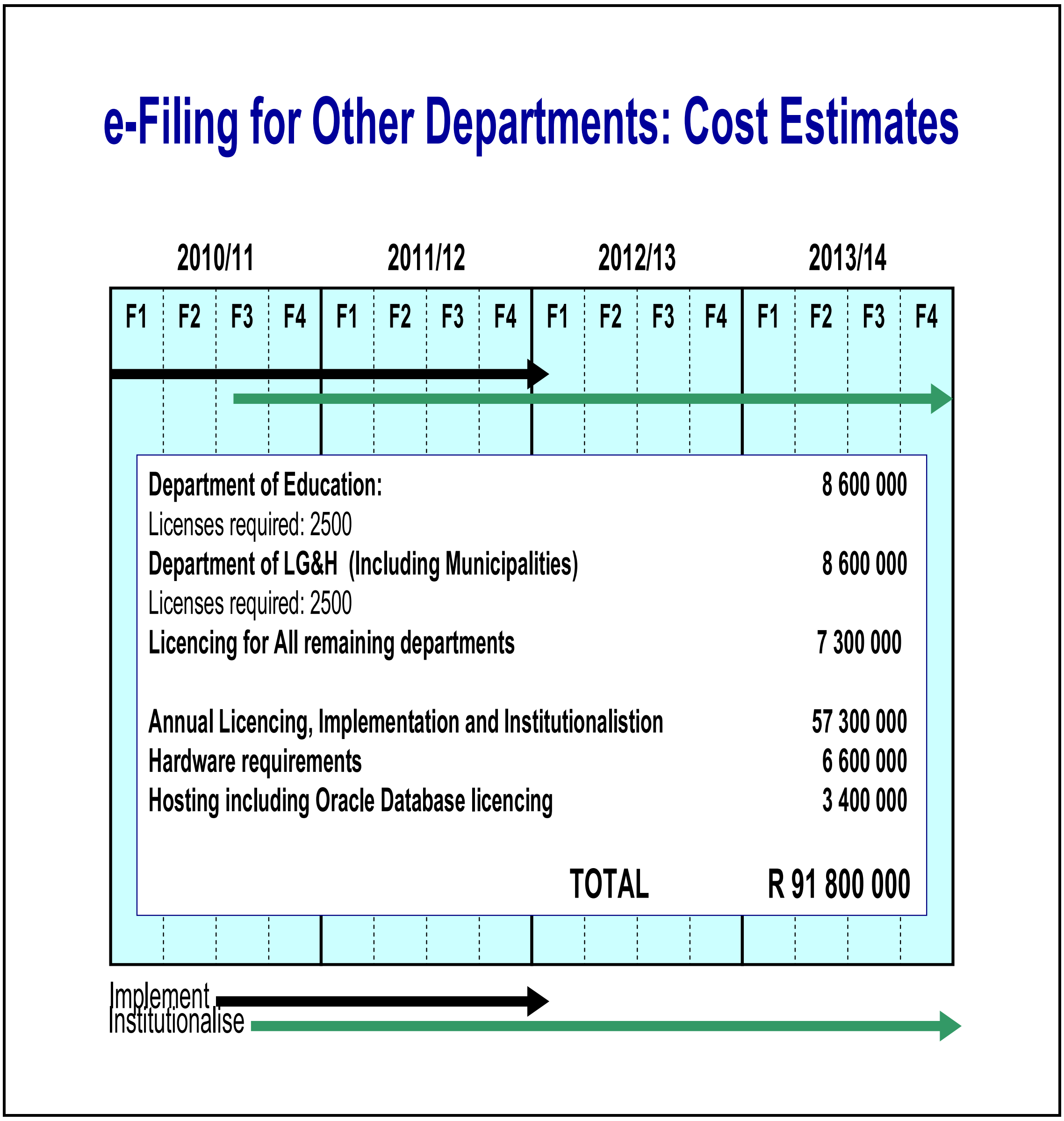
8.4 Consolidation: Option 2 – Deployment in DotP and provincial pilot

The following is a summary of estimated costing for **deployment in DotP and as a provincial pilot**, including Cabinet Services, the Office of the Premier, the Office of the Director-General and the Provincial Programme Office and eventually the rest of DotP and possibly the "shared services department":



8.5 Consolidation: Option 4 – Deployment in remaining departments

The following is a summary of estimated costing **deployment in the remaining departments of the PGWC, including the WCED, Local Government and Housing (and some municipal initiatives driven by Local Government and Housing):**



8.6 Summary of costs and estimated budgets

The following is a summary of estimated **operational or recurring costs** across all departments of the PGWC:

e-Filing Project: Operational Costs

2010/11				2011/12				2012/13				2013/14			
F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4

The envisaged operational costs will increase as departments implement the e-File / ECM solutions by 2013/14 and the basic operational costs are estimate as follows:

Annual Licencing	**9 400 000**
Hosting (which includes server technology refresh)	**13 600 000**
Annual Maintenance and Support	**7 200 000**
TOTAL	**R 30 200 000**

The following are **summaries of all costs and budget estimates, licencing, implementation, hardware and hosting,** across all departments of the PGWC, excluding end-user equipment:

e-Filing Provincial Project: Summary of Costs (A)

2010/11				2011/12				2012/13				2013/14			
F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4

	HSD/TPW/SD	DOTP	WCED & DEPTS
Licencing	13 040 000	1 360 000	24 500 000
Implementation	23 700 000	4 472 000	57 300 000
Hardware	8 600 000	385 000	6 600 000
Hosting	2 400 000	840 000	3 400 000
Total	47 740 000	7 057 000	91 800 000

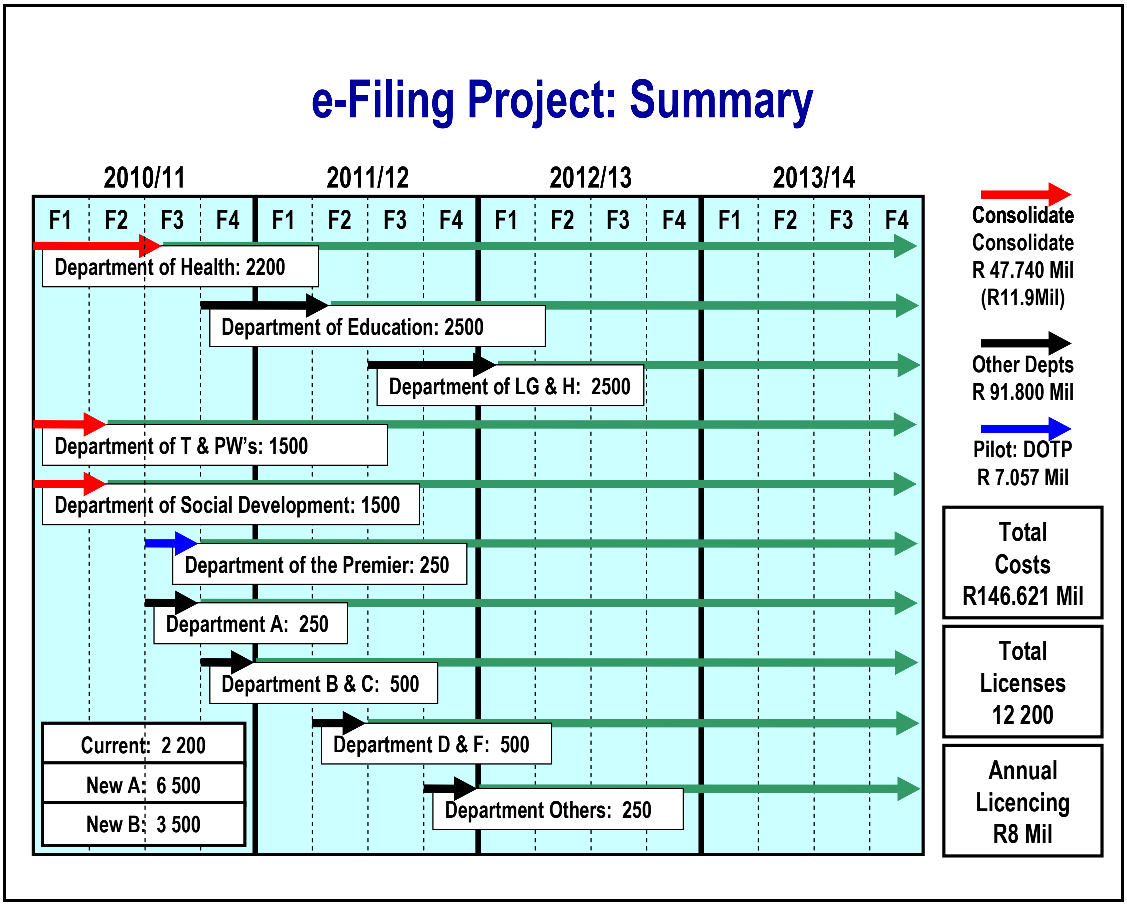
e-Filing Provincial Project: Summary of Costs (B)

	HSD/TPW/SD	DOTP	WCED & DEPTS	TOTALS
Licencing	13 040 000	1 360 000	24 500 000	38 924 000
Implementation	23 700 000	4 472 000	57 300 000	85 472 000
Hardware	8 600 000	385 000	6 600 000	15 585 000
Hosting	2 400 000	840 000	3 400 000	6 640 000
Total	47 740 000	7 057 000	91 800 000	146 621 000

The envisaged operational costs will increase as departments implement the e-File / ECM solutions by 2013/14 and the basic operational costs are estimate as follows:

Annual Licencing	9 400 000
Hosting (which includes server technology refresh)	13 600 000
Annual Maintenance and Support	7 200 000
TOTAL	R 30 200 000

The following is a summary of **estimated costs, budget and estimated implementation time frames** across all departments of the PGWC, excluding end-user equipment:



The following is a summary of **costs and budget estimates spread over the MTEF period** across all departments of the PGWC, excluding end-user equipment:

E-File Solution Budget Proposal

Total project expenditure of R 150 Mil over 4 years

Year 1 (Option 1 only) – Consolidation & DoTP	**R21 Mil or**
Year 1 (Option 2) – Consolidation, DOTP, Health & SD	**R48 Mil**
Year 2 – WCED & Some departments	**R51 Mil**
Year 3 – Remaining Departments	**R38 Mil**
Year 4 – Remaining Departments	**R13 Mil**

The following has been spent by departments of e-file initiatives over the past five financial years:

Transport and Public Works (Since 2006)	R 45 294 802
Social Development (Since 2005)	R 19 036 317
Health Department: Indicative for 2009/10	R 900 000
TOTAL	**R 65 231 119**

The above investment obviously needs to be protected and built-upon and is key to the e-file initiative, particularly the investment by the Department of Transport and Public Works focusing on electronic-document management and collaboration.

In order to ensure standardisation across the PGWC it is imperative that the budget remains centralised for e-file or ECM and that implementation be departmentally driven and based on strong project management principles.

A. de Freitas
E-file Workstream Leader
1 October 2009

9. ANNEXURE

ANNEXURE A: ACRONYMS

ARH	Archives Records Handbook
CBT	Computer Based Training
CD	Chief Director
Ce-I	Centre for e-Innovation
CIO	Chief Information Officer
CITCOM	Central Information Technology Forum
CM	Change Management
CMP	Change Management Plan
CoCT	City of Cape Town
DAM	Digital Asset Management
DAR	Document Archiving and Retrieval
DCAS	Department of Cultural Affairs and Sport
DDG	Deputy Director General
DG	Director General
DGITO	Departmental Government Information Technology Officer
DIR	Director
DITCOM	Departmental Information Technology Forum
DLGH	Department of Local Government and Housing
DTP&Ws	Department of Transport and Public Works
DotP	Department of the Premier
DOD	Department of Defence
e	Electronic
e-DOCS	Electronic Documents
ECM	Enterprise Content Management
ECMF	Enterprise Content Management Forum
EDMS	Electronic Document Management Solution
ECT	Electronic Communications and Transactions
EMA	e-Mail Management and Archiving

FAQs	Frequently Asked Questions
FM	Financial Management or Forms Management
FP	File Plan
FTEs	Full Time Equivalents
GB	Gigabyte
GITO	Government Information Technology Officer
GMS	GITO Management Services
HR	Human Resources
HRM	Human Resources Management
IS	Information Systems
ISAD	Information Society and Development
IT	Information Technology
ICT	Information and Communication Technology
LAN	Local Area Network
KB	Kilobyte
KBps	Kilobytes per second
MB	Megabyte
NAA	National Archives Act
NARs	National Archives Regulations
NARS	National Archives and Records Services
NARSSA	National Archives and Records Services of South Africa
NEPAD	New Partnership for Africa Development
MDGs	Millennium Development Goals
MISS	Minimum Information Security Standards
MTEF	Medium Term Expenditure Framework
OCR	Optical Character Reader
PC	Personal Computer
PARS	Provincial Archives and Records Services
PGDS	Provincial Growth and Development Strategy
PGWC	Provincial Government Western Cape
PID	Project Initiation Document
PO	Project or Programme Office

PP	Project Plan
PRMF	Provincial Records Management Forum
PSSA	Public Service of South Africa
QOS	Quality of Services
RM	Records Management
RMF	Records Management Forum
ROI	Return on Investment
SA	South Africa
SCM	Supply Chain Management
SD	Social Development
SITA	State Information Technology Agency
TB	Terabyte
URS	User-requirement Specification
WAN	Wide Area Network
WCED	Western Cape Education Department
WCM	Web-content Management
VOI	Value on Investment

ANNEXURE B: REFERENCES AND ENGAGEMENTS

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5. The Promotion of Access to Information Act of 2000
6. The Promotion of Administrative Justice Act of 2000
7. The Public Financial Management Act of 1999
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30. IT Service Delivery Model for Ce-I, IT Services Workstream, 29 July 2009

31. Gartner: Vendor Rating of Microsoft, 3 August 2009

32. Mandates from the Cabinet regarding the information technology function in the PGWC, as well as proposed IT roles and responsibilities, July 2008

ANNEXURE C: TEMPLATE FOR THE IMPLEMENTATION OF DOCUMENTS MANAGEMENT SYSTEM IN A DEPARTMENT

1. INTRODUCTION

1.1 A manual, uniformed filing system is at present used by the head office and the regional/district/satellite offices of the department. It is used for the filing of documents in registries. However, due to the very high volume of files and the contents thereof, it is inevitable that files or documents get lost. The volume of paper traffic is simply too huge to manage manually.

1.2 A document-management system at the head office and at the regional/district/ satellite offices of the department is becoming essential and would resolve the ever-increasing problem of lost documents or files, as well as the easy retrieval and filing of documents and files in an efficient and cost-effective manner.

1.3 Below is a proposal that addresses the benefits of pursuing a digital records or document management route, including cost estimates.

2. IMPACT OF THE CURRENT MANUAL FILING SYSTEM

2.1 The following is a summary of the major factors emanating from the impact of the current MANUAL filing system:

- There is a major lack of floor space at head office buildings.
- Floor strength is also a major problem considering the huge volumes of files that have to be housed.
- Access to the sensitive documentation is open to anyone as the documentation is currently being stored in stairways and in passageways.
- A major disaster could take place in the event of a fire, as there is only one copy of this sensitive information.
- The files sometimes need to be used by more than one member of staff at one single time, resulting in staff productivity dropping as they wait for documentation they need to become available before they continue.

- Staffs are creating TEMPORARY FILES. In other words, copies of the originals are being made and stored as off-site copies of the originals, due to the constant unavailability of needed documentation.

- This results in the original filing system being incomplete.

- There is no control over documentation that is constantly going missing.

- Even though teams that are specifically sent out to search for the original documentation have a high hit rate, the time of the team members is still wasted on searching for the missing documentation.

- When documentation is misfiled, it is lost.

- Career development is hampered due to the manual system.

- Auditing of the current registry files is limited due to the manual system.

- The manual system is slow and cumbersome

3. BEBEFITS OF A DIGITAL FILING SYSTEM

3.1 The following is a summary of the major benefits of a ELECTRONIC or DIGITAL filing system:

- The documentation can be taken off-site, as a digital registry will be available to staff of the department irrespective of where they are housed

- Access to the information will be controlled.

- Access to the information will be fast and efficient.

- You will have a digital copy of the original documentation, in the event of a fire or any other disaster.

- Staff will be able to access the same information at the same time hence, no time wasted, and waiting for documentation to become available.

- Staff should have more time to perform other tasks.
- A central repository of the information will be available to all staff connected to the system and there should be no need for temporary file.
- Auditing is made easier
- No more missing, misfiled or lost documentation.
- The HR section will have control over their sensitive staff information.

4. RECORDS MANAGEMENT PRINCIPLES

4.1 Records management is the creation, maintenance, control and disposal of information in a way that facilitates its most efficient and effective use. Another way of putting it is "applying business rules in an e-business world".

4.2 Records management encompasses several key principles, each of which can be thought of as stand-alone, but pulled together they contribute to a powerful inclusive system for the management of physical and electronic information.

4.3 The MAJOR components are to be clearly specified.

4.3.1 Document preparation

When embarking on a project of this nature, careful consideration will have to be given when planning what documentation will need to be loaded onto the records-management system.

Document preparation can be a labour intensive process whose main aim is to speed up the input stage. This can be achieved by having a clearly defined set of preparation rules, in which the documentation for loading into the system will be sorted and indexed.

Once sorted, the documentation will have all paperclips and staples removed, as well as being straightened and facing the correct way up. It is at this point that unwanted documentation can be removed thereby minimising on unwanted documentation being loaded into the system.

4.3.2 Input

The base component of records management involves creating a digital copy of the original documentation. In other words, physical documents are digitised and placed into the records-management system. Once documentation is scanned or imaged, it can be stored on disk and/or tape.

The imaged documentation also goes through a clean-up process consisting of de-speckling, de-skewing, black border removal etc., to enhance (but not alter) the quality of the image. In certain circumstances OCR and forms-processing recognition and barcode technologies are also used to extract and analyse information and route it more directly.

The goal for many organisations is the elimination of hard copy documents. Once a records-management solution has been implemented, electronic documents can be entered directly into the system from any word processor or spreadsheet application, or from an electronic form application, eliminating the extra steps required for scanning paper documents.

Also, with the proliferation of electronically created unstructured documents a common storage method is needed to file e-mail, faxes, and electronic files.

4.3.3 Bulk scanning

With a project like this, there is always a large backlog that needs to be scanned and loaded into the records management or document-management system.

This process can be approached in two ways:

- The services of a company, which would limit expensive hardware, software, maintenance and staffing costs, can do the bulk imaging. The department would only need to purchase scanning hardware capable of converting the ongoing daily documentation that would need to be loaded into the records-management system.

  OR

- The Department could purchase scanning hardware that would be capable of converting the entire backlog and the ongoing daily documentation. This option will more than likely leave the department with under-utilised hardware once the bulk scanning is complete.

4.3.4 Indexing

Indexing is when the information that is loaded into a records-management system is tagged with key identifying attributes to assist in the fast and efficient retrieval of the required information.

The more defined the indexing criteria is, the faster it is to search and retrieve information. In other words, it is good practice to limit the indexing criteria for each record and document type so that database tables do not get too large and complex.

Indexing used to be thought of as a sub-section of capture. However more and more organisations see this as being the most important part of an electronic document management solution (EDMS). Records-management systems also use "meta-data" which is often described as "information about information" to assist in complex searching.

It is often not necessary for users to initially view the image or document itself but only the information about the image or document to make a decision. This speeds up the process dramatically and cuts down on network traffic.

4.3.5 Workflow

An important consideration in the records-management software decision deals with workflows.

Workflow solves the ever-pressing questions of “where does the document need to go throughout the organisation, and in what order?”

This is especially important for documents loaded directly into a computer system, instead of being signed off and sent to the next person by hand. The document needs to make the progression electronically, with the same level of response.

It is easy to know there is a form to sign if it is physically sitting on your desktop.

There are four main areas of Workflow:

- ***Ad hoc***: This is often described as queuing and routing: simple workflow passing a document from one person to another.
- ***Administrative***: This requires a little more than ad hoc and usually means passing a file up the ladder or invokes a response from Dick back to Tom.
- ***Collaborative***: This is used when there are a group of people who work together to create and/or revise a document.
- ***Process management***: This is the “full Monty” of workflow, where an organisation can escalate, prioritise, have complex sub-routines, apply strict procedures, everything.

Most organisations have large requirements for ad hoc and/or administrative, with only certain departments requiring either of the latter two types of workflow.

4.3.6 Storage

Once documents have been entered into the chosen system, the information needs to be stored on some sort of electronic medium. The choice of storage device is driven by several factors.

First, the amount or frequency of reference to the material, and second, the speed of access required. Storage space used to be of great concern with electronic documents but the cost of storage has decreased dramatically.

Electronic stores are generally on a network drive where they are accessible to all authorised users with appropriate security protection. A typical word processor document (e.g. Word) will require between 10KB, and 30KB of disk storage per page of text.

The higher limit relates to the current advanced range of word processor applications – simpler applications like Word 6 capacity demands will be at the lower end of the range. Black and white electronic document images of a page of A4 text with no graphics or background colour will average between 35KB to 50KB per page.

It is the experience that a greyscale-scanned image is typically about 50 KB.

4.3.7 Location

Along with the physical data storage device, in any database design the consideration exists of the physical or geographical location of the data. An organisation can maintain a centralised database with all its data stored in one database.

Here the issue of redundant or back-up databases must be considered for reasons of the event of a disaster striking the storage location. In situations where branch offices or multiple facilities exist, comprising multiple input and retrieval locations, the images, documents, etc. can be stored and maintained at the branch facilities, and made available through a common index or connection from a central point.

4.3.8 Communication

An important consideration in terms of document production, storage, retrieval and sharing is that of communication between applications, between hardware, and between locations or functions. With a centralised system, it becomes even more critical that files can be easily shared between systems and networks.

Standard, or, more importantly, “open” file formats must be used for efficient and accurate information maintenance. With the ever-increasing amount of connectivity between organisations, clients, and suppliers, and the sharing of information electronically, standard communication protocols are necessary.

4.3.9 Search and retrieval

Perhaps the most central and underlying component of any electronic document-management system lies in the ability to search and retrieve documents. The ability to retrieve information quickly from a large pool of documents is the driving force behind EDMS.

Along with the different methods of capture, go different degrees of search ability. With the available technology, almost any document can be captured via imaging or keyed entry, and searched for by any word or group of words. The speed of retrieval is another major issue, directly tying together with storage medium, and with the chosen user interface.

5. IMPLEMENTATION TIME FRAMES

5.1 The implementation of the proposed solution, for a large department, can be done over four to five financial years at the head office and the regional/district/satellite offices of the department:

- 2010/2011 Initial user-requirements specifications and procurement of solution
- 2011/2012 Implementation of HR registries
- 2012/2013 Implementation of finance registries, SCM and remaining registries
- 2013/2014 Implementation collaboration and workflows
- 2014/2015 Implementation of remaining requirements, refinement and optimisation

6. IMPLEMENTATION PROCESS

6.1 As mentioned above, the implementation of the proposed solution will be done over five financial years at both the head office and the EMDCs and an implementation process is required.

6.2 The first step is to complete a full user-requirements specification (URS) for the department as a whole and one per major phase.

7

6.3 The implementation of the document-management system will be implemented in the following separate phases:

- 2010/2011 Initial user-requirements specifications and procurement of solution
- 2011/2012 Implementation of HR registries
- 2012/2013 Implementation of finance registries, SCM and remaining registries
- 2013/2014 Implementation collaboration and workflows
- 2014/2015 Implementation of remaining requirements, refinement and optimisation

6.4 The implementation of the system will start in the HR registry at head office as a pilot project. The objective is to use an area that is big enough to evaluate but at the same time small enough to manage. Should it be successful, then the project will proceed to the next phases or areas.

7. GENERIC PHASES WITHIN THE IMPLEMENTATION PROCESS

7.1 As mentioned earlier, the implementation of the proposed solution will follow an implementation process methodology. Within the process, major phases as described below, will be followed and always adhering to the generic principles of records management.

7.2 PHASE 1 – INDEXING AND BAR-CODING OF FILES

7.2.1 The implementation of the indexing and bar-coding of files at the general registry. This phase will include:

- The preparation of documents to be bar-coded and indexed.
- The indexing and bar-coding of the documents to create an electronic registry system according to the requirements stipulated in the National Archives Act, 1996 (Act 43 of 1996).
- Training of personnel.

7.3 PHASE 2: BULK AND ONGOING SCANNING

7.3.1 The implementation process of the bulk scanning and ongoing scanning will be as follows:

- The preparation of current documents for bulk scanning. This will include the following:
    - The removal of staples, copying of faxes, etc., of all current records to be scanned.
    - The indexing criteria for the scanning of the documents.
- The bulk scanning and ongoing scanning of current records, i.e. records of the filing system which are still in use.
    - The provision and installation of software.
    - The provision and installation of the scanners.
- The indexing and scanning of the documents after scanning.
- The bulk scanning of all closed volumes of records (volumes of records in the current filing system which have reached a thickness of three centimetres or have become full after a new volume has been opened).
- Training of personnel.

8. ELEMENTS OF THE URS

8.1 User-requirements specifications (URS) will be required before the implementation of the solution and must take cognisance of the following elements:

8.1.1 NEW ELECTRONIC REGISTRY DATABASE

- An electronic registry database must still comply with the directives pertaining to electronic records in terms of the National Archives Act. 1996 (Act 43 of 1996).

- The national archivist must be involved during the design phase of the system.

8.1.2 INDEXING

- A functionally-based subject classification approved by the national archivist should be used to allocate references to records, as this will facilitate retrieval of information and place records in context. The indexing must be linked to the department's filing system.

- The approved file plan must be put on the electronic registry or document management system.

- The indexing of documents must be automated. Bar-coding must be included as a means of identifying documents belonging to a specific file to enable the registry personnel to manage and exercise effective control (e.g. issuing and tracking of files) over files handled by the head office and district-office personnel.

- The information must be indexed according to the needs of the different directorates or divisions. For example, for the enquiry section in the registries, a drop-down default screen would be needed to request:

  (i) persal number

  (ii) identity number

  (iii) date of birth and

  (iv) paypoint.

8.1.3 BULK AND ONGOING SCANNING

- A detailed implementation plan for the project is a requirement.

- The scanners that will be used must be compatible with the hardware of the department.

- Documents up to A3 in size must be scanned.

- The scanner must allow for duplex (back-to-back) scanning.

- The scanner must have an automatic feeder.

- The scanner must be one-touch operational.

- The scanner must be able to be connected to a PC.

- The scanner must be able to support the operating systems used by the department.

- Pertinent drivers must be included in the scanner set-up.

8.1.4 THE SYSTEM

- The system must provide on-screen access to all workstations simultaneously.

- Access to the system must be by log-in code.

- The system must allow for additions to the number of pages etc. on an incremental basis, and make provision for the amendments from legislation.

- The system must be able to reject duplicate reference numbers and/or propose alternative reference numbers as provided by the department and verify the validity thereof.

- Simultaneous viewing of the filing system windows is a prerequisite.

- A printing option must be available. The system must enable the user to zoom in on specifics, for example, in the printing of scanned and printed documents. The scanned and printed documents must be of good quality so as to allow for easy reading.

- There must be adequate security measures within the system. The system must therefore be equipped with an effective audit trail. The system must be password-driven with access limitations. Therefore the system must not allow for any alteration or manipulation of the scanned documents.

- With regard to the bulk scanning to be undertaken, the supplier must ensure that the scanned information is properly stored on the server.

- The system must have a storage medium that is secured and acceptable to the department as well as the national archivist.

- The system must have an e-mail facility for the transfer of electronic files from the head office to the regional/district/satellite offices of the department and back to the head office. Such transfers must be transparent to the user.

- The system must allow for a growth in number of users and should not have any restrictions as to the size of files.

- The system must allow for keyboard alternatives for all features it offers (short-cut keys).

- Images must be able to be viewed from the operating systems within the department.

- Head office and regional/district/satellite offices of the department must be able to access archived images via the system.

- The system must have the facility to e-mail folders to other destinations e.g. National Archives, using GroupWise.

- A standard document must be stored as a template for index purposes.

- The system must allow users to retrieve stored documents by highlighting the information. If the index is unknown to the user, the user must be able to highlight the contents of the document by which a search will be done by the system.

- The system must be able to inform the user that images have been archived and where they are archived.

- The system must be web-enabled.

- The system must be able to provide comprehensive management information.

- The system must provide on-line help functionality by pressing, for example, function key 1 (F1) at any stage while using the system.

8.1.5 THE DATABASE

- The database must point to a specific server at the head office and/or the regional/district/satellite offices of the department where the image is stored.

- The database must point to a specific compact disc at the head office and/or the regional/district/satellite offices of the department where an image is archived.

- The indexes must be replicated on the server at the head office and and/or at the regional/district/satellite offices of the department.

- The personnel at the head office and/or at the regional/district/satellite offices of the department must be able to view the local images.

8.1.6 TRAINING

- The provision of adequate training on site during the implementation of the system and also support to departmental staff during the ongoing scanning is essential.

- Adequate training should enable departmental staff to operate the system independently after the supplier has completes the initial project.

- The provision of training to all the operators and users must be available and include detailed manuals to explain use of the software.

8.1.7 QUALITY CHECKS

- Support staff must be available on-site during bulk scanning to inspect the quality of the scanned documents and to ensure that a good quality standard is maintained.

- Poorly scanned documents must not be accepted.

8.1.8 STAFFING

- The supplier must provide staff and equipment for the duration of the bulk scanning process in collaboration with the department.

8.1.9 TIME FRAMES

- The files must be indexed within the time frame determined by the department.

- The implementation of the ongoing scanning must be phased in within the time frame determined by the department.

8.1.10 ONSITE SCANNING

- The bulk scanning will be undertaken on the premises of the head office and at the regional/district/satellite offices of the department.

- External expertise will be required but individuals may be replaced on the request of the department. The department will not be held responsible for any damages or claims that may arise because of it.

8.1.11 NON-DISCLOSURE OF INFORMATION

- Suppliers must undertake that they will not at any time, whether during the installation of the system or at any time after the termination thereof, divulge to any person any information relating to the department's affairs or business.

9. POSSIBLE SOLUTIONS AND OPTIONS

9.1 File tracking is not proposed at all as it will not improve the current situation significantly and will certainly not justify the costs involved. Furthermore, the entire industry is moving towards the digital route because it solves the file-tracking problems and provides additional benefits described earlier.

9.2 For cost purposes and also to ascertain what it will require to implement the digital solution two options are proposed based on the registries of HRM. Full details are provided in Attachment A.

9.3 A two-solution option proposed as follows can be used:

- Scanning of all files based on certain assumptions, and

- Scanning of only certain files based on certain assumptions.

9.4 The two-solution option proposed is based on an estimated 122 000 files and approximately 13 910 000 documents in the HRM registries as reflected below:

HRM units	EST. NO. FILES	EST. DOCS per

		CATEGORY
Specific	37 000	3 600 000
General	85 000	9 310 000
TOTALS	**122 000**	**12 910 000**

10. ESTIMATE FINANCIAL IMPLICATIONS

10.1 The financial implications are only for the HRM registries. Thereafter, the infrastructure will be in place to accommodate additional registries.

10.2 The first option will cost approximately R12 million.

10.3 The second option, which is not recommended due to envisaged implementation complications and issues, will cost R6 million plus approximately R400 000 per month.

11. RECOMMENDATIONS

11.1 It is recommended that the first option be approved for implementation within the MTEF process of the department.

11.2 It is further recommended that the solution be piloted in HRM for the reasons provided earlier.

11.3 It is also recommended that a full URS be finalised before the solution is implemented as this will in fact determine and document the detailed requirements as well as an accurate cost for each area of implementation. In the case of HRM it will cost approximately R500 000.

11.4 In order to ensure the success of the project, it is recommended that a project steercom and team comprising of the flowing components be established to drive the process:

Steering Committee:	**Project Team:**
DDG (Chairperson)	The Director responsible for Records Management (Chairperson)

The Director DGITO	The IT Services Manager
The CD: HRM	The D: HRM
The CD: FM	The D: FM
Project manager	Other role players

ATTACHMENT A:

HR DEPARTMENT - FILE AND DOCUMENT TOTALS

The department's human resource management function is split into two sections, public service employees and general. Documentation contained within the registries, split between the 4th and the 9th floors of the department's building is as follows:

- **Public Service Employees**

➢ 8 000 active employees
➢ 4 000 inactive employees
➢ 4th Floor storage

FILE CATEGORY	EST. NO. FILES	EST. NO. DOCS/ FILE	EST. DOCS/ CATEGORY
Personnel	12 000	200	2 400 000
Merit	2 000	10	20 000
Housing subsidy	4 000	30	120 000
Guarantee	3 000	20	60 000
Leave	12 000	50	600 000
Workers Comp.	4 000	100	400 000
TOTALS	**37 000**		**3 600 000**

- **General**

➢ 27 000 active
➢ 4 000 active dormant or inactive educators
➢ 9th Floor storage

FILE CATEGORY	EST. NO. FILES	EST. NO. DOCS/ FILE	EST. DOCS/ CATEGORY
Recipients	27 000	200	5 400 000
Contractors	12 000	30	360 000
NGOs	10 000	20	200 000
Temporaries	27 000	50	1 350 000
Other	0		
SUB TOTAL	**76 000**		**7 310 000**

Policy	5 000	200	1 000 000
Active/Dormant	4 000	250	1 000 000
TOTALS	**85 000**		**9 310 000**

- **Totals: Public Service Employees and General**

DEPARTMENT	EST. NO. FILES	EST. DOCS/ CATEGORY
Public Service	37 000	3 600 000
General	85 000	9 310 000
TOTALS	**122 000**	**12 910 000**

- **HR registry floor space and associated costs**

5th Floor 165 m2

9th Floor 111 m2
56 m2
199 m2

Cost per m2
Rent - R30,25/ m2
Operating cost - R11,04/ m2
Total - R41,29/ m2

DESCRITION	FLOOR SPACE	COST/M2	MONTHLY COST
5th Floor	165 m2	R41,29/m2	R6 812,85
9th Floor	366 m2	R41,29/m2	R15 112,14
Total	**531 m2**		**R21 924,99**

OPTION 1 – Full registry conversion with off-site storage

This option has taken into consideration all of the documentation (122 000 files) in the registries, split between the 5th and 9th floors. The documentation will be converted into images and loaded into a records-management system. This will provide full digital access to your information through records management software.

Once all the documentation has been converted into images, it will be moved off-site to an off-site document storage facility. The loading of the files into the system will enable the department to be able to retrieve the original files upon request.

Scanning hardware will be purchased to satisfy the scanning of the ongoing documentation for loading into the records-management system. The existing volumes of ongoing documentation that will need to be processed when choosing the scanning hardware for this solution option has been taken into consideration.

Records-management software costing and professional services to install and maintain the software for one year has also been taken into consideration.

This option excludes all hardware costs other that scanning hardware (i.e. disk storage), ongoing support for the solution and retrieval costs for hardcopy documentation.

The following option has been based on the total volume of approximately (example only).

13 000 000 documents for initial bulk scanning. Costs listed below are indicative only as part of the high-level investigation.

Bulk scanning R
5 200 000,00

Software for 250 users, and

One-year maintenance and professional services R 1 843 750,00

Scanning hardware R600 000,00

Off-site file storage take on costs R600 850,00

Storage for one year R171 150,00

TOTAL R8 415 750,00

OPTION 2: Partial registry conversion with on-site storage

This option has taken into consideration all of the documentation (122 000 files) in the registries, split between the 10th and 11th floors. The documentation will be converted into images and loaded into a records-management system only when the documentation is needed/requested. This will result in a "scan-on-demand" solution.

This option also gives you full digital access to your information through records-management software.

This option considers the fact that the documentation will remain on-site at the department. With this option it is proposed that the supplier looks after the files on the department's premises and takes control of the management and loading of images into the records-management system.

Scanning hardware will be purchased to satisfy the scanning of the ongoing documentation for loading into the records-management system. The existing volumes of ongoing documentation that needs to be processed when choosing the scanning hardware for this solution option has been taken into consideration.

Records-management software costing and professional services to install and maintain the software for one year has also been taken into consideration.

This option excludes all hardware costs other than scanning hardware (i.e. disk storage), ongoing support for the solution and rental for the registry floor space.

The following option has been based on the total volume of approximately 62 000 ongoing file activities and the pulling of 12 000 files a month (example only).

Costs listed below are indicative only as part of the high-level investigation.

File management, insertion, scan-on-demand, loading of images into system.

File management take-on-costs: R976 000

Software for 250 users, and

One-year maintenance and professional services
R1 843 750

Scanning Hardware R600 000

Total cost: Take-on cost of R3 419 750,00 and R222 000,00 per month

ANNEXURE D: RETURN IN INVESTMENT (ROI)

To manage any form of content, you first have to capture it. Capture by itself will not produce any cost savings. The savings come from the process benefits and opportunities that flow once a document is freed from its physical form. It can then be data-extracted, indexed, viewed, moved, replicated, work flowed, stored and preserved electronically.

Industry-wide surveys found that investments in document scanning and capture, when taken as part of a specific process improvement, can produce considerable cost savings in relatively short timescales – frequently paying back the initial investment in less than 12 months from project completion. In addition, the availability of electronic documents continues to earn long-term returns in speed of information access, stronger compliance, better customer service, and considerable space-saving.

ECM at the Department of Transport and Public Works overview

The Department of Transport and Public Works consumes an average 500 000 pages per month of which 30% to 50% becomes records, which have to be stored in line with National Archive policy and regulations.

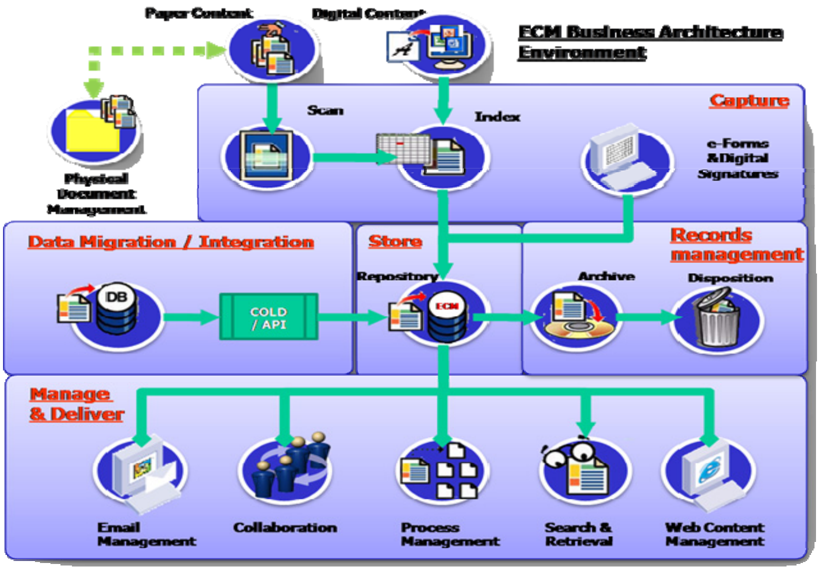
There are currently about 10 million pages of records at 9 Dorp Street alone. Due to space and capacity constraints in the department's official registries, many of these records are being stored outside the official registries. Thus results in:

- Wasted storage space (physical and digital) as a result of record duplication and the absence of document life-cycle management strategies
- Loss of person-hours due to loss or misplacement of key documents
- Sub-par decision-making or excessive authorisations as a result of limited access to relevant decision support information.

This has a negative impact on business processes, productivity, and service delivery to the public as well as regulatory compliance in some processes.

It was intuitive then that the decision to address content management at a department level has realised operational as well as strategic benefits. The implementation of an Enterprise-Content Management (ECM) Strategy has improve service delivery, significantly reduced costs and risks associated with regulatory compliance, helping the Department to realise its strategic intent and other strategic initiatives like Batho Pele and iKapa elihlumayo.

ECM Functional Architecture



Livelink's core document-management and imaging solutions contain all standard document-management functionalities that any best-of-breed solution in its class offers. These include:

- Store captured electronic records in a central repository
- Manage multiple record formats
- Normalise all records into a single, non-proprietary and non-alterable record format such as PDF
- Organises data into a taxonomy that is aligned with existing departmental taxonomy

- Extract and separately store-content metadata for searching and retrieval of records

- Provide powerful search capabilities

ROI Overview

The ECM framework consists of three major categories: create and capture, manage and archive, and retrieve and deliver. Create-and-capture ROI focuses on the number of documents processed, number of hardware devices and the associated cost. Manage-and-archiving functions yield ROI from cost of hard copies saved, storage floor space saved, person-hours saved in document processing, costs saved with associated risk of document and data loss, and compliance penalty cost. Lastly, the retrieval-and-delivery function provides a compelling ROI based upon the number of applications processed, claims handled, invoices processed, and state constituents served.

One of the difficulties is in obtaining benchmarks *before* the system is implemented, the absence of which makes it difficult to measure the ROI. Some areas where cost savings can be found include decreased cost for physical and electronic storage, decreased numbers of steps in processes, time saved for information workers, the ability to outsource a now totally electronic workflow and the enablement of customer self-service. Thus, content technologies often result in substantial value on the investment (VOI) in content management. VOI is an expanded view of value that includes financial ROI plus many forms of non-financial value, such as reuse, sharing and leveraging the knowledge embedded in the State's content.

Tangible ROI is measured in bottom-line currency saved—determining metrics of current practices as a baseline, setting goals, and measuring against those goals. Paper processes can cost as much as 24 times that of electronic processes—measuring how long it takes to process paper today, setting a clear savings objective and measuring again after automation. Dramatic time-savings, and increased service to constituents can be achieved. Measuring intangible return by tying content management deployments to a specific initiative that has metrics of success—for example, being able to deliver a document to a constituent in three to five seconds instead of three to five days will yield measurable improved service to the constituents.

In a recent Open Archive Inc. white paper, authors Sandy Schiele and Betsy Delfosse note impressive statistics and savings. BAE Systems conducted a study that discovered that 80 percent of employees waste an average of half an hour per day retrieving information, while 60 percent are spending an hour or more duplicating the work of others. More statistics supporting the need for document management include:

- Ninety percent of corporate memory exists on paper

- Ninety percent of all the pages that get handled each day in the average office are merely shuffled

- The average document gets copied 19 times

- Companies spend $20 in labour to file a document, $120 in labour to find a misfiled document, and $220 in labour to reproduce a lost document

- Seven and a half percent of all documents get lost

- Three percent of the remainder get misfiled

- Professionals spend 5 to 15 percent of their time reading information, but up to 50 percent looking for it
- Estimates are that efficiencies using modern electronic document management systems and software would result in:

    - A 75 percent reduction in time spent locating and retrieving documents
    - A 75 percent reduction in time spent filing
    - A 50 percent reduction in copying costs
    - A 75 percent reduction in off-site storage costs
    - A 75 percent reduction in on-site storage costs.

Return on Investment in enterprise-content management

Increasingly, enterprise-content management is seen as a bottom line enterprise application and technology with objectives identified as reducing administrative costs, improving efficiency and enhancing profit.

Commonly, when enterprise professionals discuss the ROI of an investment, they are mostly thinking of "financial" benefits. Today, organisations must also consider the "non financial" benefits of an investment.

Financial benefits include impacts on the organisation's budget and finances, e.g. cost reductions or revenue increases.

Non-financial benefits are the so-called "intangibles", "soft", or "unquantifiable" benefits of an investment. These benefits include effects on business operations and productivity.

The OpenText ECM Suite produces positive impacts on business performance and strategic goals. These include improved customer satisfaction, better use of current and archived information, and shorter cycle-time.

The benefits calculation for ECM can be both direct, like paper or archival cost savings, and indirect, like productivity or improved quality.

IDC (part of the International Data Group, IDG) has estimated that the typical enterprise with 1 000 knowledge workers wastes $2,5 million to $3,5 million per year searching for nonexistent information, failing to find existing information or recreating information that can't be found, while Gartner estimates that an enterprise-content management can reduce overall document-related costs by 40%.

ECM enables enhanced use of existing IT infrastructure capacity, document sharing via short links versus multiple e-mail attachments.

It creates the opportunity for off-site storage of objects using more cost effective space and processes.

Financial ROI:

- **Reduces dramatically active filing storage costs** (include the physical real estate of the registry room, the cost to maintain file cabinets, the cost of folders and other hardware review tables).
- **Eliminates inactive and archive storage costs** through the central control and repository of the document (include the physical real estate, outsourced cost to document storage facilities, cost to retrieve documents, cost of physical items such as boxes, labels, etc.)
- **Reduces the number of FTEs (full-time employees) needed** to support the paper associated active and inactive storage centres.
- **Reduced cost of physical object movement,** postage and courier costs versus e-delivery.
- **Cuts the hidden costs of having paper present in local files**, personal files, and smaller "not official" department file areas.
- **Avoids costs of replacing and recovering misplaced, abused and worn out paper documents**. Companies spend $20 in labour to file a document, $120 in labour to find a misfiled document and $220 in labour to reproduce a lost document. (Source: AIIM.)

- **Reduce the cost of legal discovery** due to the reduction of records to be searched (through accurate records capture and timely disposal) and the use of more efficient and accurate search and filtering tools.

- **Cuts costs and increases revenue by**:
    - Lowering paper-handling costs.
    - Providing powerful search capabilities allowing for speedy retrieval of critical documents.
    - Cutting the filing, duplications and retrieval costs of off-site storage.
    - Reducing organisational downtime in the case of natural disaster.
    - Simplifying business-continuity planning.
    - Using space currently needed for paper storage for more productive revenue-generating activities.
    - Bettering digital-asset use.
    - Increasing collaboration on data and knowledge.

Non-financial ROI:

- **Increases productivity** due to electronic management of the content: content creation, revision, approval, distribution and cycle time improved as only the newest version is available.

- **Enables the up skilling of most staff** with regards to records management, system usage and general computer literacy.

- **Saves time** by centrally managing the versions for the content and avoiding duplication.

- **Saves IT resources** by having the content located and stored once (plus versions) in a central repository.

- **Eliminates personal electronic and hard copies spread** throughout the business unit and company.

- **Provides physical resources reduction** as "paper" is no longer printed, marked up and multiple version copies are filed.

- **Improves regulatory compliance** by integrating compliance management capabilities into current business processes.

- **Reduces paper work** and paper needed to print out reports, due to customised views and the comprehensive dashboard.

- **Centralised storage with web access** allows simultaneous access to a single document by multiple staff, irrespective of geographical location.

- **Reduces project start-up time:** shortens learning curve for project team members and saves time once the processes, procedures and templates of documents are created and reused.

- **Delivers standardisation** through the use of e-forms (templates).

Programme deliverables mapped to maturity and solution levels

Programme deliverables identified during the Project Initiation phase are constantly tracked and mapped to agreed solutions and ECM maturity levels. These results are reported back to the executive Steering Committee on a regular basis.

Deliverable	Intervention Type	Status	*Maturity Levels* L1 File Tracking	L2 Capture Content	L3 Document Management	Comments	*SOLUTION TYPE* Physical Tracking	EDMS	Workflow	Back Scanning	Process Scanning/Image	Documents Added	Process Management	Production Management
Pre July 2006 (Prior to programme start)														
Business Case and High Level BRS	Foundational	Complete												
File Plan Customization (File Tracking)	Solutions	Complete	✔			File Plan built in Livelink	✔							
Livelink Appointments Work Flow	Solutions	Complete		✔					✔		✔	✔	✔	
July 2006 to March 2007 (Programme start)														
File Tracking Roll-out	Solutions	Complete	✔				✔							
MVA Work Flow with Performance Reporting	Solutions	Complete		✔		Workflow stopped by MVA due eNatis			✔		✔	✔		
Routing Solution for Goulburn	Solutions	Replaced by MOS				NA								
Content Audit POLB Process	Solutions	Complete		✔		NA								
MOS Implementation and Support	Solutions	Complete				Management							✔	✔
Goulburn Scanning	Solutions	Complete		✔	✔	Management					✔	✔		
April 2007 to March 2008														
CORPUS migration (Existing Policy and Procedures)	Solutions	Complete		✔					✔					
Livelink for Libraries	Solutions	Complete	✔				✔	✔						
Parliamentarian Questions Work Flow	Solutions	Complete		✔	✔				✔			✔	✔	
IYM Work Flow	Solutions	Complete		✔	✔			✔	✔			✔	✔	
HR Policies and Procedures Work Flow	Solutions	Complete			✔				✔			✔	✔	
HR Minutes and Agendas	Solutions	Complete		✔					✔			✔	✔	
PW General Buildings – Scanning and Check-in Solution	Foundational	Complete		✔	✔			✔	✔		✔	✔		
ECM Business Review	Foundational	Complete												
CA Registry Processes and ECM Policy Framework	Foundational	Complete *						✔						
DOTPW User Administration and Security Framework and Solution	Foundational	Complete		✔		NA		✔						
Metadata Model for DOTPW	Foundational	Complete				NA		✔						
Deployment of IT Architecture phase 1 (see paragraph 5.3.1)	IT Architecture	Complete				NA								
April 2008 to March 2009														
E-Registry Solution (Enterprise wide solution to capture and classify content into Livelink)	Solutions	Complete *		✔	✔			✔	✔			✔	✔	
KC – Capturing Content (Finance)	Solutions	Complete		✔	✔			✔	✔			✔		
KC – Capturing Content (PWs)	Solutions	In Progress		✔	✔			✔	✔		✔	✔		
Recruitment Work Flow with Performance Reporting	Solutions	In Pilot Phase		✔	✔			✔	✔		✔	✔	✔	
Goulburn Scanning	Solutions	Complete		✔	✔			✔	✔	✔	✔	✔	✔	
LUD Workflow									✔			✔	✔	
e-Works Password Reset Workflow									✔			✔	✔	
* Process sign-off dependent on Scan Centre														

Conclusion

AIIM Survey results indicate that substantial process benefits will flow from an investment in scanning and capture. Savings in process time, staff costs and storage space mean that payback can be expected in 12 to 18 months after completion of the project. These projects are far more likely to meet or exceed expectations compared to other IT investments.

An integrated ECM solution delivers various management improvement benefits. Management of staff productivity and efficiency is delivered by the ability to electronically monitor parameter-driven processes, it enables the effective management of national and regional archives, facilitating governance-compliant records management.

The electronic audit trail of actions of an ECM solution supports responsibility and accountability.

The collaborative benefits of an ECM solution are clear in so much that the IP created within it, rests in the organisation and in its ECM solution and no longer with the individuals. In addition to this, it enables the seamless transfer of this knowledge through use of workspaces and discussions.

In most organisations there are many more documents and forms that could be usefully scanned than are currently being scanned, and one reason for this is the lack of available scanning platforms close to the process itself. The latest technology, such as distributed capture and intelligent document recognition, would also allow different form types to be more easily streamed. In addition, few enterprise applications are capture-enabled, despite there being a strong desire to integrate capture with process.

In most organisations departmental multi-function printers are underutilised for local scanning. On exploring the potential benefits of a distributed capture platform compared to centralised scanning, it was found that the increased cost of the office staff carrying out local scanning would likely be offset by savings in storage, transport and photocopying. In addition, there were considerable improvements in the turnaround time, an improvement in indexing accuracy and greater flexibility of scanned document types.

Finally, over and above cost savings and productivity improvements, the strongest driver for increasing the number of documents and forms that are converted into an electronic format was considered to be the improved access to information, creating a level playing field for paper and electronic documents both for knowledge-worker access and for the increasingly important legal discovery process. Standardising business workflows around scanned documents and forms will also reduce errors and improve process compliance within a regulatory regime.

ANNEXURE E: PROPOSED CHANGE MANAGEMENT PLAN

A. Introduction

This document provides a summary of the change-management plan and activities developed to support the Livelink departmental deployments. While this plan is project specific, it is further enhanced by the ECM Programme's change-management initiatives. In compiling this document we have referred to the following sources of information:

- The relevant PID
- The feedback from the Livelink Forum survey polls
- The change-readiness assessment
- Feedback provided by project sponsors on the specific challenges likely to be faced

B. Change-management activities

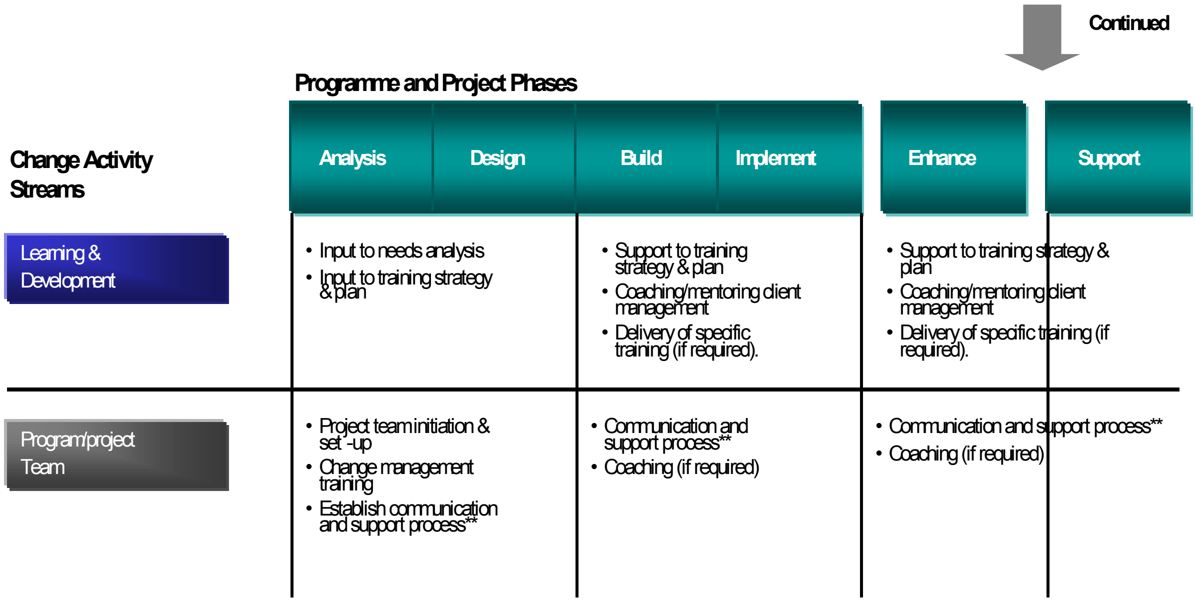
In line with the ECM Programme change strategy, we have followed the model outlined below in developing this plan:

Diagram 3: Strategic change-management approach

Programme and Project Phases

Change Activity Streams	Analysis / Design	Build / Implement	Enhance	Support
Stakeholder Management (includes Labour if applicable)	• Identify & interview stakeholders • Complete analysis • Complete network map • Agree tactics & approach • Assign internal responsibilities	• Meet and monitor • Review and realign tactics	• Meet and monitor • Review and realign tactics	• Meet and monitor • Review and realign tactics
Communication Strategy & Plan	• Link business vision to program • Develop future state picture • Develop branding & logo • Analyse current internal communications options • Develop communication strategy,plan and activities – start rollout	• Communications activities • Develop measurement process & implement	• Communications activities • Measurement & adjustment	
HR/OD Impact	• Assess current HR/OD environment • Identify possible levers • Identify people impact of future state. • Complete gap analysis	• Input to new structures • Input to new Job Descriptions • Input to skills requirements • Input to new measurements • Input to policy/procedure changes (PM, Rewards, etc.) • Measure success	• Measure success	• Measure success
Change Education	• Readiness assessment design and implement • ID Change leadership training • ID Change education training • ID change agents & approach and tactics • Design interventions– start rollout	• Specific change interventions • Activate change agents and monitor	• Specific change interventions • Monitor change agents	

Continued below



B: 1 Stakeholder management

The following stakeholders have been identified and responsibilities assigned for liaison by the DCX project team:

Table 1: Processes stakeholder analysis

Stakeholder type	Dept. identification and role required	Responsibility supplier
Sponsors	Exec. sponsor – demonstrated sponsorship.	
	Director of HR (newly appointed) – demonstrated sponsorship, project monitoring, business metrics	
	Communications, project activities, project co-ordination as required, production statistics	
	Communications, project activities, project co-ordination as required, production statistics	
Influencers	Directors/senior users Senior users (a) Senior users (b)	 Project team Project team
Agents	Senior users (a) Senior users (b)	Sign-off – project team

	Change agents	Change management
Targets	Sub-component staff	Change management and trainers

B: 2 Communications

The project level communications activities will be as follows:

Table 2: Communications matrix – HRM processes

Audience	**Medium of communication**	**Key messages**	**Frequency and timing**
ECM Programme stakeholders	Programme steercom meetings Stakeholder e-shot	• Reinforce the vision and mission • Business case/benefits • Target business metrics • Status reports (all projects) • Risks and issues log • "Memory Jogger" for Livelink use (e.g. ECM top tips) • Business integration issues • Project status information • Success stories • Leadership through change • Change-resistance management • Provide projects' status and next steps	Monthly as per published schedule Monthly (first week)
Project Specific Stakeholders & Change Targets	Project Overview presentation Presentation at monthly staff meeting	• Why are we doing this? • What is in it for us? • Who is involved? • What is happening, how and when? Project status reports: • What's happening now • What's next • Who is involved	Once off prior to process and technical design Monthly starting 28/01/08

	Bulletin board in component area	• Q & A session • Project plans and progress, posters, photographs, business benefits, new processes, training initiatives, success stories.	Updated after above meeting

(continued…)

Audience	**Medium of communication**	**Key messages**	**Frequency & Timing**
Change agents	Change agents' workshops	• Information as requested to report back to colleagues • Reinforce the vision and mission • Sell the projects' benefits • Provide projects' status and next steps • Create future interest • Promote/celebrate successes • Implications of change on a personal level • To receive feedback on communication effectiveness	Every two months
Project team	Weekly meetings	• Status • Risk and issues • Feedback from steercom meetings	Weekly (as per project plan)
Department of Transport and Public Works - all	Livelink lingo and posters	• ECM vision • Business benefits (the why) • Project general information • Success stories • Individual involvement and/or contribution • ECM general information • Create future interest	Monthly (last week) Monthly (mid)

		• Implications of change on a personal level • Personal responsibilities in a change situation	

B: 3 Human resource and organisational development impact

Once the new or revised business processes and the Livelink technical specification have been signed off, **the following activities should be completed prior to technical "going live".**

- Identify the impact on the organisational structure.
- Identify the impact on individual positions (activities and IPDP implications).
- Document and notify management for implementation.
- Identify any new skill requirements and ensure that needs are met via the learning and development plan (refer B:5 below).

Once implemented, monitor performance as per project user support plan.

B: 4 Change education

This area of change management focuses primarily on two issues:

- Change-resistance management
- Education of supervisors/managers on managing a changing environment.

The following activities are to be scheduled into the project plan. These activities also form part of the wider ECM Programme change strategy:

- A "leadership through change" workshop for supervisory staff (combined with their colleagues from other areas).
- Change-education workshops for individual staff members. Groups of plus-minus 15 in one workshop. Again, groups from different components may be combined.

Both workshops are approximately three hours in duration and it is recommended that they are completed off-site. Timing should be as early as is practicable in the project and obviously before "going live".

B: 5 Learning and development

At an ECM Programme level a number of skills requirements are being identified that will facilitate the implementation of Livelink department-wide. For example, generic computer skills and basic production control and management. However, once the new business process model, technical specification and required skills are identified (refer to B: 3 above), it will be possible to develop the training strategy and plan for this specific project implementation. The plan will identify the following:

- The various training audiences and their specific needs.
- The training requirements in terms of knowledge, skills and abilities for the audiences identified.
- Training delivery approaches for each skills area (e.g. face-to-face classroom, one-on-one, self-learning, CBT, etc.).
- Proposed delegate lists.
- The plan for training material development (as required).

- The actual training activities and associated schedule of timings.

B: 6 Project team

The focus of the activities completed under this heading is to ensure that the project team members are all clear on their roles, the business case for the project and the communication and reporting activities required of them. For this project the following activities are in place or have been completed:

- Weekly project team meetings (scheduled from 2010).

C. Conclusion and next steps

This change plan is specific to a Livelink departmental project that is a component of the wider ECM Programme of a department. The project plan is initialised, the activities may be further integrated in terms of appropriate timing.

The delivery of these activities will be the primary responsibility of the appointed change consultant supported by the ECM Programme change manager and in accordance with the direction of the Programme and project managers.

ANNEXURE F: PROPOSED UNIFORM FILE PLAN FOR THE PGWC

WESTERN CAPE PROVINCIAL DEPARTMENT

PROPOSED UNIFORM SUPPORT
FILING PLAN

First draft
Version 1
25-09-2009

LIST OF MAIN SERIES

1. STATUTORY AND REGULATORY FRAMEWORK
2. ORGANISATION AND CONTROL
3. HUMAN RESOURCE MANAGEMENT
4. INTERNAL FINANCIAL MANAGEMENT
5. SUPPLY CHAIN MANAGEMENT
6. INTERNAL FACILITIES MANAGEMENT
7. INTERNAL TRAVEL AND TRANSPORT SERVICES
8. INTERNAL INFORMATION SERVICES
9. INTERNAL COMMUNICATIONS
10. LEGAL SERVICES
11. ATTENDING AND HOSTING MEETINGS AND OTHER GATHERINGS

1. STATUTORY AND REGULATORY FRAMEWORK

(This main series has to do with all functions relating to the drafting and amendments of acts, bills, green papers and white papers. It also contains functions regarding obtaining of legal opinions and interpretations.)

NUMBER	DESCRIPTION	DISPOSAL
1/1	**Own legislation**	
1/1/P	Policy	
1/1/R	Routine enquiries	
1/1/1	Acts and bills	
1/1/1/1	Drafting, amendments, comments and tabling	
1/1/1/2	Interpretation and legal opinions	
1/1/2	Regulations	
1/1/2/1	Drafting, amendments, comments and tabling	
1/1/2/2	Interpretation and legal opinions	
1/1/3	Instructions, directives and codes of practice	
1/1/3/1	Drafting, amendments, comments and tabling	
1/1/3/2	Interpretation and legal opinions	
1/1/4	Green papers and white papers	
1/1/4/1	Drafting, amendments, comments and tabling	
	Interpretation and legal opinions	
1/2	**Other legislation**	
1/2/R	Routine enquiries	
1/2/1	Acts and bills	
1/2/1/1	Drafting, amendments, comments and tabling	
1/2/1/2	Interpretation and legal opinions	
1/2/2	Regulations	
1/2/2/1	Drafting, amendments, comments and tabling	

NUMBER	DESCRIPTION	DISPOSAL
1/2/2/2	Interpretation and legal opinions	
1/2/3	<u>Instructions, directives and codes of practice</u>	
1/2/3/1	Drafting, amendments, comments and tabling	
1/2/3/2	Interpretation and legal opinions	
1/2/4	<u>Green papers and white papers</u>	
1/2/4/1	Drafting, amendments, comments and tabling	
1/2/4/2	Interpretation and legal opinions	

2. <u>ORGANISATION AND CONTROL</u>

(Matters dealt with in this main series have to do with the determination of organisational goals and objectives, as well as organisational management and institutional transformation.)

NUMBER	DESCRIPTION	DISPOSAL
2/1	**<u>Reorganisation of functions</u>**	
2/1/1	Acquisition of functions	
2/1/2	Relinquishing of functions	
2/1/3	Privatisation of services and functions	
2/2	**<u>Delegation of powers</u>**	
2/2/1	<u>Permanent delegations</u>	
2/2/1/1	By the President	
2/2/1/2	By the Minister	
2/2/1/3	By the Director-General	
2/2/1/4	By the Chief Director	
2/2/2	Temporary delegations	
2/3	**Establishment of new sections/offices**	
2/4	**<u>Work study, extension demands and systems investigations</u>**	
2/4/1	<u>Investigations, surveys and reports</u>	
2/4/1/1	Department	
2/4/1/2	Directorates	
2/4/1/3	Sub-directorates	
2/4/1/4	Components/sections	
2/4/1/5	Regional offices	
2/4/1/6	District offices	
2/4/1/7	Institutions	
2/5	**<u>Planning</u>**	

NUMBER	DESCRIPTION	DISPOSAL
2/5/P	Policy	
2/5/R	Routine enquiries	
2/5/1	<u>Strategic planning</u>	
2/5/1/1	Department	
2/5/1/2	Directorates	
2/5/1/3	Sub-directorates	
2/5/1/4	Components/sections	
2/5/1/5	Regional offices	
2/5/1/6	District offices	
2/5/1/7	Institutions	
2/5/2	<u>Business plan</u>	
2/5/2/1	Department	
2/5/2/2	Directorates	
2/5/2/3	Sub-directorates	
2/5/2/4	Components/sections	
2/5/2/5	Regional offices	
2/5/2/6	District offices	
2/5/2/7	Institutions	
2/5/3	<u>Annual Performance Plan (APP)</u>	
2/5/3/1	Department	
2/5/3/2	Directorates	
2/5/3/3	Sub-directorates	
2/5/3/4	Components/sections	
2/5/3/5	Regional offices	
2/5/3/6	District offices	
2/5/3/7	Institutions	

NUMBER	DESCRIPTION	DISPOSAL
2/6	**<u>Office instructions and codes</u>**	
2/6/1	Office instructions	
2/6/2	Staff codes (Also includes the Code of Conduct.)	
2/7	**<u>Transversal policy documents</u>** (Where applicable a copy of the circular could be filed on the relevant subject file.)	
2/7/1	National	
2/7/2	Provincial	
2/7/3	Departmental	
2/7/4	Component	
2/8	**<u>Organisational performance systems</u>**	
2/8/1	<u>Performance audits</u>	
2/8/1/1	Department	
2/8/1/2	Directorates	
2/8/1/3	Sub-directorates	
2/8/1/4	Components/sections	
2/8/1/5	Regional offices	
2/8/1/6	District offices	
2/8/1/7	Institutions	
2/8/2	<u>Service-delivery improvement plan</u>	
2/8/2/P	Policy	
2/8/2/R	Routine enquiries	
2/8/2/1	Department	
2/8/2/2	Directorates	
2/8/2/3	Sub-directorates	
2/8/2/4	Components/sections	

NUMBER	DESCRIPTION	DISPOSAL
2/8/2/5	Regional offices	
2/8/2/6	District offices	
2/8/2/7	Institutions	
2/9	**<u>Fraud prevention</u>** (For cases reported, see ?.)	
2/9/P	Policy	
2/9/R	Routine enquiries	
2/9/1	Fraud prevention strategies and plans	
2/9/2	Mechanisms	
2/9/3	Monitoring and reporting (Including whistle-blowing.)	
2/9/4	<u>Risk assessment</u>	
2/9/4/1	Profile and reports	
2/10	**<u>Occupational Health and Safety</u>**	
2/10/P	Policy	
2/10/R	Routine enquiries	
2/10/1	Audits and reports	
2/10/2	Minutes	
2/10/3	Arrangements and programmes	
2/10/4	Contingency/emergency plans (1. For security measures see ?. 2. For security installations see ?. 3. For safety and security services see ?. 4. For the maintenance of the security installations see ?.)	
2/11	**<u>Reports</u>** (1. This sub-series should only be used for annual, quarterly, monthly and other reports which cannot be placed under any other main series. See also paragraph ? of the General Instructions. 2. Other reports and returns pertaining to subjects for which separate main series have been provided for should be dealt with under the relevant main series.)	

NUMBER	DESCRIPTION	DISPOSAL
2/11/P	Policy	
2/11/R	Routine enquiries	
2/11/1	Annual reports	
2/11/1/1	Compilation of own reports	
2/11/1/1/1	Department	
2/11/1/1/2	Directorates	
2/11/1/1/3	Sub-directorates	
2/11/1/1/4	Components/Sections	
2/11/1/1/5	Regional offices	
2/11/1/1/6	District offices	
2/11/1/1/7	Institutions	
2/11/1/2	Annual reports received from other departments and institutions (For other publications received from government departments and other institutions see ?.)	
2/11/1/2/1	Acknowledgement of receipt	
2/11/2	Quarterly progress reports	
2/11/2/1	Department	
2/11/2/2	Directorates	
2/11/2/3	Sub-directorates	
2/11/2/4	Components/Sections	
2/11/2/5	Regional offices	
2/11/2/6	District offices	
2/11/2/7	Institutions	
2/11/3	Monthly progress reports	
2/11/3/1	Department	
2/11/3/2	Directorates	

NUMBER	DESCRIPTION	DISPOSAL
2/11/3/3	Sub-directorates	
2/11/3/4	Components/Sections	
2/11/3/5	Regional offices	
2/11/3/6	District offices	
2/11/3/7	Institutions	

3. <u>HUMAN RESOURCE MANAGEMENT</u>

(This main series deals with all functions relating to the management of the department's employees. Files under this main series should be used for general employees' matters only. Correspondence in connection with a particular person is placed on the personal files, which do not form part of this file plan. See the List of Series of Separate Case Files.)

NUMBER	DESCRIPTION	DISPOSAL
3/1	**<u>Posts Control</u>** (1. For surveys to ascertain extension demands, systems investigations, establishment of new sections/offices, see main series 2. 2. Posts control has only to do with the posts structure and not with the employees filling the posts.)	
3/1/P	Policy	
3/1/R	Routine enquiries	
3/1/1	<u>Creation, conversion and abolition of posts</u>	
3/1/1/1	Department	
3/1/1/2	Directorates	
3/1/1/3	Sub-directorates	
3/1/1/4	Components/sections	
3/1/1/5	Regional offices	
3/1/1/6	District offices	
3/1/1/7	Institutions	
3/1/2	<u>Designation and classification of posts</u>	
3/1/2/1	Department	
3/1/2/2	Directorates	
3/1/2/3	Sub-directorates	
3/1/2/4	Components/sections	
3/1/2/5	Regional offices	
3/1/2/6	District offices	
3/1/2/7	Institutions	

NUMBER	DESCRIPTION	DISPOSAL
3/1/3	<u>Evaluation of posts</u>	
3/1/3/1	Department	
3/1/3/2	Directorates	
3/1/3/3	Sub-directorates	
3/1/3/4	Components/sections	
3/1/3/5	Regional offices	
3/1/3/6	District offices	
3/1/3/7	Institutions	
3/1/4	<u>Job descriptions</u>	
3/1/4/1	Department	
3/1/4/2	Directorates	
3/1/4/3	Sub-directorates	
3/1/4/4	Components/sections	
3/1/4/5	Regional offices	
3/1/4/6	District offices	
3/1/4/7	Institutions	
3/1/5	<u>Supernumerary staff</u>	
3/1/5/P	Policy	
3/1/5/1	List of supernumerary staff	
3/1/6	Human resource plan	
3/1/7	Staff retention plans and programmes	
3/1/8	Reports	
3/2	**<u>Conditions of service</u>**	
3/2/P	Policy	
3/2/R	Routine enquiries	

NUMBER	DESCRIPTION	DISPOSAL
3/2/1	<u>Determination and payment</u>	
3/2/1/1	<u>Remuneration</u>	
3/2/1/1/1	Salaries (Confidential payroll printouts filed on ?.)	
3/2/1/1/2	Overtime and additional remuneration	
3/2/1/1/3	Gratifications, bonuses and awards	
3/2/1/1/4	Pensions	
3/2/1/2	<u>Allowances</u>	
3/2/1/2/1	Subsistence and travel allowance	
3/2/1/2/2	Housing allowance	
3/2/1/2/3	Entertainment allowance	
3/2/1/2/4	Resettlement allowance	
3/2/1/2/5	Camping allowance	
3/2/1/2/6	Support allowance	
3/2/1/2/7	Night duty allowance	
3/2/1/2/8	Danger pay	
3/2/1/2/9	Recruitment allowance	
3/2/1/2/10	Location allowance	
3/2/1/2/11	Acting allowance	
3/2/1/2/12	Stand-by allowance	
3/2/1/2/13	Scarce skills allowance	
3/2/1/2/14	Rural allowance	
3/2/1/3	Insurance	
3/2/1/3/1	Medical aid	
3/2/1/4	Income tax (Individual IRP5s are filed on the personal confidential files of staff. See the List of Series of Separate Case Files.)	

NUMBER	DESCRIPTION	DISPOSAL
3/2/1/5	Workmen's compensation	
3/2/1/6	Occupational diseases and injuries	
3/2/1/7	Motor vehicle financing	
3/2/1/8	Unemployment fund	
3/2/1/9	Recognition of educational qualifications	
3/2/1/10	Uniforms and protective clothing (1. For accounts see ?. 2. For requests and quotations see ?.)	
3/2/1/11	Official hours of duty	
3/2/1/13	Long-service awards	
3/2/2	Conditions of service of Senior Management	
3/3	**<u>Vacancies and appointments</u>**	
3/3/P	Policy	
3/3/R	Routine enquiries	
3/3/1	<u>Recruitment and advertising</u>	
3/3/1/1	Department	
3/3/1/2	Directorates	
3/3/1/3	Sub-directorates	
3/3/1/4	Components/sections	
3/3/1/5	Regional offices	
3/3/1/6	District offices	
3/3/1/7	Institutions	
3/3/2	<u>Applications and appointments</u> (1. As soon as a person is appointed, his/her personal documents are removed from the files in this sub-series and transferred to his/her personal file. See the List of Series of Separate Case Files. 2. The unsuccessful applications are kept outside the file plan as Other Records. See the Records Control Schedule. 3. The contracts for contract appointments and consultants	

NUMBER	DESCRIPTION	DISPOSAL
	are dealt with on the ? sub-series.)	
3/3/2/1	<u>Permanent appointments</u>	
3/3/2/1/1	<u>Selection and verification of documents and references</u>	
3/3/2/1/1/1	Department	
3/3/2/1/1/2	Directorates	
3/3/2/1/1/3	Sub-directorates	
3/3/2/1/1/4	Components/sections	
3/3/2/1/1/5	Regional offices	
3/3/2/1/1/6	District offices	
3/3/2/1/1/7	Institutions	
3/3/2/2	<u>Contract appointments</u>	
3/3/2/2/1	Department	
3/3/2/2/2	Directorates	
3/3/2/2/3	Sub-directorates	
3/3/2/2/4	Components/sections	
3/3/2/2/5	Regional offices	
3/3/2/2/6	District offices	
3/3/2/2/7	Institutions	
3/3/2/3	<u>Consultants</u>	
3/3/2/3/1	Department	
3/3/2/3/2	Directorates	
3/3/2/3/3	Sub-directorates	

NUMBER	DESCRIPTION	DISPOSAL
3/3/2/3/4	Components/sections	
3/3/2/3/5	Regional offices	
3/3/2/3/6	District offices	
3/3/2/3/7	Institutions	
3/4	**Termination of service**	
3/4/P	Policy	
3/4/R	Routine enquiries	
3/4/1	Specific terminations	
3/4/1/1	Resignations	
3/4/1/2	Dismissals	
3/4/1/3	Retirements	
3/4/1/4	Death	
3/4/1/5	Severance packages	
3/4/2	Service certificates	
3/4/3	Exit interviews	
3/5	**Qualifications, training and skills development**	
3/5/1	Qualifications (For recognition of educational qualifications see ?.)	
3/5/1/P	Policy	
3/5/1/R	Routine enquiries	
3/5/2	Training	
3/5/2/P	Policy	
3/5/2/R	Routine enquiries	
3/5/2/1	Internal training	
3/5/2/1/1	Induction and orientation programmes	
3/5/2/1/1/1	Arrangements and nominations	

NUMBER	DESCRIPTION	DISPOSAL
3/5/2/1/1/2	Lectures and programmes	
3/5/2/1/2	<u>Functional training</u>	
3/5/2/1/2/1	Arrangements and nominations	
3/5/2/1/2/2	Lectures and programmes	
3/5/2/2	<u>External training</u>	
3/5/2/2/1	<u>Courses by the Provincial Government Western Cape</u> (Files in this sub series deal with training and courses provided by other departments of the PGWC.)	
3/5/2/2/1/1	Arrangements and nominations	
3/5/2/2/1/2	Lectures and programmes	
3/5/2/2/2	<u>Outsourced training</u>	
3/5/2/2/2/1	Arrangements and nominations	
3/5/2/2/2/2	Lectures and programmes	
3/5/2/3	Reports and returns	
3/5/3	<u>Bursaries and scholarships</u>	
3/5/3/P	Policy	
3/5/3/R	Routine enquiries	
3/5/3/1	Applications and conditions (The individual applications of staff have to be dealt with on the personal files. See the List of Series of Separate Case Files.)	
3/5/4	<u>Workplace skills plan</u>	
3/5/4/P	Policy	
3/5/4/R	Routine enquiries	
3/5/4/1	Department	

NUMBER	DESCRIPTION	DISPOSAL
3/5/4/2	Directorates	
3/5/4/3	Sub-directorates	
3/5/4/4	Components/sections	
3/5/4/5	Regional offices	
3/5/4/6	District offices	
3/5/4/7	Institutions	
3/6	**Staff Performance Management** (1. For individual performance agreements and assessments see the List of Series of Separate Case Files. 2. For post/job evaluation and grading see ?.)	
3/6/P	Policy	
3/6/R	Routine enquiries	
3/6/1	Performance agreements	
3/6/2	Performance assessments/reviews	
3/6/3	Competency assessment	
3/7	**Staff movement**	
3/7/P	Policy	
3/7/R	Routine enquiries	
3/7/1	Transfers and secondments	
3/8	**Staff control**	
3/8/P	Policy	
3/8/R	Routine enquiries	
3/8/1	Office hours (Including flexi-time.)	
3/8/2	Extended hours	
3/8/3	Leave and relief arrangements	
3/8/4	Clothing	

NUMBER	DESCRIPTION	DISPOSAL
3/8/5	Requests to deliver speeches	
3/8/6	Permission to receive gifts	
3/8/7	Outside remunerative work (Includes work outside the service.)	
3/8/8	Assistance with government projects (Without remuneration and e.g. with elections.)	
3/8/9	Security clearances	
3/8/10	Handling of information	
3/8/11	Approval to publish	
3/8/12	Telephone use	
3/8/13	Issuing of staff access cards	
3/8/14	Registering of professional occupations	
3/8/14/1	Department	
3/8/14/2	Directorates	
3/8/14/3	Sub-directorates	
3/8/14/4	Components/sections	
3/8/14/5	Regional offices	
3/8/14/6	District offices	
3/8/14/7	Institutions	
3/8/15	Registration of beneficiaries	
3/8/16	Team-building sessions	
3/8/17	Obtaining of driver's licences	
3/9	**Labour relations**	
3/9/P	Policy	
3/9/R	Routine enquiries	
3/9/1	Disciplinary hearings/measures	
3/9/2	Grievances, petitions and complaints	

NUMBER	DESCRIPTION	DISPOSAL
3/9/3	Bargaining councils	
3/9/4	<u>Trade unions and staff associations</u>	
3/9/4/1	Negotiations with unions and associations	
3/9/4/2	Membership matters	
3/9/4/3	Protest actions	
3/10	**<u>Employee Assistance Programme</u>** (Individual cases are dealt with on the confidential personal files. See the List of Separate Case files.)	
3/10/P	Policy	
3/10/R	Routine enquiries	
3/11	**<u>Domestic matters</u>** (Only staff matters which cannot be placed on other files in this main series.)	
3/11/1	Social functions	
3/11/2	Letters of thanks, congratulations and condolence (Only for staff. For the public and clients ?.)	

4. <u>INTERNAL FINANCIAL MANAGEMENT</u>

(The files in this main series deal with functions relating to raising, allocating, using and accounting for the financial resources of the department.)

NUMBER	DESCRIPTION	DISPOSAL
4/P	Policy	
4//R	Routine enquiries	
4/1	**<u>Budget</u>**	
4/1/P	Policy	
4/1/1	<u>Compilation of budget</u>	
4/1/1/1	Provincial budget	
4/1/1/2	Department	
4/1/1/3	Directorates	
4/1/1/4	Sub-directorates	
4/1/1/5	Components/sections	
	Regional offices	
4/1/1/6	District offices	
4/1/1/7	Institutions	
4/1/2	Budget management	
4/1/3	Strategic budget	
4/2	**Accounting responsibility**	
4/2/1	Burglaries, thefts, losses and write-off	
4/2/2	Returns	
4/2/3	Safety of state monies (Also includes handing-over of safe keys.)	
4/2/4	<u>Audit inspections</u> (1. For internal records management inspections see ?.. 2. For departmental inspections see ?.)	
4/2/4/1	<u>Reports and queries</u>	

NUMBER	DESCRIPTION	DISPOSAL
4/2/4/1/1	Department	
4/2/4/1/2	Directorates	
4/2/4/1/3	Sub-directorates	
4/2/4/1/4	Components/sections	
4/2/4/1/5	Regional offices	
4/2/4/1/6	District offices	
4/2/4/1/7	Institutions	
4/2/5	Departmental inspections (1. For internal records management inspections see ?. 2. For departmental inspections see ?.)	
4/3	**Donations to and from the State**	
4/4	**<u>Revenue</u>** (For the collection of revenue for copies supplied see ? sub series.)	
4/4/P	Policy	
4/4/1	<u>Determination of tariffs and charges</u>	
4/4/1/1	Department	
4/4/1/2	Directorates	
4/4/1/3	Sub-directorates	
4/4/1/4	Components/sections	
4/4/1/5	Regional offices	
4/4/1/6	District offices	
4/4/1/7	Institutions	
4/4/2	Deposit of revenue	
4/4/3	Disposal of waste paper (For services to remove waste paper see ? subseries.)	
4/5	**<u>Expenditure</u>**	
4/5/P	Policy	

NUMBER	DESCRIPTION	DISPOSAL
4/5/R	Routine enquiries	
4/5/1	Settlement of accounts (1. All accounts must be dealt with on this sub-series. 2. For requests, quotations and contracts for supplies and services see main series ?.)	
4/5/1/1	Accounts not separately provided for	
4/5/1/2	Equipment	
4/5/1/2/1	Photocopiers	
4/5/1/2/2	Computers/printers	
4/5/1/3	Stationery	
4/5/1/4	Telecommunication	
4/5/1/4/1	Telephones/fax machines	
4/5/1/5	Postage and franking	
4/5/1/6	Library publications	
4/5/1/6/1	Subscription fees to periodicals	
4/5/1/7	Maintenance of buildings	
4/5/1/8	Membership fees	
4/5/1/9	Uniforms and protective clothing (1. For the acquisition thereof see ?. 2. For conditions of service see ?.)	
4/5/1/10	Photographic equipment and material	
4/5/1/11	Security service	
4/5/1/12	Office furniture	
4/5/1/13	Trolleys and ladders	
4/5/2	Petty cash	
4/5/3	Claims	
4/6	**<u>Banking arrangements</u>**	
4/6/1	Signing authority	

NUMBER	DESCRIPTION	DISPOSAL
4/6/2	Receipt, safe-keeping and depositing of money	

5. SUPPLY CHAIN MANAGEMENT

(1. This main series deals with all functions regarding the acquisition, maintenance and management of consumables.
2. For settlement of accounts see ? subseries.
3. For contracts see the ? sub series.)

NUMBER	DESCRIPTION	DISPOSAL
5/1	**Consumable assets**	
5/1/P	Policy	
5/1/R	Routine enquiries	
5/1/1	Supply control administration	
5/1/1/1	Specifications	
5/1/1/2	Stocktaking	
5/1/1/3	Statistics and reports on losses	
5/1/1/4	Disposal of surplus and unserviceable supplies	
5/1/1/5	Return of empty containers	
5/1/1/6	Tender Board exemptions	
5/1/1/7	Usage by other institutions/persons (Only the use of supplies by other institutions/persons.)	
5/1/2	Acquisition, maintenance and transfer	
5/1/2/1	Supplies not separately provided for (See also paragraph ? of the General Instructions.)	
5/1/2/2	Stationery	
5/1/2/3	Postage stamps (1. For internal postal matters see ?. 2. For postal services see ?.)	
5/1/2/4	Cleaning material	
5/1/2/5	Garden material	
5/1/2/6	Cardboard containers	
5/1/2/7	Conservation materials	
5/1/2/8	Face value forms	

NUMBER	DESCRIPTION	DISPOSAL
5/1/2/9	Uniforms and protective clothing	
5/1/2/10	Photographic material	
5/1/2/11	Promotional items	
5/1/2/12	Data input forms	
5/1/2/13	Medical materials	
5/2	**<u>Services</u>** (1. For maintenance services to supplies and equipment see ? subseries. 2. For transport services see main series ?.)	
5/2/P	Policy	
5/2/1	Services not separately provided for	
5/2/2	Security services (1. For security measures see ? subseries. 2. For security installations see ?. 3. For contingency/emergency plans see ?. 4. For maintenance of security installations see ?.)	
5/2/3	Translation services	

6. INTERNAL FACILITIES MANAGEMENT

(The files in this main series deal with all functions regarding the planning, designing, and managing of buildings, their mechanical and electrical installations and air-conditioning plants, equipment and furniture, etc. and grounds, equipment and furniture, as well as postal and telecommunication services.)

NUMBER	DESCRIPTION	DISPOSAL
6/1	**Buildings and grounds**	
6/1/P	Policy	
6/1/R	Routine enquiries	
6/1/1	Acquisition (1. Includes buildings, grounds and installations such as air-conditioning, climate control, electrical and security installations. 2. Acquisition includes purchase, construction and extensions.)	
6/1/1/1	Department	
6/1/1/2	Directorates	
6/1/1/3	Sub-directorates	
6/1/1/4	Components/sections	
6/1/1/5	Regional offices	
6/1/1/6	District offices	
6/1/1/7	Institutions	
6/1/2	Alienation (Includes selling and letting of buildings and grounds.)	
6/1/3	Maintenance	
6/1/3/1	Buildings	
6/1/3/1/1	Not separately provided for	
6/1/3/1/2	Air-conditioner and climate control	
6/1/3/1/3	Electrical installations	
6/1/3/1/4	Security installations (1. For contingency/emergency plans see ?. 2. For security measures see ?.	

NUMBER	DESCRIPTION	DISPOSAL
	3. For safety and security services see ?. 4. For the security installation see ?.)	
6/1/3/1/4/1	Stack room doors	
6/1/3/2	Grounds (For garden services see ?.)	
6/1/4	Cleaning of buildings (For cleaning services see ?.)	
6/1/5	Beautifying of buildings and grounds	
6/1/6	<u>Parking arrangements</u>	
6/1/6/1	Employees	
6/1/6/2	Visitors	
6/1/6/3	Street loading zones	
6/1/7	Usage of facilities by other institutions/persons (Only for the use of accommodation, e.g. conference room.)	
6/1/8	Security measures (1. For safety and security services see ?. 2. For security installations see ?. 3. For contingency/emergency plans see ?. 4. For the maintenance of the security installation see ?.)	
6/1/8/1	Reports	
6/1/9	<u>Allocation and use of offices</u>	
6/1/9/1	Department	
6/1/9/2	Directorates	
6/1/9/3	Sub-directorates	
6/1/9/4	Components/sections	
6/1/9/5	Regional offices	
6/1/9/6	District offices	
6/1/9/7	Institutions	
6/2	**<u>Equipment and furniture</u>**	

NUMBER	DESCRIPTION	DISPOSAL
6/2/P	Policy	
6/2/R	Routine enquiries	
6/2/1	Supply control administration	
6/2/1/1	Specifications	
6/2/1/2	Stocktaking	
6/2/1/2/P	Policy	
6/2/1/2/1	Master inventory and asset register	
6/2/1/2/2	Stocktaking	
6/2/1/3	Loss control	
6/2/1/3/P	Policy	
6/2/1/3/1	Statistics and reports on losses	
6/2/1/4	Disposal of surplus and unserviceable supplies	
6/2/1/5	Return of empty containers	
6/2/1/6	Tender board exemptions	
6/2/1/7	Usage by other institutions/persons (Only the use of supplies by other institutions/persons.)	
6/2/2	Acquisition, maintenance and transfer	
6/2/2/1	Equipment and furniture not separately provided for (See also paragraph ? of the General Instructions.)	
6/2/2/2	Photocopiers	
6/2/2/3	Computers and electronic media (1. For computer networks, e-mail and Internet see ?. 2. For the use of Internet for outreach purposes see ?.)	
6/2/2/3/1	Hardware (Including printers, scanners, programs, etc.)	
6/2/2/3/2	Peripherals (E.g. mouse pads, CDs, DVDs, memory sticks, etc.)	
6/2/2/3/3	Software	
6/2/2/3/4	Complaints and failures	

NUMBER	DESCRIPTION	DISPOSAL
6/2/2/4	Franking machine (1. For internal postal matters see ?. 2. For postal services see ?.)	
6/2/2/5	Office furniture (Excluding computer equipment.)	
6/2/2/6	Stack room shelves	
6/2/2/7	Trolleys and ladders	
6/2/2/8	Steel trunks, padlocks and keys	
6/2/2/9	Microfilm equipment	
6/2/2/10	Electric fans and heaters	
6/2/2/11	Fire extinguishers and hoses	
6/2/2/12	Cleaning equipment	
6/2/2/13	Garden equipment	
6/2/2/14	Conservation equipment	
6/2/2/15	Office locks and keys	
6/2/2/16	Fax machines	
6/2/2/17	Flags, flag poles and coat-of-arms	
6/2/2/18	Audiovisual apparatus (E.g. television, video machine, video camera, cassettes, etc.)	
6/2/2/19	Tape recorders, dictaphones and cassettes	
6/2/2/20	Photographic equipment	
6/2/2/21	Safes	
6/2/2/22	Emergency communication connections (E.g. radios)	
6/2/2/23	Kitchen equipment	
6/2/2/24	Laundry equipment	
6/2/2/25	Medical equipment (Also includes medical laboratory equipment.)	

NUMBER	DESCRIPTION	DISPOSAL
6/2/2/26	Workshop equipment	
6/3	**Postal services** (1. Includes the acquisition of post bags. 2. For internal postal matters see ?. 3. For franking machine and postage stamps see ?.)	
6/4	**<u>Telecommunication services</u>** (1. Includes telephones, switchboard and directories. 2. For payment of telephone account see ?.)	
6/4/1	<u>Land lines</u>	
6/4/1/P	Policy	
6/4/1/R	Routine enquiries	
6/4/1/1	Acquiring of	
6/4/1/2	Allocation of extensions and re-routing	
6/4/2	<u>Cellular phones</u>	
6/4/2/P	Policy	
6/4/2/R	Routine enquiries	
6/4/2/1	Acquiring of	
6/4/2/2	Requests for renewal/issuing	
6/4/2/3	Maintenance and repairs	
6/4/3	<u>Compilation of telephone directories</u>	
6/4/3/1	External directories	
6/4/3/2	Departmental directories	
6/4/3/3	Internal directories	

7. INTERNAL TRAVEL AND TRANSPORT SERVICES

(1. This main series deals with all functions regarding the provision of transport to deliver services and the administration of travel arrangements for official journeys.
2. For subsistence and travel claims see ?.)

NUMBER	DESCRIPTION	DISPOSAL
7/1	Transport	
7/1/P	Policy	
7/1/R	Routine enquiries	
7/1/1	Government motor transport (Log books are kept outside the file plan. See the Records Control Schedule.)	
7/1/1/1	Requests/trip authorities	
7/1/1/2	Vehicle checklists	
7/1/1/3	Traffic offences	
7/1/1/4	Accident and theft reports	
7/1/2	Departmental transport	
7/1/3	Subsidised vehicles	
7/1/4	Scheme vehicles	
7/1/5	Air travel	
7/1/6	Railway transport	
7/1/7	Use of private vehicle for official purposes	
7/1/8	Returns and reports	
7/2	**Journeys** (Reports on journeys should be filed on the relevant subject file.)	
7/2/P	Policy	
7/2/R	Routine enquiries	
7/2/1	Approval of journeys and itineraries	
7/2/2	Reservations and accommodation arrangements	

NUMBER	DESCRIPTION	DISPOSAL
7/2/2/1	Department	
7/2/2/2	Directorates	
7/2/2/3	Sub-directorates	
7/2/2/4	Components/sections	
7/2/2/5	Regional offices	
7/2/2/6	District offices	
7/2/2/7	Institutions	

8. INTERNAL INFORMATION SERVICES

(Files in this main series deal with all functions regarding the provision and maintenance of information resources of the department.)

NUMBER	DESCRIPTION	DISPOSAL
8/1	**Internal records management**	
8/1/P	Policy	
8/1/R	Routine enquiries	
8/1/1	File plan	
8/1/1/1	Compilation, amendments and additions (For obtaining disposal authorities see ?.)	
8/1/1/2	Distribution of copies	
8/1/2	Records control schedule	
8/1/2/1	Compilation, amendments and additions (For obtaining disposal authorities see ?.)	
8/1/3	Disposal of records	
8/1/3/1	Obtaining of disposal authorities	
8/1/4	Transfer of records	
8/1/4/1	To the Western Cape Archives and Records Service	
8/1/4/2	To other departments	
8/1/5	Destruction of records	
8/1/6	Inspection of records	
8/1/6/1	Arrangements	
8/1/6/2	Reports	
8/1/7	Codes and directives (1. Only on internal records management and registry practices. 2. For office instructions and codes see ? sub series.)	
8/1/7/1	Records management policy	
8/1/7/2	Registry procedure manual	

NUMBER	DESCRIPTION	DISPOSAL
8/1/8	Registry matters	
8/1/8/1	Daily file: Maintenance and distribution	
8/1/8/2	Forwarding of correspondence received in error	
8/1/8/3	Borrowing of files (From the Western Cape Archives and Records Service.)	
8/1/8/4	Postal matters (1. For postal services see ?. 2. For franking machine and postage stamps see ?.)	
8/1/8/5	Storage of records	
8/2	**Library management**	
8/2/P	Policy	
8/2/R	Routine enquiries	
8/2/1	Stocktaking (For stocktaking of other supplies see ?.)	
8/2/2	Disposal of surplus and obsolete library material	
8/2/3	Exchange of surplus publications (Includes transfer of surplus publications to and from governmental bodies and other institutions.	
8/2/4	Acquisition of library material	
8/2/4/1	Purchase/subscriptions (For the settlement of accounts for library publications and periodicals see ? and ?.)	
8/2/4/2	Donations	
8/2/4/3	Material obtained in terms of an Act of Parliament	
8/2/5	Classification, cataloguing and indexing	
8/2/6	Restoration and binding	
8/2/6/1	Reports	
8/2/7	Copyright (For copyright on own publications see ?.)	
8/2/8	Contributions to catalogues of publishing houses (For publicity guides see ?.)	

NUMBER	DESCRIPTION	DISPOSAL
8/2/9	Distribution of new publication	
8/2/10	Automation of library	
8/3	**<u>Information management</u>** (1. Only information which cannot be placed on an appropriate subject file. 2. For publicity matters see main series ?.)	
8/3/P	Policy	
8/3/R	Routine enquiries	
8/3/1	<u>Supplying of information</u>	
8/3/1/1	<u>Questions and answers</u> (Only information on subjects which have no connection with other main series should be dealt with here.)	
8/3/1/1/1	From Parliament	
8/3/1/1/2	From the Premier	
8/3/1/1/3	From the Minister	
8/3/1/1/4	From the Head of the Department	
8/3/1/2	Provision of advice (Only advice which cannot be placed on an appropriate subject file. This file is limited to advice on professional matters to bodies not falling under the provisions of the line-functions act.)	
8/3/1/3	<u>Promotion of access to information</u>	
8/3/1/3/P	Policy	
8/3/1/3/R	Routine enquiries	
8/3/1/3/1	Manual	
8/3/1/3/2	Applications	
8/3/1/3/3	Reports	
8/4	**<u>Knowledge management</u>**	
8/4/1	<u>Professional training to outside persons</u> (1. Includes training of outside persons/students, e.g. interns, learnerships, etc.	

NUMBER	DESCRIPTION	DISPOSAL
	2. For staff see ? sub series.)	
8/4/1/P	Policy	
8/4/1/R	Routine enquiries	
8/4/1/1	Arrangements	
8/4/1/2	Syllabus/programmes	
8/4/1/3	Reports	
8/5	<u>Information technology</u>	
8/5/P	Policy	
8/5/R	Routine enquiries	
8/5/1	Master Systems Plan	
8/5/2	Persal	
8/5/3	Logis	
8/5/4	Bas	
8/5/5	Permis	

9. <u>INTERNAL COMMUNICATIONS</u>

(The files in this main series deal with all functions regarding the systematic planning, implementing, monitoring and revision of publication and marketing strategies, as well as the dissemination of information.)

NUMBER	DESCRIPTION	DISPOSAL
9/P	Policy	
9/R	Routine enquiries	
9/1	**<u>Communication with the media</u>**	
9/1/1	Press releases	
9/1/2	Radio talks	
9/1/3	TV interviews	
9/1/4	Newspaper/magazine articles and clippings (For contributions to newspapers and magazines see ?.)	
9/2	**<u>Speeches and lectures</u>** (Copies of all speeches and lectures should be filed here.)	
9/2/1	Arrangements	
9/2/2	Copies of speeches and lectures	
9/2/3	Contributions to speeches (E.g. for the Premier, Minister, Director-General, Head of Department.)	
9/3	**<u>Awareness programmes</u>** (For promotional items see ?.)	
9/3/P	Policy	
9/3/R	Routine enquiries	
9/3/1	Exhibitions (Internal and external exhibitions.)	
9/3/2	<u>Open days/week/month</u>	
9/3/2/P	Policy	
9/3/2/R	Routine enquiries	
9/3/2/1	Arrangements	

NUMBER	DESCRIPTION	DISPOSAL
9/3/2/2	Statistics and reports	
9/3/3	<u>Visits</u>	
9/3/3/1	Received (Includes school and student groups, other institutions, etc.)	
9/3/3/2	Paid to	
9/3/4	Publicity guides (1. Contributions to guides. 2. For library contributions to catalogues see ?.)	
9/3/5	<u>Electronic communication information</u> (1. For the acquisition and maintenance of Internet see ?. 2. For e-mail facilities and ? see ?.)	
9/3/5/P	Policy	
9/3/5/R	Routine enquiries	
9/3/5/1	Compilation and amendments to website	
9/3/5/2	Contributions to the Intranet	
9/3/5/3	Contributions to the Internet	
9/3/6	<u>Educational videos/DVDs</u>	
9/3/6/1	Acquisition	
9/3/6/2	Production of own videos/DVDs	
9/3/7	<u>Annual Provincial Sports Day</u>	
9/3/7/P	Policy	
9/3/7/R	Routine enquiries	
9/3/7/1	Arrangements	
9/4	**<u>Awards to other institutions/persons</u>**	
9/4/1	Department	
9/4/2	Directorates	
9/4/3	Sub-directorates	
9/4/4	Components/sections	

NUMBER	DESCRIPTION	DISPOSAL
9/4/5	Regional offices	
9/4/6	District offices	
9/4/7	Institutions	
9/5	**<u>Social matters</u>**	
9/5/1	Letters of thanks, congratulations and condolences (1. Only public and official. 2. For staff see ?)	
9/5/2	<u>Functions</u> (Only to functions/gatherings that cannot be placed elsewhere in the system, e.g. for launches, openings, etc.)	
9/5/2/1	<u>Own functions</u>	
9/5/2/1/1	Arrangements and invitations	
9/5/2/1/2	Programmes	
9/5/2/2	Other functions and invitations	
9/5/3	Reports	
9/6	**<u>Participation in events</u>** (For participation in external exhibitions see ?.)	
9/6/1	Arrangements	
9/7	**<u>Publications</u>** (For printing of publications by other outside companies see ?.)	
9/7/P	Policy	
9/7/R	Routine enquiries	
9/7/1	<u>Own publications</u>	
9/7/1/1	<u>Compilation of publications</u>	
9/7/1/1/1	Questionnaires	
9/7/1/1/2	Forms	
9/7/1/1/3	Pamphlets and brochures	
9/7/1/1/4	Posters	

NUMBER	DESCRIPTION	DISPOSAL
9/7/1/1/5	Newsletters	
9/7/1/2	Distribution of publications	
9/7/1/3	Reviews on own publications	
9/7/1/4	Copyright on own publications	
9/7/2	Publications published by other bodies	
9/7/2/1	Acknowledgement of receipt	
9/7/2/2	Contributions to other publications	
9/7/2/3	Reviews of other publications	
9/8	**Contact details**	
9/8/1	Specific bodies	
9/8/1/1	National governmental bodies	
9/8/1/2	Western Cape governmental bodies	
9/8/1/3	Governmental bodies in other provinces	
9/8/1/4	The public	
9/8/1/5	Own employees	
9/8/1/6	Non-governmental bodies	
9/8/2	Compilation of distribution lists	

10. LEGAL SERVICES

(This main series deals with all functions regarding the provision of legal advice, litigation and contract management.)

NUMBER	DESCRIPTION	DISPOSAL
10/1	Provision of legal advice	
10/1/P	Policy	
10/1/R	Routine enquiries	
10/1/1	Requests for advice	
10/2	Litigations	
10/2/P	Policy	
10/2/R	Routine enquiries	
10/2/1	Investigations	
10/2/2	Prosecutions	
10/2/2/1	Court cases arising from acts and regulations	
10/2/3	Claims	
10/2/3/1	Claims against the Government	
10/2/3/2	Claims by the Government	
10/3	Contract management	
10/3/P	Policy	
10/3/R	Routine enquiries	
10/3/1	Specific approved and signed contracts	
10/3/1/1	With service providers	
10/3/1/1/1	Garden services (1. For maintenance of grounds see ?. 2. For beautifying of grounds see ?.)	
10/3/1/1/2	Fumigation services	
10/3/1/1/3	Printing services (1. For example pamphlets, brochures and posters.	

NUMBER	DESCRIPTION	DISPOSAL
	2. For the compilation of own publications see ? subseries.)	
10/3/1/1/4	Disposal of waste paper (For financial matters about this subject see ?.)	
10/3/1/1/5	Cleaning services (1. For cleaning of buildings see ?. 2. For beautifying of buildings see ?.)	
10/3/1/1/6	Catering services	
10/3/1/1/7	Courier services	
10/3/1/1/8	Laundry services	
10/3/1/2	With contract workers	
10/3/1/3	With consultants	
10/3/2	<u>Specific approved and signed agreements</u>	
10/3/2/1	With other departments in the PGWC	
10/3/2/2	With other provincial departments	
10/3/2/3	With national departments	
10/3/2/4	With local authorities in the Western Cape	
10/3/2/5	With local authorities in other provinces	
10/3/2/6	With non-governmental bodies	
10/3/2/7	With international bodies	

11. ATTENDING AND HOSTING MEETINGS AND OTHER GATHERINGS

(The files in this main series deals with all functions relating to attending of gatherings.)

NUMBER	DESCRIPTION	DISPOSAL
11/1	Councils, committees and meetings	
11/1/1	International councils, committees and meetings	
11/1/1/1	Membership and representation on	
11/1/1/2	Arrangements and invitations	
11/1/1/3	Agenda and minutes	
11/1/1/4	Instructions and matters arising from the minutes	
11/1/1/5	Reports and comments	
11/1/1/6	Distribution of minutes, reports and comments	
11/1/2	National councils, committees and meetings	
11/1/2/1	Arrangements and invitations	
11/1/2/2	Agenda and minutes	
11/1/2/3	Instructions and matters arising from the minutes	
11/1/2/4	Reports and comments	
11/1/2/5	Distribution of minutes, reports and comments	
11/1/3	Provincial committees and meetings	
11/1/3/1	Arrangements and invitations	
11/1/3/2	Agenda and minutes	
11/1/3/3	Instructions and matters arising from the minutes	
11/1/3/4	Reports and comments	
11/1/3/5	Distribution of minutes, reports and comments	
11/1/4	Departmental committees and meetings	
11/1/4/1	Arrangements and invitations	
11/1/4/2	Agenda and minutes	

NUMBER	DESCRIPTION	DISPOSAL
11/1/4/3	Instructions and matters arising from the minutes	
11/1/4/4	Reports and comments	
11/1/4/5	Distribution of minutes, reports and comments	
11/1/5	<u>Directorate committees and meetings</u>	
11/1/5/1	Arrangements and invitations	
11/1/5/2	Agenda and minutes	
11/1/5/3	Instructions and matters arising from the minutes	
11/1/5/4	Reports and comments	
11/1/5/5	Distribution of minutes, reports and comments	
11/1/6	<u>Sub-directorate committees and meetings</u>	
11/1/6/1	Arrangements and invitations	
11/1/6/2	Agenda and minutes	
11/1/6/3	Instructions and matters arising from the minutes	
11/1/6/4	Reports and comments	
11/1/6/5	Distribution of minutes, reports and comments	
11/1/7	<u>Component's/section's committees and meetings</u>	
11/1/7/1	Arrangements and invitations	
11/1/7/2	Agenda and minutes	
11/1/7/3	Instructions and matters arising from the minutes	
11/1/7/4	Reports and comments	
11/1/7/5	Distribution of minutes, reports and comments	
11/1/8	<u>Stakeholder meetings</u>	
11/1/8/1	Arrangements and invitations	
11/1/8/2	Agenda and minutes	
11/1/8/3	Instructions and matters arising from the minutes	
11/1/8/4	Reports and comments	

NUMBER	DESCRIPTION	DISPOSAL
11/1/8/5	Distribution of minutes, reports and comments	
11/1/9	<u>Meetings with statutory bodies</u>	
11/1/9/1	Arrangements and invitations	
11/1/9/2	Agenda and minutes	
11/1/9/3	Instructions and matters arising from the minutes	
11/1/9/4	Reports and comments	
11/1/9/5	Distribution of minutes, reports and comments	
11/2	<u>Conferences</u>	
11/2/1	Arrangements and invitations	
11/2/2	Agenda and minutes	
11/2/3	Instructions and matters arising from the minutes	
11/2/4	Reports and comments	
11/2/5	Distribution of minutes, reports and comments	
11/3	<u>Congresses</u>	
11/3/1	Arrangements and invitations	
11/3/2	Agenda and minutes	
11/3/3	Instructions and matters arising from the minutes	
11/3/4	Reports and comments	
11/3/5	Distribution of minutes, reports and comments	
11/4	<u>Seminars</u>	
11/4/1	Arrangements and invitations	
11/4/2	Agenda and minutes	
11/4/3	Instructions and matters arising from the minutes	
11/4/4	Reports and comments	
11/4/5	Distribution of minutes, reports and comments	

NUMBER	DESCRIPTION	DISPOSAL
11/5	<u>Workshops</u>	
11/5/1	Arrangements and invitations	
11/5/2	Agenda and minutes	
11/5/3	Instructions and matters arising from the minutes	
11/5/4	Reports and comments	
11/5/5	Distribution of minutes, reports and comments	
11/6	<u>Forums</u>	
11/6/1	Arrangements and invitations	
11/6/2	Agenda and minutes	
11/6/3	Instructions and matters arising from the minutes	
11/6/4	Reports and comments	
11/6/5	Distribution of minutes, reports and comments	
11/7	<u>Lectures</u>	
11/7/1	Arrangements and invitations	
11/7/2	Agenda and minutes	
11/7/3	Instructions and matters arising from the minutes	
11/7/4	Reports and comments	
11/7/5	Distribution of minutes, reports and comments	

LIST OF SERIES OF SEPARATE CASE FILES

NUMBER	DESCRIPTION	DISPOSAL
	Personal files	
SP, surname, initials and persal number	Employee personal confidential file (This file contains personal matters of a confidential nature, e.g. letter of appointment, promotion and merit documentation, etc.)	
SV, surname, initials and persal number	Leave file (This file contains routine matters in respect of this subject, e.g. leave forms and correspondence on leave matters.)	
SF, surname, initials and persal number	Financial file (This file contains financial matters, e.g. transfer costs, subsistence allowances, transport matters, home owners' allowances, banking arrangements, etc.)	
SO, surname, initials and persal number	Occupational diseases and injuries file (This file contains correspondence in respect of injuries sustained while on duty.)	
SA, surname, initials and persal number	Performance Assessment confidential file (This file contains performance agreement, assessment forms, review forms, reports and correspondence on this subject.)	
ST, surname, initials and persal number	Temporary workers personal confidential file (This file contains personal matters of a confidential nature of contract workers, consultants, etc., e.g. application, letter of appointment, etc.)	
SM, surname and initials	Patient files (This file contains personal matters of a confidential nature of patients, e.g. medical reports, treatments and related documentation.)	

ANNEXURE G: PROJECT TEMPLATE FOR e-FILE or ECM IMPLEMENTATION

PROJECT
METHODOLOGY
and
TEMPLATE

INTRODUCTION

Developing and implementing a solution in an organisation requires a methodology. This methodology is to ensure that the right questions are asked, the right technical issues are addresses, and that the entire implementation team, including the client organisation and vendors, are all well aligned on the steps required in the process.

A methodology is a system of principles, practices and procedures applied to a specific branch of knowledge. Methodologies provide a framework or procedure within which all necessary tasks and activities are accomplished in the correct or desired sequence.

No methodology should be blindly followed without regard for details and specifics of each organisation' environment and corporate culture. The methodology should be seen as a baseline model for deployment, to be moulded to match the circumstances of each project.

The methodology is organised into four phases – planning and analysis, procurement, installation and testing; implementation; and post-implementation evaluation.

There is no one single methodology that can adequately satisfy all the types of projects that can be conducted. Hence the methodology may need to be tailored to accommodate the distinct needs of a particular organisation. Two major factors should be carefully examined by the project team when adapting the methodology to the specific needs of their project: the *size* and *complexity* of the project.

In the case of a small and relatively simple implementation, two or more phases can be combined to more adequately fit the project's needs and eliminate unnecessary overhead. In particular instances, some of the tasks that are prescribed for a specific phase can be omitted or reorganised in a different sequence, whether within the boundaries of that phase or across several phases. Tailoring a methodology can mean not only eliminating or modifying one or more tasks, but also adding new tasks that become necessary to satisfy the needs of the project.

For a large and complex project, it may be imperative to proceed through all the phases, conducting the tasks one at a time in an orderly sequence with all the rigor that a large project requires.

1. PLANNING PHASE

Purpose

To determine the high-level needs, goals and objectives of the project. It evaluates the feasibility of pursuing further deployment through identification of the probable characteristics, costs, and benefits. This phase is important in assessing the organisational readiness for a deployment and based on this assessment, a Project Management Plan (PMP) is developed with the stakeholders to define: detailed scheduling (tasks, activities, milestones and deliverables), level of effort, costs, quality assurance and control procedures including project team roles and responsibilities. It is important to note here that the PMP is a document that evolves over time and is adjusted as more detailed information is made available. The planning phase ends with a decision by management on whether or not to proceed with the next phase (stage-gate process).

Tasks

- Preliminary Site Survey/Reconnaissance
- Develop a Project Management Plan
- Initiate the project
- Management Review and Quality Assurance

PHASE: 1. PLANNING	
Task: 1.1 Preliminary Project Reconnaissance	
OBJECTIVE: The objective of this task is to determine the project's business objectives, scope of the project as it pertains to the existing functional, technical, and potential training requirements.	
INPUT (Description)	**FROM: (Task Name)**
Technical and Functional documents	Project Authority
OUTPUT (Description)	**TO (Task Name)**
Working Notes	1.2 Develop Project Management Plan
ACTIVITIES	
1.1.1 Determine if funding is available 1.1.2 Identify the client Project Authority and Stakeholders 1.1.3 Identify current problems, opportunities, user's needs 1.1.4 Define system mission and project business objectives 1.1.5 Determine the existing technical environment (Hardware, Software, Network) 1.1.6 Determine the existing functional environment(Business Rules) 1.1.7 Identify the high-level functions required 1.1.8 Identify project constraints and risks 1.1.9 Determine project scope 1.1.10 Determine scale of project 1.1.11 Determine type of install or build 1.1.12 Determine potential training requirements 1.1.13 Determine any unique requirements 1.1.14 Estimate costs 1.1.15 Prepare working notes 1.1.16 Brief project management team on major issues	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Project Authority Technical Architect Senior Analyst	
DELIVERABLES	
Project Management Plan	

PHASE: 1. PLANNING	
Task: 1.2 Develop a Project Management Plan	
OBJECTIVE: The objective of this Task is to develop the Project Management Plan.	
INPUT (Description)	**FROM: (Task Name)**
Working Notes	1.1 Preliminary Project Reconnaissance
OUTPUT (Description)	**TO (Task Name)**
QA checklist for PMP Client Acknowledgement/Receipt form	1.4 Management Review and QA
ACTIVITIES	
1.2.1 Establish terms of reference 1.2.2 Define project team participants 1.2.3 Prepare project work plan and schedule for each phase 1.2.4 Define project team organisation and structure 1.2.5 Prepare project control requirements 1.2.6 Quality Assurance review of project management plan using QA checklist 1.2.7 Prepare and submit project management plan 1.2.8 Review project management plan 1.2.9 Obtain approval and sign-off from project authority	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager	
DELIVERABLES	
Project Management Plan	

PHASE: 1. PLANNING	
Task: 1.3 Initiate the Project	
OBJECTIVE: The objective of this Task is to establish a project management office, and develop a communications plan/change management plan.	
INPUT (Description)	**FROM: (Task Name)**
Project Management Plan	Task 1.2 Develop a PMP
OUTPUT (Description)	**TO (Task Name)**
Working Notes Acknowledgement/Receipt form	1.4 Management Review and QA
ACTIVITIES	
1.3.1 Set up a Project Management Office 1.3.2 Hold kick-off/Orientation session 1.3.3 Draft a communication plan/change management plan 1.3.4 Provide demonstration/briefing as requested 1.3.5 Identify potential candidates for functional interviews 1.3.6 Conduct weekly project status meetings with representatives (review minutes)	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Project Authority	
DELIVERABLES	
Communications Plan/Change Management Plan Minutes of weekly project status meetings	

PHASE: 1. PLANNING	
Task: 1.4 Management Review and Quality Assurance	
OBJECTIVE: The objective of this task is to formally review the results of the work done. In addition, all project deliverables must undergo QA verification.	
INPUT (Description)	**FROM: (Task Name)**
Project Plans Acknowledgement/Receipt forms	
OUTPUT (Description)	**TO (Task Name)**
Working Notes Acknowledgement/Receipt form	4.11 Implementation Management Review and Quality Assurance
ACTIVITIES	
1.4.1 Review results of work assignments 1.4.2 Obtain approval to proceed to next phase	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Project Authority	
DELIVERABLES	

2. REQUIREMENTS ANALYSIS AND PROCUREMENT

Purpose

The Requirements Analysis and Procurement work provides the detailed foundation upon which the technical and business environment will be developed. The initial emphasis is directed entirely to an analysis of the current user business and operational environment. Each group of users or business functional groups must be understood in sufficient detail to determine where and how documents and information impact the work being done. The documents which carry the knowledge and work processes must be completely and clearly understood. Once the user environment and requirements are understood in detail, the technical approaches for the subsequent phases are determined. This phase ends with a review and acceptance by management of all phase deliverables.

Tasks

- Technical Requirements Definition
- Data Conversion/Migration Requirements Definition
- Procure necessary Hardware and Software components
- Functional Requirements Definition
- Customisation Requirements Definition
- Assess the current business environment
- Draft analysis report
- Training Requirements Definition
- Maintenance and Support Requirements Definition
- Management Review and Quality Assurance

PHASE: 2. REQUIREMENTS ANALYSIS AND PROCUREMENT PHASE	
Task: 2.1 Technical Requirements Definition	
OBJECTIVE: The objective of this task is to conduct a complete technical survey of the environment. The technical survey shall include the server rooms, client workstations, and client training facilities.	
INPUT (Description)	**FROM: (Task Name)**
Project Scope	Task 1.2 Develop a PMP or documentation
OUTPUT (Description)	**TO (Task Name)**
Technical Site Survey Acknowledgement/Receipt form	Procure Necessary Hardware Functional Requirement Definition 2.2 Data Conversion Customisation Requirements Assessment of Business Environment 2.9 Analysis Report 2.10 Management Review and QA

ACTIVITIES

2.1.1 Meet and maintain contact with all relevant client technical personnel
2.1.2 Determine physical site requirements for hardware (floor space, air conditioning, etc.)
2.1.3 Determine architectural requirements
2.1.4 Determine hardware requirements (servers, workstations, software)
2.1.5 Determine site network operating system and peripherals
2.1.6 Determine current network load and bandwidth requirements
2.1.7 Determine software component requirements
2.1.8 Identify system performance requirements
2.1.9 Identify data storage requirements
2.1.10 Define system security and control requirements
2.1.11 Determine required site modifications
2.1.12 Determine preferred location and connection strategy
2.1.13 Determine other facilities required
2.1.14 Conduct technical review workshop with all relevant personnel
2.1.15 Prepare technical requirements chapter
2.1.16 Produce customised technical survey checklist
2.1.17 QA Chapter and checklist
2.1.18 Review findings with management

PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Team Leader Technical Architect	

DELIVERABLES

Technical Site Survey

PHASE: 2. REQUIREMENTS ANALYSIS AND PROCUREMENT PHASE	
Task: 2.2 Data Conversion/Migration Requirements Definition	
OBJECTIVE: The objective of this task is to develop a legacy data conversion strategy.	
INPUT (Description)	**FROM: (Task Name)**
Functional Survey Technical Survey	2.4 Functional Requirement Definition 2.1 Technical Requirement Definition
OUTPUT (Description)	**TO (Task Name)**
Acknowledgement/Receipt form	2.10 Management Review and QA
ACTIVITIES	
2.2.1 Determine complexity of the existing and new system data architecture 2.2.2 Determine the volume of data involved in the conversion process 2.2.3 Identify the business units that will be involved in the conversion process 2.2.4 Analyse the high-level data requirements of the new system 2.2.5 Examine the overall quality and integrity of the data presently stored 2.2.6 Identify any special software tools, hardware, and network equipment required 2.2.7 Identify special handling of sensitive data 2.2.8 Estimate duration of conversion effort 2.2.9 Develop conversion specifications (input, transform, and output processes) 2.2.10 Identify roles and responsibilities of staff involved in conversion effort 2.2.11 Prepare and submit a data conversion strategy 2.2.12 QA 2.2.13 Deliver presentation on conversion/migration strategy to management	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Team Leader Project Authority Senior System Analyst	
DELIVERABLES	
Data Conversion Strategy	

PHASE: 2. REQUIREMENTS ANALYSIS AND PROCUREMENT PHASE	
Task: 2.3 Procure Necessary Hardware and Software Components	
OBJECTIVE: The objective of this task is to ensure that the required hardware and software are available.	
INPUT (Description)	**FROM: (Task Name)**
Technical Requirements	2.1 Technical Requirement Definition
OUTPUT (Description)	**TO (Task Name)**
Equipment specifications profile Coordination of procurement Maintenance of financial records	N/A
ACTIVITIES	
2.3.1 Review technical requirements documentation 2.3.2 Determine lead times and critical items 2.3.3 Determine delivery schedule 2.3.4 Determine installation responsibilities 2.3.5 Determine prerequisites for installation 2.3.6 Determine risks 2.3.7 Coordinate procurement and maintain financial records	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Project Authority	
DELIVERABLES	

PHASE: 2. REQUIREMENTS ANALYSIS AND PROCUREMENT PHASE	
Task: 2.4 Functional Requirements Definition	
OBJECTIVE: The objective of this task is to conduct a complete functional survey of the current and desired business environment.	
INPUT (Description)	**FROM: (Task Name)**
Technical survey	2.1 Technical Requirement Definition
OUTPUT (Description)	**TO (Task Name)**
Acknowledgement/Receipt form	2.5 Customisation Requirements 3.0 Testing Environment 2.10 Management Review and QA
ACTIVITIES	
2.4.1 Determine number of personnel identified as candidates for interviews 2.4.2 Set up meetings with all personnel to be interviewed 2.4.3 Assess state of environment 2.4.4 Determine system configuration and management requirements 2.4.5 Conduct functional review workshop with all relevant personnel 2.4.6 Prepare functional chapter 2.4.7 Produce customised functional survey checklist 2.4.8 QA chapter and checklist 2.4.9 Review findings with management	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Team Leader Business Representative(s) Functional Analyst	
DELIVERABLES	
Functional Survey Report Configuration Specifications	

PHASE: 2. REQUIREMENTS ANALYSIS AND PROCUREMENT PHASE	
Task: 2.5 Customisation Requirements Definition	
OBJECTIVE: The objective of this task is to deliver the Customisation Requirement Report to management	
INPUT (Description)	**FROM: (Task Name)**
Functional Survey Report Technical Survey Report	2.4 Functional Workshop or Survey 2.1 Technical Survey
OUTPUT (Description)	**TO (Task Name)**
Customised screen and forms Acknowledgement/Receipt form	3.0 Test Environment 2.10 Management Review and QA
ACTIVITIES	
2.5.1 Identify customisation requirements and their impact 2.5.2 Identify the effort required to implement all requirements 2.5.3 Define screens 2.5.4 Define input/output specifications 2.5.5 Define security specifications 2.5.6 Define repository specifications 2.5.7 Define interfaces with other systems 2.5.8 Prepare and submit customisation requirements chapter 2.5.9 QA chapter 2.5.10 Review findings with management	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Team Leader Business Representative(s) Functional Analyst	
DELIVERABLES	
Customisation Requirement Report	

PHASE: 2. REQUIREMENTS ANALYSIS AND PROCUREMENT PHASE	
Task: 2.6 Assess the Current Business Environment	
OBJECTIVE: The objective of this task is to assess the current business environment and workflows to define the setting within which the project will provide support.	
INPUT (Description)	**FROM: (Task Name)**
Functional Survey Technical Survey Data Conversion Report Procurement requirements list	2.1 Technical Requirement Definition 2.2 Data Conversion/Migration requirements 2.3 Hardware/Software specifications 2.4 Functional Requirement Definition
OUTPUT (Description)	**TO (Task Name)**
Definition of Business setting	2.7 Analysis Report
ACTIVITIES	
Describe the Organisational Environment Describe the operational environment Prepare organisational/operational chapter QA	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Team Leader Functional Authority Functional Analyst	
DELIVERABLES	

PHASE: 2. REQUIREMENTS ANALYSIS AND PROCUREMENT PHASE	
Task: 2.7 Draft Analysis Report	
OBJECTIVE: The objective of this task is to deliver a completed analysis report to management.	
INPUT (Description)	**FROM: (Task Name)**
Technical Survey Data Conversion/Migration Chapter Functional Survey Customisation Chapter Organisational/Operational Preface	2.1 Technical Requirement Definition 2.2 Data Conversion/Migration Requirements 2.4 Functional Requirement Definition 2.5 Customisation Requirement Definition 2.6 Assessment of Business Environment
OUTPUT (Description)	**TO (Task Name)**
Version Specification Acknowledgement/Receipt form	3.0 Testing Environment 2.10 Management Review and QA
ACTIVITIES	
2.7.1 Include Technical Chapter 2.7.2 Include data conversion/migration chapter 2.7.3 Include functional chapter 2.7.4 Include customisation chapter 2.7.5 Include organisational/operational preface	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Team Leader Project Authority Technical Analyst Functional Analyst	
DELIVERABLES	
Analysis Report	

PHASE: 2. REQUIREMENTS ANALYSIS AND PROCUREMENT PHASE	
Task: 2.8 Training Requirements Definition	
OBJECTIVE: The objective of this Task is to deliver a completed training plan to management.	
INPUT (Description)	**FROM: (Task Name)**
Version Specification	2.7 Draft Analysis Report
OUTPUT (Description)	**TO (Task Name)**
Training Plan Acknowledgement/Receipt form	4.8 Conduct Training 2.10 Management Review and QA
ACTIVITIES	
2.8.1 Identify training needs and qualify individuals to be trained 2.8.2 Identify training resources 2.8.3 Prepare training schedules and assign responsibilities 2.8.4 Identify course materials/requirements for training sessions 2.8.5 Coordinate training requirements with training coordinator 2.8.6 Develop a staffing and training strategy 2.8.7 Prepare training plan 2.8.8 QA training plan 2.8.9 Review training plan with management	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Team Leader Training Authority Course Developer	
DELIVERABLES	
Training Plan	

PHASE: 2. REQUIREMENTS ANALYSIS AND PROCUREMENT PHASE	
Task: 2.9 Maintenance and Support Requirements Definition	
OBJECTIVE: The objective of this task is to deliver the Concept of Operations	
INPUT (Description)	**FROM: (Task Name)**
Configuration Specifications Technical Survey	2.4 Functional Requirement Definition 2.1 Technical Requirement Definition
OUTPUT (Description)	**TO (Task Name)**
Concept of Operations Acknowledgement/Receipt form	2.10 Management Review and QA
ACTIVITIES	
2.9.1 Identify resources requirements to provide user, admin and maintenance support 2.9.2 Define technical support requirements 2.9.3 Define change control management 2.9.4 Prepare a Concept of Operations 2.9.5 QA Concept of Operations 2.9.6 Review Concept of Operations with management	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Team Leader	
DELIVERABLES	
Concept of Operations Report	

PHASE: 2. REQUIREMENTS ANALYSIS AND PROCUREMENT PHASE	
Task: 2.10 Management Review and Quality Assurance	
OBJECTIVE: The objective of this task is to conduct a QA of this phase of the project and obtain approval to proceed to the next phase.	
INPUT (Description)	**FROM: (Task Name)**
Acknowledgement/Receipt form	All deliverables
OUTPUT (Description)	**TO (Task Name)**
	4.11 Implementation Management Review and QA
ACTIVITIES	
2.10.1 Prepare presentation to management 2.10.2 Review results of requirements analysis phase 2.10.3 Obtain formal sign-off approval regarding customisation 2.10.4 Obtain approval to proceed to next phase	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Project Authority	
DELIVERABLES	

3. TESTING ENVIRONMENT INSTALLATION AND SYSTEM TESTING PHASE

Purpose

The third phase involves the review, confirmation and installation of the necessary hardware and software components. It includes the preparation of the site for the installation of the hardware, software and communications facilities as required, the actual installation of the latter and testing to ensure they all function together seamlessly. Prototyping of the envisaged system is developed during this phase. Prototyping is the act of building a scaled-down version of the environment that has the look, feel, and functionality of the final system. A Test Integration Facility (TIF) is established. Its main goal is to translate the written requirements into something users can visually use to confirm their requirements. This helps ensure that the requirements accurately reflect the needs of the users as early as possible in the development process. This phase also helps identify missing or additional functionality that is required. Another goal is to establish a common vision between all members of the project team while providing a facility to perform initial testing of the recommended components.

Tasks

- Establish a Test Integration Facility (or Prototyping Test Lab)
- Modify/Improve/Correct
- Management Review and Quality Assurance

PHASE: 3. TESTING ENVIRONMENT INSTALLATION AND SYSTEM TESTING	
Task: 3.1 Establish a Test Integration Facility or Test Lab	
OBJECTIVE: The objective of this task is to establish a functional TIF that emulates the operational environment.	
INPUT (Description)	**FROM: (Task Name)**
Configuration Specifications Technical Survey Bill of Material	2.1 Technical Requirement Definition 2.4 Functional Requirement Definition
OUTPUT (Description)	**TO (Task Name)**
Management acceptance of set-up	Management Review and Quality Assurance
ACTIVITIES	
3.1.1 Install test site hardware 3.1.2 Install operating system 3.1.3 Install database 3.1.4 Install software suite 3.1.5 Integrate and configure software suite 3.1.6 Bring system to simulated operational state 3.1.7 Verify using functional and technical checklists 3.1.8 Review and test	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Team Leader Technical Analyst and Installers Functional Analyst	
DELIVERABLES	
Functional TIF that emulates operational environment	

PHASE: 3. TESTING ENVIRONMENT INSTALLATION AND SYSTEM TESTING

Task: 3.2 Modify/Improve/Correct

OBJECTIVE: The objective of this task is the adjustment of the TIF so that it emulates the operational environment as closely as possible.

INPUT (Description)	FROM: (Task Name)
TIF Set-up	3.1 Establish a TIF

OUTPUT (Description)	TO (Task Name)
Customised technical performance checklist Customised functional performance checklist Configuration specifications adjusted as required Validation of set-up instructions Validation of configuration instructions (business rules) Acknowledgement/Receipt form	4.2 Install, Configure, Integrate software 3.3 Management Review and QA

ACTIVITIES

3.2.1 Review system functionality with client
3.2.2 Modify/improve/correct as applicable
3.2.3 Re-test
3.2.4 Modify/improve/correct as applicable
3.2.5 Re-test
3.2.6 Obtain system sign-off

PARTICIPANTS	RESPONSIBILITY OF PARTICIPANTS
Team Leader Technical Analyst and Installers Functional Analyst	

DELIVERABLES

Customised technical performance checklist
Customised functional performance checklist

PHASE: 3. TESTING ENVIRONMENT INSTALLATION AND SYSTEM TESTING	
Task: 3.3 Management Review and Quality Assurance	
OBJECTIVE: The objective of this task is to conduct a QA of this phase of the project and obtain approval to proceed to the next phase.	
INPUT (Description)	**FROM: (Task Name)**
TIF Set-Up Acknowledgement/Receipt forms	3.1 Establishment of TIF Receipt forms for all deliverables
OUTPUT (Description)	**TO (Task Name)**
	4.2 Software Implementation 4.11 Implementation Management Review and QA
ACTIVITIES	
Review results of TIF installation and system testing Obtain approval to proceed to next phase	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Team Leader Project Authority	
DELIVERABLES	
Functional TIF that emulates operational environment	

4. IMPLEMENTATION PHASE

Purpose

The primary objective of the implementation phase is to deliver a fully operational system to the users. Based on the various requirements specifications that were produced during earlier phases, the software components are tested and gradually integrated into a complete system. The user and system documentation manuals are completed and the staff is properly trained. The data in the old files are converted into the new file/database structures, and the system and its supporting material are transferred into the production environment. If necessary, the software is fine-tuned during the first month following its installation in production.

Tasks

- Prepare site
- Install, configure, integrate software
- Conduct data conversion/migration
- Prepare necessary documentation
- Establish maintenance and support requirements
- Execute communications plan/change management strategy
- Conduct system testing
- Conduct training
- Roll-out software to client business units
- Hand-over of production system to proper organisation and project wrap-up
- Management review and quality assurance

PHASE: 4. IMPLEMENTATION PHASE	
Task: 4.1 Prepare Site	
OBJECTIVE: The objective of this task is to install the implementation hardware.	
INPUT (Description)	**FROM: (Task Name)**
Customised Technical Checklist	3.2 Modify/Improve/Correct (TIF)
OUTPUT (Description)	**TO (Task Name)**
ACTIVITIES	
4.1.1 Install implementation hardware	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Technical Analyst Technical Authority	
DELIVERABLES	

PHASE: 4. IMPLEMENTATION PHASE	
Task: 4.2 Install, Configure, Integrate Software	
OBJECTIVE: The objective of this task is to configure the implementation software and hardware and bring it to an operational status.	
INPUT (Description)	**FROM: (Task Name)**
Validated Configuration Instructions Validated Installation Instructions	3.2 Modify/Improve/Correct (TIF)
OUTPUT (Description)	**TO (Task Name)**
QA test report – technical QA test report – functional Client Acknowledgement/Receipt form	4.11 Implementation Management Review and QA
ACTIVITIES	
Review Bill of Material and ensure all components are correct, with supporting documentation Install Operating System Install database Install software suite Integrate and configure software suite Bring system to operational state Test system – QA using functional checklist Demonstration	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Technical Analyst Technical Authority	
DELIVERABLES	
Operational Test Report	

PHASE: 4. IMPLEMENTATION PHASE	
Task: 4.3 Conduct Data Conversion/Migration	
OBJECTIVE: The objective of this task is to convert and migrate the legacy data into the system.	
INPUT (Description)	**FROM: (Task Name)**
Legacy Data Data Migration Report	Client Business Representative 2.2 Data Conversion/Migration requirement definition
OUTPUT (Description)	**TO (Task Name)**
Converted data	N/A
ACTIVITIES	
4.3.1 Review conversion/migration requirements report 4.3.2 Assemble data conversion team and assign roles and responsibilities 4.3.3 Install any software tools and hardware equipment necessary 4.3.4 Verify integrity of data to be output to system 4.3.5 Test data conversion programs 4.3.6 Carry out data conversion 4.3.7 Verify integrity of data input to system	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Functional and technical analysts Client business representative	
DELIVERABLES	
Converted data	

PHASE: 4. IMPLEMENTATION PHASE	
Task: 4.4 Prepare necessary documentation	
OBJECTIVE: The objective of this task is to ensure that the client receives the appropriate documentation.	
INPUT (Description)	**FROM: (Task Name)**
Bill of Material	License packaging
OUTPUT (Description)	**TO (Task Name)**
N/A	N/A
ACTIVITIES	
4.4.1 Identify all necessary manuals/ guides required 4.4.2 Customise user manual 4.4.3 Customise system manual 4.4.4 Prepare policies and standards 4.4.5 Confirm product specific technical manuals supplied	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Team Leader Project Authority	
DELIVERABLES	

<table>
<tr><td colspan="2">PHASE: 4. IMPLEMENTATION PHASE</td></tr>
<tr><td colspan="2">Task: 4.5 Establish Maintenance and Support Requirements</td></tr>
<tr><td colspan="2">OBJECTIVE: The objectives of this task are the establishment of the operational support infrastructure, and the formulation of terms of reference for service level agreements.</td></tr>
<tr><td>INPUT (Description)</td><td>FROM: (Task Name)</td></tr>
<tr><td>Maintenance and Support Requirement Definition</td><td>2.9 Maintenance and Support Requirements Definition</td></tr>
<tr><td>OUTPUT (Description)</td><td>TO (Task Name)</td></tr>
<tr><td>Technical service level report</td><td>N/A</td></tr>
<tr><td colspan="2">ACTIVITIES</td></tr>
<tr><td colspan="2">4.5.1 Review the maintenance and support requirements report
4.5.2 Establish service level agreement terms of reference
4.5.3 Establish operational support infrastructure (Change requests, new release, etc.)
4.5.4 Define ongoing back-up/recovery procedures</td></tr>
<tr><td>PARTICIPANTS</td><td>RESPONSIBILITY OF PARTICIPANTS</td></tr>
<tr><td>Project Manager
Project Authority</td><td></td></tr>
<tr><td colspan="2">DELIVERABLES</td></tr>
<tr><td colspan="2"></td></tr>
</table>

PHASE: 4. IMPLEMENTATION PHASE	
Task: 4.6 Execute Communications Plan/Change Management Strategy	
OBJECTIVE: The objective of this task is to disseminate information to the users.	
INPUT (Description)	**FROM: (Task Name)**
Communication Plan	1.3 Initiate Project
OUTPUT (Description)	**TO (Task Name)**
Information Transmittal	N/A
ACTIVITIES	
4.6.1 Activities based on plan 4.6.2 Publish web site 4.6.3 Send intro e-mail to entire user group 4.6.4 Brief senior management 4.6.5 Poster campaign	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Project Authority Communication Officer	
DELIVERABLES	

PHASE: 4. IMPLEMENTATION PHASE	
Task: 4.7 Conduct System Testing	
OBJECTIVE: The objective of this task is to conduct a complete functional and technical assessment of the installed system.	
INPUT (Description)	**FROM: (Task Name)**
Functional checklist Technical checklist	3.2 Modify/Improve/Correct (TIF)
OUTPUT (Description)	**TO (Task Name)**
Acknowledgement/Receipt form	4.11 Implementation Management Review and QA
ACTIVITIES	
4.7.1 Assemble test team and assign roles and responsibilities 4.7.2 Review technical and functional checklists 4.7.3 Test team to run the tests and note the results 4.7.4 Review results 4.7.5 Carry out corrections 4.7.6 Prepare and submit test summary report 4.7.7 Review test summary report and obtain management approval	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Test assessment officer Test assessment/QA authority	
DELIVERABLES	
Report on technical and functional test results.	

PHASE: 4. IMPLEMENTATION PHASE	
Task: 4.8 Conduct Training	
OBJECTIVE: The objective of this task is to ensure the delivery of training.	
INPUT (Description)	**FROM: (Task Name)**
Training Plan As Built list updated Configuration Specifications Updated	2.8 Training Requirements Definition 4.2 Install, Configure, Integrate Software 3.2 Modify/Improve/correct (TIF)
OUTPUT (Description)	**TO (Task Name)**
Training Session completed Acknowledgement/Receipt form	4.11 Implementation Management Review and QA
ACTIVITIES	
4.8.1 Review Training requirements report 4.8.2 Schedule user training 4.8.3 Schedule administrator training 4.8.4 Reserve appropriate training facilities 4.8.5 Conduct user training 4.8.6 Conduct administrator training	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Course Developer/Trainer	
DELIVERABLES	
Training Sessions Completed	

PHASE: 4. IMPLEMENTATION PHASE	
Task: 4.9 Roll-out of system to Client Business Units	
OBJECTIVE: The objectives of this task are to ensure that there are sufficient server procedures that allow for a stable environment, and that the software is installed on the client workstations.	
INPUT (Description)	**FROM: (Task Name)**
Maintenance and Support requirements defined	4.5 Establish Maintenance and Support Requirements
OUTPUT (Description)	**TO (Task Name)**
Active user workstations	N/A
ACTIVITIES	
4.9.1 Implement ongoing backup/recovery procedures 4.9.2 Implement emergency call procedures 4.9.3 Install software on client workstations	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Team Leader Technical Analyst Technical Authority	
DELIVERABLES	

PHASE: 4. IMPLEMENTATION PHASE	
Task: 4.10 Handover of Production System to proper organisation and Project Wrap-up	
OBJECTIVE: The objective of this task is to obtain formal acceptance from the client.	
INPUT (Description)	**FROM: (Task Name)**
Client acceptance for deliverables	1.4 Acknowledgement/acceptance forms for all deliverables 3.1 Client acceptance of TIF Installation
OUTPUT (Description)	**TO (Task Name)**
	N/A
ACTIVITIES	
4.10.1 Transfer control of system to support team 4.10.2 Turn over system to client 4.10.3 Close out project	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Team Leader Project Authority	
DELIVERABLES	

PHASE: 4. IMPLEMENTATION PHASE	
Task: 4.11 Management Review and Quality Assurance	
OBJECTIVE: The objectives of this task are to review the results of the implementation phase and obtain approval to proceed with the post-implementation phase.	
INPUT (Description)	**FROM: (Task Name)**
Lessons Learned – Implementation Phase Acknowledgement/Receipt Forms	All deliverables 4.10 Handover
OUTPUT (Description)	**TO (Task Name)**
	N/A
ACTIVITIES	
4.11.1 Review results of implementation phase 4.11.2 Obtain approval to plan for and undertake post-implementation review phase	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Team Leader Project Authority	
DELIVERABLES	

5. POST-IMPLEMENTATION PHASE

Purpose

This phase is conducted after the software has been implemented so that management may assess the success and shortcomings of the system. Since the objective of this phase is assessment, timing is important. Usually this phase is carried out after at least three to four months have elapsed since production turnover. It is impractical to perform this phase until the system has operated long enough to produce measurable results.

Tasks

- Evaluate attainment of initial goals and objectives
- Evaluate system performance and technical quality
- Evaluate data quality assurance
- Evaluate user acceptance
- Evaluate human factors impacts
- Evaluate organisational impacts

PHASE: 5. POST-IMPLEMENTATION PHASE	
Task: 5.1 Evaluate Attainment of Initial Goals and Objectives	
OBJECTIVE: The objective of this task is to conduct an assessment of how well the initial project goals and objectives were addressed.	
INPUT (Description)	**FROM: (Task Name)**
Project Plan	Team Leader
OUTPUT (Description)	**TO (Task Name)**
N/A	N/A
ACTIVITIES	
5.1.1 Assess attainment of corporate goals/objectives 5.1.2 Assess level of improvement in relations/services to public 5.1.3 Assess attainment of cost/benefit expectations 5.1.4 Assess extent of differences between previous environment and new one 5.1.5 Assess quality and effectiveness of the deployment process	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Team Leader Project Authority	
DELIVERABLES	

PHASE: 5. POST-IMPLEMENTATION PHASE	
Task: 5.2 Evaluate System Performance and Technical Quality	
OBJECTIVE: The objective of this task is to assess the hardware and software as it pertains to system performance and technical quality.	
INPUT (Description)	**FROM: (Task Name)**
Technical and Functional Surveys Volume metrics Reports	N/A
OUTPUT (Description)	**TO (Task Name)**
N/A	N/A
ACTIVITIES	
Assess ease of use and responsiveness Assess system use by user and by feature used Assess technical reliability (number of failures and shutdowns, existence of bugs, meeting of timetables) Assess resource consumption (computing power, peripheral devices, data storage) Assess timelines and quality of support services/help desk	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Team Leader Project Authority	
DELIVERABLES	

PHASE: 5. POST-IMPLEMENTATION PHASE	
Task: 5.3 Evaluate Data Quality Assurance	
OBJECTIVE: The objective of this task is to conduct a threat and risk assessment of the system.	
INPUT (Description)	**FROM: (Task Name)**
N/A	N/A
OUTPUT (Description)	**TO (Task Name)**
N/A	N/A
ACTIVITIES	
5.3.1 Determine data security and risk exposures 5.3.2 Refine backup and recovery procedures 5.3.3 Assess adequacy of security procedures 5.3.4 Establish timeliness, correctness, accuracy, and effectiveness of the information processed.	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Team Leader Project Authority	
DELIVERABLES	

PHASE: 5. POST-IMPLEMENTATION PHASE	
Task: 5.4 Evaluate User Acceptance	
OBJECTIVE: The objective of this task is to assess the user acceptance of the hardware and software, and business rules.	
INPUT (Description)	**FROM: (Task Name)**
Test Acceptance Reports	N/A
OUTPUT (Description)	**TO (Task Name)**
N/A	N/A
ACTIVITIES	
5.4.1 User Attitudes towards the system environment 5.4.2 Ability of the system to meet the user needs 5.4.3 Extent of the system's ability to support decision making 5.4.4 Extent of the system's ability to reduce inefficiencies 5.4.5 Usability of the user interface (screens, reports, forms)	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Team Leader Project Authority	
DELIVERABLES	

PHASE: 5. POST-IMPLEMENTATION PHASE	
Task: 5.5 Evaluate Human Factors Impacts	
OBJECTIVE: The objective of this task is to assess the employee morale/motivation and quality of user training and documentation.	
INPUT (Description)	**FROM: (Task Name)**
Training Manuals Installation Manuals Training Assessment Reports	N/A
OUTPUT (Description)	**TO (Task Name)**
N/A	N/A
ACTIVITIES	
5.5.1 Impact of system on employee work habits 5.5.2 Changes in employee morale/motivation 5.5.3 Quality and adequacy of user training received 5.5.4 Quality and adequacy of user documentation provided	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Team Leader Project Authority Training Manager	
DELIVERABLES	

PHASE: 5. POST-IMPLEMENTATION PHASE	
Task: 5.6 Evaluate Organisational Impacts	
OBJECTIVE: The objective of this task is to assess the organisational impact of the system.	
INPUT (Description)	**FROM: (Task Name)**
N/A	N/A
OUTPUT (Description)	**TO (Task Name)**
N/A	N/A
ACTIVITIES	
5.6.1 Impact on work methods/procedures/policies 5.6.2 New training requirements identified 5.6.3 Impact on organisational structures and relationships 5.6.4 Changes in employee demographics and career patterns	
PARTICIPANTS	**RESPONSIBILITY OF PARTICIPANTS**
Project Manager Team Leader Project Authority	
DELIVERABLES	