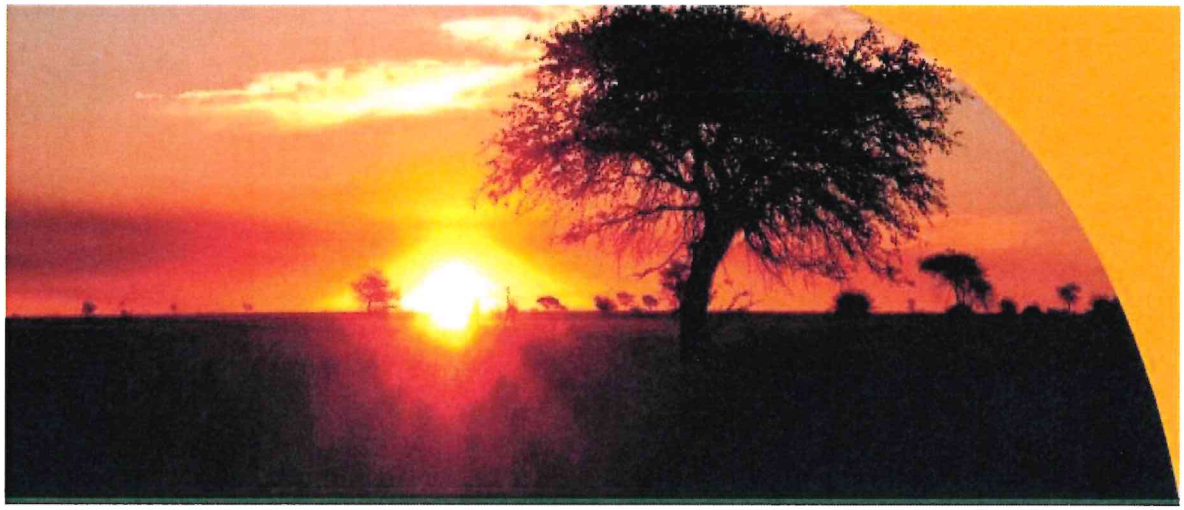

DCSR ICT Portfolio Management Framework

(ICT Project Management

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3. ACRONYMS

APO05	Align, Plan and Organise 05
APP	Annual Performance Plan
BAI01	Build, Acquire and Implement 01
CGICTF	Corporate governance of Information and Communication Technology
COBIT 5	Control Objectives for Information and Related Technology (COBIT) version 5
DSS	Decision support system
GITO	Government Information Technology Officer
GWEA	Government-wide Enterprise Architecture
GWEAF	Government-wide Enterprise Architecture Framework
ICT	Information and Communication Technology
ISACA	Information Systems Audit and Control
ISO	Interaction Organization for Standardisation
ITIL	Information Technology Infrastructure Library
ITSMF	IT service Management Framework
MPAT	Monitoring Performance Assessment Tool
MTSF	Medium-Term Strategic Framework
OGC	Office of the Government Commerce
OLA	Operational Level Agreement
P3M3	Portfolio Management Programme Management and Project Management
PRINCE2	Projects in Control Environments 2
RFID	Radio frequency identification detector
SEPPPMO/SEP3MO	Shared Enterprise Portfolio, Programme And Project Management Office
SITA	State Information Technology Agency
SLA	Service Level Agreement
TOGAF	The Open Group Architecture Framework
TPS	Transaction processing system

4. PURPOSE

4.1. The primary purpose of this framework is to facilitate an alignment between public service strategic priorities, strategic goals and strategic objectives on the one hand and ICT initiatives and operations on the other, with a view to facilitating the delivery of public services and improving the operational effectiveness and efficiency of the public service, and at the same time to ensure that a harmonious balance is struck and continually prevails between benefits that would be realised through ICT initiatives and operations, the ICT investments that are to be incurred or are already incurred in the pursuit and execution of ICT initiatives and ICT operations, and the attendant or concomitant risks.

4.2. A secondary purpose of this framework is to provide a common business taxonomy and governance across all departments to departments to facilitate the communication and understanding of the principles, policies, guidelines, standards and criteria involved in ICT portfolio, programme and project management.

4.3. A third consideration is to adopt a no-frills pragmatic approach to portfolio, and project management process so that little or no overhead that could impede progress is imposed in the day to day execution of the framework.

5. BACKGROUND

5.1. Information and Communication Technology (ICT) has become more critical to government's undertaking of customer-facing activity and to more efficient running of internal business processes. This move from back office operations to core service delivery capacity enablement has forced government Information Technology offices to find creative ways of balancing demands from their clients on their ICT service provision capabilities. One of these ways has been applied successfully for several decades by the financial services industry to get more "bang for the buck". In the financial services industry an investment portfolio is diversified to hedge against risks, and comparisons or benchmarking is made against similar investments, that is, apples are compared with apples. Hence ICT portfolio management is meant to help government departments to judiciously prioritise and optimise their investments in ICT.

6. MANDATE FOR THIS FRAMEWORK

6.1. The Mpumalanga Department of Culture, Sport and Recreation Corporate Governance of ICT Policy Framework, clauses 20.5 (d)(vi) and 20.9 (a)(vii), requires each department to have in place an ICT Portfolio Management Framework that is embedded in Departmental portfolio/programme management structures. This ICT portfolio management framework must include portfolio management and project management. It must also show or explain how the department will create the necessary capacity to manage ICT-related business programmes and projects.

6.2. The implementation Guidelines for the CGICTF further requires the Department to standardise its ICT Portfolio Management Framework on an internationally accepted methodology in conformance with:

6.2.1 Control Objectives for Information and Related Technology (COBIT) version 5

6.2.2 Processes of Align,

6.2.3 Plan and Organise 05 (APO05) and of

6.2.4 Build, Acquire and Implement 01 (BAI01).

6.3. Although this is not stated in the aforementioned Implementation Guideline, this methodology could be the facto or the jure. A de facto methodology, namely:

6.3.1 The United Kingdom (UK) Office of the Government Commerce (OGC) Portfolio Management Programme Management and Project Management (P3M3) Maturity Model has been combined with the

6.3.2 Montana State University Portfolio Management, Programme Management and Project Management Model, which, together with

6.3.3 Relevant enabling processes of the Information Systems Audit and Control (ISACA) COBIT version 5, form the core of this Departmental ICT Portfolio and Project Management Framework.

7. FRAMEWORK DEVELOPMENT APPROACH

7.1. In order to achieve the tall order mandate of ensuring a perennial alignment between strategic public service business priorities, goals, objectives, programmes and subprogrammes on the one hand and ICT initiatives, ICT infrastructure, application systems and ICT operations on the other, and the minimising of concomitant risks, whilst at the same time seeing to it that internationally accepted ICT methodologies are followed and adhered to, an eclectic and synergistic fusion or synthesis approach has been adopted in the conceptualization and formulation of this departmental ICT portfolio and Project management framework.

7.2. This framework adopts adaptations from models of institutions such as the National Treasury Framework for Strategic Plans and Annual Performance Plans; Departmental Strategic Plan and the ISACA, COBIT Framework version 5 Enabling Process.

7.3. The effective application of this Framework thus requires more than a scant familiarization with the above frameworks, models and enabling processes.

7.4. In addition, a knowledge of the Government-wide Enterprise Architecture (GWEA) Framework. Which is based on the international The Open Group Architecture Framework (TOGAF), will be advantageous, especially in the formulation of ICT strategic plans and the alignment of these ICT plans with government strategic priorities, goals and objectives. It therefore goes without saying that it is essential for one to be an fair with the ICT plan of the department which must be GWEA-compliant for the successful application of this framework.

8. BENEFITS OF USING THIS ICT PORTFOLIO AND PROJECT MANAGEMENT FRAMEWORK

8.1. Apart from achieving compliance with the Corporate Governance of ICT Policy Framework, the application of this Framework will ensure that demonstrable business value ensues from ICT investments and operations through alignment of ICT frameworks with the main instruments that are used for government business planning and concomitant budgetary processes, namely:

8.1.1 National Treasury Framework for Strategic Plans and

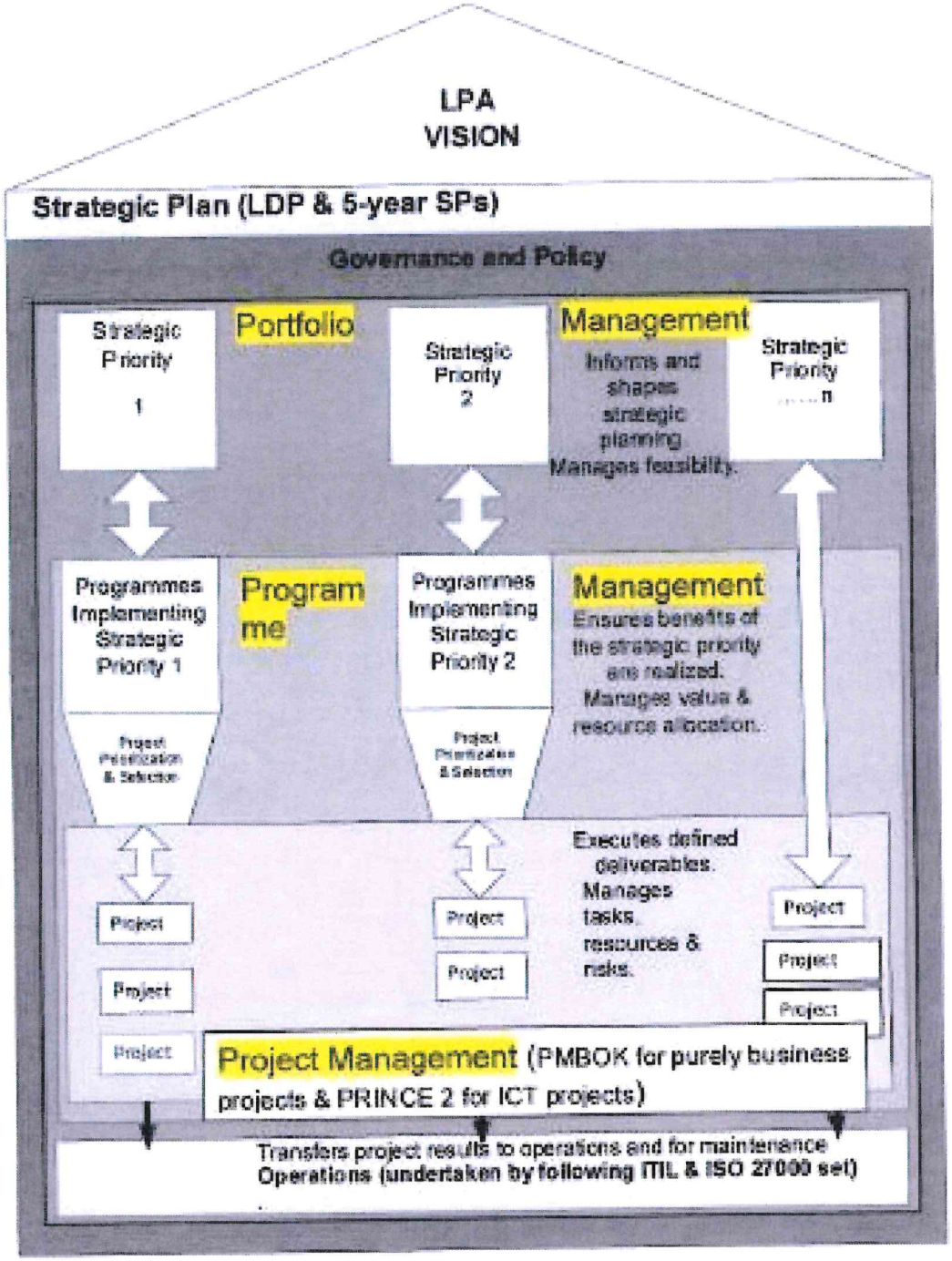
8.1.2 Annual Performance Plans.

8.2. n addition, the Department can make us of the UK OGC maturity model to establish its baseline in terms of its levels of maturity for portfolio management and project management, and it can further assess the progress of the improvement of its maturity levels over time for applying the portfolio management and project management principles using the methodology.

8.3. The COBIT 5 framework provides the underlying enabling processes. The UK OGC's de factor project management methodology, namely Projects in Control Environments (PRINCE) 2, which forms an integral part pf the portfolio management and project management maturity model and methodology, provides the framework for the standardised management and delivery of projects within timeframes, budgets and other resources. Its use is most likely to ensure the delivery of successful ICT projects. For managing purely business projects that have no or little ICT bearing or content, the Project Management Book of Knowledge (PMBOK) methodology of the Project Management institute (PMI) is likely to be the most suitable choice. The Information Technology Infrastructure Library (ITIL), which is used for managing results ensuing from the pursuit of ICT initiatives (projects), informs ICT operations and is part of or is the basis for an ICT Management Framework, and the ICT Management Framework, which does not form an integral part of this ICT Portfolio and Project Management Framework, should be consulted.

9. ICT PORTFOLIO AND PROJECT MANAGEMENT FRAMEWORK BIRD'S EYE VIEW

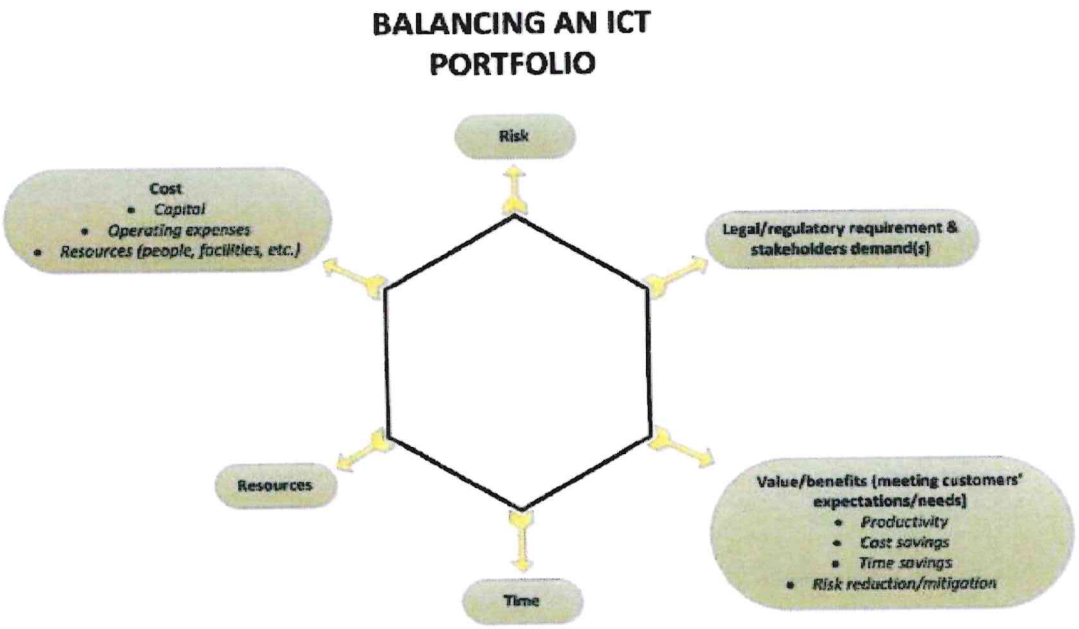
9.1. The following diagram provides a bird's eye view of this ICT Portfolio Management and Project Management Framework.



9.2. As it can be seen from the diagram above, this Framework consists of three main parts, namely portfolio management and project management. For best results and execution, ideally, each portfolio needs to have an assigned, designated and dedicated portfolio manager to manage it, each programme or a closely related set of programmes and/or sub-programmes needs to have an assigned, designated and dedicated programme manager; and each project needs to be assigned a project manager. A Shared Enterprise

Portfolio, Programme and Project Management Office (SEPPPMO/SEP3MO) or a departmental portfolio and project management office in the absence of a SEPPPMO, needs to be in place to provide technical and logistical support to portfolio and project management managers managing various projects that ensure from strategic business programmes and sub-programmes.

9.3. A portfolio will consist of a related set of strategic priorities, strategic goals, strategic objectives and programmes that are contained in a 5-year strategic business plan of the department. This strategic business plan in turn would be crafted from a 5-year tranche of a 20-year or more for the Culture, Sport and Recreation Plan (DCSRDP). A properly built portfolio should be balanced, and this balancing act is not achieved once but continually throughout the lifecycle of the portfolio. The following diagram depicts the continual trade-offs that must be made to achieve a balanced portfolio in terms of business value or benefits to customers or clients, cost, resources (people, facilities, materials, budget, etc.), risks, time and legal or regulatory requirements and stakeholders demands.



9.4. Even though the diagram above appears to depict a portfolio in horizontal dimension as a sort of related strategic priorities, it should be observed from the description given in paragraph 7.3 above that there is also a vertical dimension to a portfolio. In other words, a portfolio will consist of a strategic goals and strategic objectives, as well as all programmes, sub-programmes and projects ensuing from the programmes and sub-

programmes, together with the ICT infrastructure and operations that were the end result of the projects. A portfolio therefore consists of the totality of change initiatives within the department which may comprise a number of programmes and sub-programmes and initiatives that achieve a congruence of change.

9.5. Each programme in a portfolio will ensue from a portfolio of strategic priorities, strategic goals and strategic objectives. Programmes generally do not have time limit, for example, the provision of primary school education does not have a predefined end time. Each programme generates one or more sub-programmes with performance measures, indicators and metrics. A sub-programme will also likely not have a predefined lifespan. There are also strategic business risks that are associated with these programmes and/or sub-programmes. The sub-programmes are generally detailed in an Annual Performance Plan (APP).

9.6. Projects, whether they be purely business projects, purely ICT-projects of a combination of both, would or should ensue from the programmes and/or subprogrammes in a portfolio. Each project must have a business case that clearly shows the business value that will derived from the project. These projects form part of the portfolio. Projects generally have a predefined time lifespan, and these lifespans could be less than a year, one year or several years. Projects are executed in sequence or in parallel depending on their independencies. Each project is managed in accordance with a project statement of work or a project charter ()not a service level agreement, as a service level agreement comes into the picture only when the end result of the project has been transferred to the operations, and this is usually after a post-warranty period has elapsed). The results of projects are transferred to operations, and in respect of ICT projects, the resultant operations are undertaken according to Information Technology Infrastructure Library (ITIL) principles and Interaction Organization for Standardisation (ISO) 27000 set for security management.

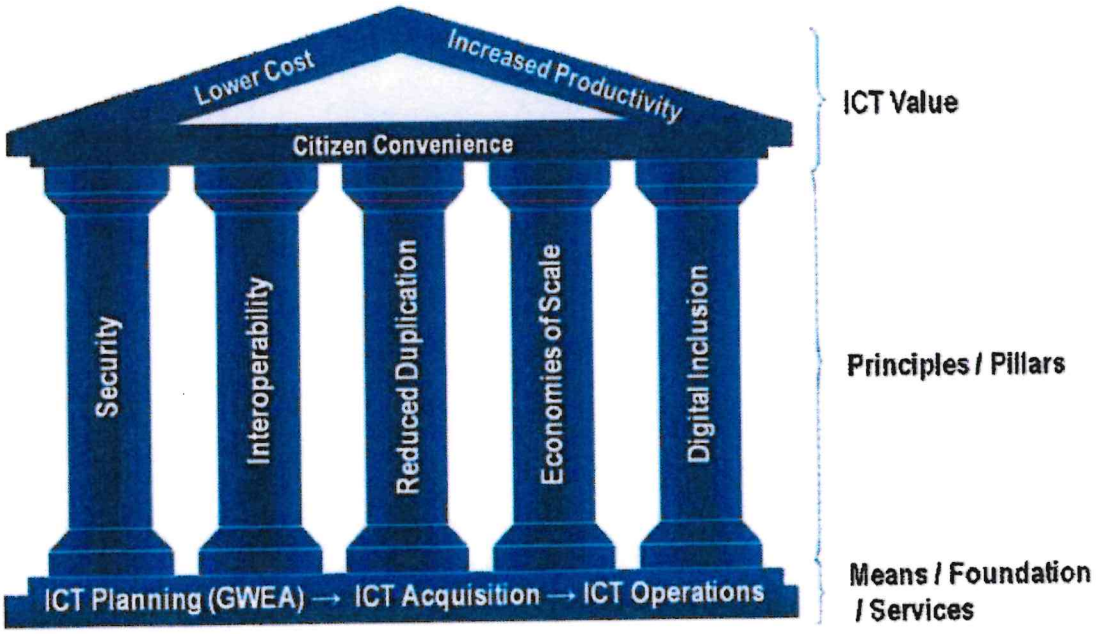
9.7. ICT operations and services ensue from completed projects and they also form part of a portfolio; hence when a portfolio is examined or assessed, the operations must be taken into account. Outsourced ICT services (that is, ICT services provided by an external agency such as the State Information Technology Agency (SITA) to the department) are managed in accordance with a Service Level Agreement (SLA) which must conform to an IT service Management Framework (ITSMF) standard. Insourced ICT services (that is,

ICT services provided by a GITO unit to clients within the department) must be managed in accordance with an Operational Level Agreement (OLA).

9.8. The business value or proposition of an ICT portfolio that is derived from ICT investments (projects, infrastructure, application or information systems, operations and services) must evince itself in the Government ICT House of values. This implies that a business case that triggered a portfolio, programme, sub-programme, project or operation must be continually evaluated in the light of the business value of lack thereof. This in turn implies that a portfolio must be balanced in terms of the business value it delivers ad the risks associated with it. Trade-offs have to be constantly made within the portfolio to balance it (see the diagram in paragraph 7.3 above.

10. GOVERNMENT OF ICT OF VALUES

10.1. The government ICT house of values is depicted in the diagram below



10.2 An ICT project business case must demonstrate how and to what extent operational costs (the cost of doing or undertaking public service business) will be lowered initially and/or over a period of time (this includes time savings, tasks or procedures complexity, repetition and duplication elimination or reduction); how productivity (operational effectiveness and efficiency) will be increased or improved and to what extent (this includes the improvement of the quality, quantity and frequency of availability of public service outputs); and how

citizen and business convenience will be facilitated and/or improved (and this includes service and service equity).

10.3. A project must also contribute to improvement of ICT security, reduction of duplications of ICT systems and infrastructure instances, achievement of economic of scale, advance interoperability with existing ICT systems as dictated by the Minimum Interoperability Standards (MIOS), and ensure digital inclusion of government employees, citizens, businesses, non-governmental organization, community organisation (e.g. burial societies or funeral schemes), cooperatives, faith-bases organisations, etc.

10.4. The "roof" signifies the impact of ICT on public sector operations, which are:

10.4.1. Lowering costs – reducing time, complexity, repetition and duplication of tasks.

10.4.2. Increasing productivity – improving the quality and quantity of traditional public sector outputs or introducing new processes to produce outputs and render services that were previously impossible.

10.4.3. Citizen convenience – (Batho Pele Principles for information orientated services) by offering equal access to government information services, providing, more and better information, improving information service quality and privacy, remedying of failures and providing best value for money.

10.5. The "pillars" signify the principles that must guide the provision of values to be derived from public services ICT acquisitions, which are:

10.5.1. Security – ensuring that information systems operate in a maintained security environment, setting standards for security and certifying compliance of goods and services with those standards.

10.5.2. Interoperability – ensuring that information systems can interconnect and exchange data by setting standards for interoperability and certifying goods and services for compliance with those standards.

10.5.3. Reducing duplications – eliminating unnecessary duplication of ICT goods or services, and compiling and maintaining an up-to-date inventory of all information systems of the department.

10.5.3.1. Economic of scale – leveraging economies of scale to provide cost effective services (i.e. use collective purchasing power of departments to negotiate lower unit prices from the ICT industry).

10.5.3.2. Digital inclusion – by promoting the nascent ICT industry, with a particular emphasis on broad-based black economic empowerment (BBBEE), labour absorption, and stimulation of economic growth and skills development in ICT especially in rural communities in the Mpumalanga Province.

10.6. The "Foundation" signifies the broad category of the means by which the department should contribute to the Government OCT House of Values, which are:

10.6.1. ICT planning – the means to set direction for ICT and to validate/certify conformance and performance thereto.

10.6.2. ICT acquisition/Integration – the means to provide and develop ICT systems and Infrastructure to integrated ICT solutions, within and beyond the department.

10.6.3. ICT operations – the means to ensure that ICT systems and infrastructure are maintained in a reliable, available and secure environment.

11. VISION OF THE MPUMALANGA PROVINCIAL ADMINISTRATION AND THAT OF THE DEPARTMENT OF CULTURE, SPORT AND RECREATION

11.1. The vision of the Mpumalanga Provincial Administration (MPA) is articulated in the Mpumalanga Development Plan. All activities of agencies of the MPA, be they provincial departments or state-owned companies, should contribute towards the achievement and realization of this vision, informed by their respective mandates. The vision of the department is a sub-set of the Provincial vision, and is articulated in its 5-year strategic plan. The department vision is generally amplify from the provincial perspective and mandate of the MPA.

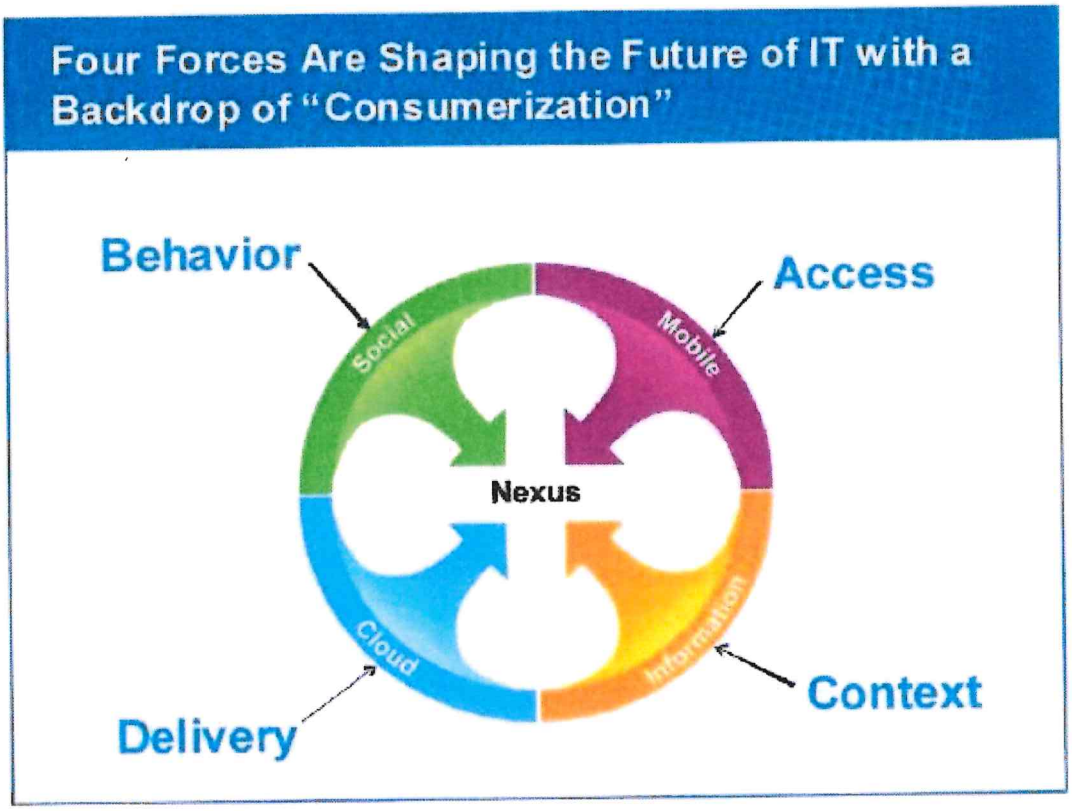
12. STRATEGIC PLAN, ANNUAL PERFORMANCE PLAN AND ICT PLAN OF THE DEPARTMENT

12.1. In terms of the National Treasury Framework for Strategic Plans and Annual Performance Plans, a 5-year Strategic Plan is formulated that is commensurate with an electoral cycle. This strategic plan is informed by a medium term strategic framework (MTSF) that is crafted from a manifesto of the ruling party. This strategic plan contains strategic priorities,

strategic goals and strategic objectives, as well as programmes that will be pursued for the attainment of the strategic goals and objectives. Most, if not all, of these strategic priorities, goals and objectives are likely to be business-oriented with business outputs or outcomes. Very few, if any, are likely to be purely ICT inclined.

12.2. A three-year Annual Performance Plan that advances the attainment, in terms of programmes and sub-programmes, of the strategic goals and objectives is crafted annually, and is informed by the resources available. This implies the prioritization and selection on an annual basis of projects that will be pursued in a particular financial year for the attainment of the sub-programmes and programmes.

12.3. An ICT plan that conforms to the Government-wide Enterprise Architecture and that is ideally commensurate with the 5 year strategic plan must also be crafted. At an absolute minimum, the ICT plan must be commensurate with the Annual Performance Plan, and be informed by it. The ICT Plan will contain these elements that will contribute towards the attainment of the strategic programmes and sub-programmes. The ICT Plan is thus informed by the Departmental Strategic Plan and departmental enterprise architecture, and it needs to be part of or a subset of the departmental strategic plan. The ICT plan should anticipate to some degree technological advancement and demonstrated how and to what extent these advancements, when they are harnessed, will or could contribute towards the attainment of the strategic programmes and sub-programmes. Until such time that departmental designated enterprise architects and ICT architects have been capacitated to make use of the Government-wide Enterprise Architecture Framework, the ICT plan development checklist which is annexed hereto as Annexure A should be used to develop new ICT plans or to review, revise and bring up to date the existing strategic information systems plans. It should be noted that it is possible that, in a 21st century that is increasingly driven by knowledge, information, innovation and networks of people and things as critical means of production, an ICT plan may require in some instances that a strategic plan be revisited, for example, a new digital business model may need to be defined in order to take advantage of the service delivery or service improvement opportunities presented by a convergence of these technological advancements that are characterised by what Gartner has called a nexus of four transformational forces, namely, cloud computing, mobility, social networking and information, which forces are depicted below. In other words, there will at times be a mutual interaction between a strategic plan and ICT plan.



Courtesy: Gartner

13. GOVERNANCE AND POLICY

13.1. The execution of the strategic plan, annual performance plan, ICT plan and undertaking of operations has to be done in compliance with prevailing pieces of legislation ()e.g. Public service Act, Public Finance management Act, National Treasury Regulations, Protection of Personal Information Act, SITA Act, Electronic Communications and Transaction Act, etc.), policies, practice notes, directives, circulars and frameworks (e.g. National Treasury Frameworks for Strategic Plans and Annual Performance Plans, Corporate Governance of ICT Policy Framework, Public Service Commission Risk Management Framework 2003, National Treasury Public Sector Risk Management Framework 2010, Government-wide Enterprise Architecture Framework, Mpumalanga Electronic Government Strategy Framework, COBIT 5, etc.), and adherence to standards (e.g. Mpumalanga ICT Strategic Plan, Mpumalanga Development Plan, Review Checklist, etc.), in the interest of good governance. Achieving a strategic goal or objective (that is, fulfilling the needs of customers and/or clients) but nevertheless

having flouted good governance principles in the process will render the department to obtaining an adverse audit finding or could invite the wrath of stakeholders. Where a new situation is encountered and the prevailing policy regime is found to be inadequate or does not provide clear guidelines, approvals for deviations from policies and/or amendments to existing policies or approvals of formulations of new or replacement policies need to be sought a priori from the relevant authority, be they the accounting officer or executive authority.

13.2. Adequate consultations with relevant stakeholder on new or replacement policies need to take place prior to obtaining their approval.

13.3. For ICT, COBIT 5 is the overarching business framework for the governance and management of enterprise IT, which has been adopted by both the national Government Information Technology Officers Council and the Provincial Government Information Technology Officers Council. It is a comprehensive framework of globally accepted practices that helps enterprise ladders create optimal values from Information and Communication technology investments by maintaining a balance amongst benefits and optimising risk levels and resource use. COBIT 5 provides the structure and tools needed to deliver trust and value manage risk, avoid potential embarrassment and maximise opportunities.

13.4. To the extent is practical in the department, an ICT Strategic Committee or an ICT Steering Committee may serve as Portfolio and Project Management Governance body to set Portfolio Management Principles; rules; resource allocation priorities, investment categorisation and objectives and investment decision-making criteria.

14. ICT PORTFOLIO MANAGEMENT

14.1. ICT portfolio management is about providing or demonstrating the business value of ICT assets or investments. It is about maximising value (tangible and intangible) while minimising risks and costs at the same time. This is applied across an entire department or provincial administration (the latter in the case of transversal information systems and infrastructure) over the entire lifecycle of an ICT investment. The business case of an ICT portfolio has to be continually interrogated to identify specific areas that could be in need of improvement, holes in user requirements, idiosyncrasies in business architecture, obsolesce of technology architecture, misalignment between strategic business intent

and existing ICT investments and assets, and business areas that are overserved or underserved.

14.2. The enabling COBIT 5 processes to plan, create, assess, balance and communicate the execution of an ICT portfolio are indicated on Annexure B in highlight. These processes must be standardised, consistent and visible across the entire department.

14.3. Tools are needed to gather and analysis information and data such as value, costs, risks, benefits, requirements, architectures and alignment f ICT investments to strategic business goals and objectives. This information and data are derived from the strategic business intent, strategic plan and strategic business objectives. It must be noted that information and data in order to prioritized and rank investments. Whatif analysis is then performed, and this may have an impact on or alter the ranking and priorities of the ICT investments in the ICT portfolio.

14.4. The following steps should be followed, but not necessarily in a waterfall manner:

14.4.1. Develop an ICT portfolio management game plan (that is, determine and understand the strategic objectives to be met by the ICT Portfolio in order to establish or arrive at the portfolio objectives, assess the main points to establish the most practical areas (e.g. infrastructure, application, waste and/or risk reduction, business transformation, business process improvement, customer reach extension, etc.) to be addressed, understand the capabilities of the department, determine what measures and indicators of success will be, understand at a high levels the risks and costs involves, and try to avoid analysis paralysis);

14.4.2. Plan the ICT portfolio (portfolio planning is required to conduct a stakeholder analysis in order to identify key stakeholders and their likely stakes in the portfolio (e.g. de jure, de facto portfolio manager, entities wo are likely to have a positive or negative influence on the portfolio, beneficiaries of the outputs or outcomes of the portfolio, etc.), to organise work within a portfolio, to identify ICT business enablement opportunities, to develop an initial business case for candidate projects, and to establish a portfolio governance mechanism, process or body that will provide support to the portfolio manager, which is needed even more so

in the absence of SEPPPMO); document any assumptions that are made or have been made for validity interrogation at a later stage;

14.4.3. Create or establish the ICT portfolio structure (prioritization of programme and/or sub-programmes is needed in order to focus on the most critical projects in a particular planning cycle or financial year); care should be taken that a portfolio structure has some relationship with the chart of accounts of the department to facilitate accounting and financial reporting;

14.4.4. Assess the ICT portfolio in terms of investment categories, resource allocations, risk tolerances, etc. (the selected candidate list of programmes, subprogrammes and projects are assessed and prioritized in terms of their contribution to providing business value and their risk profiles); the assessment should take into account current, planned and proposed portfolio investments;

14.4.5. Balance the ICT portfolio (trade-offs are made to achieve the right balance or optimum mix of programmes, sub-programmes and projects taking into account the risk appetite or tolerance of the department); identify investments that are no longer aligned with the portfolio plan or objectives, identify projects that fail to meet investment targets, identify projects whose priorities have changed relative to each other;

14.4.6. Communicate the ICT portfolio with relevant stakeholders;

14.4.7. Execute the ICT portfolio to deliver programmes, sub-programmes and projects that will in turn deliver business results; and the portfolio is updated to reflect ongoing efforts; and

14.4.8. Monitor and evaluate independently execution of the ICT portfolio and compare the current portfolio performance to the desired and/or planned portfolio objectives (the projects, information systems, infrastructure and operations in a portfolio are inspected for their current or as-is state and the inspection results are filtered into the next portfolio planning iteration or cycle, with new opportunities, redundancies, waste and process gaps identified and with recommendations for information systems and infrastructure health improvements or retirement and business process improvements and/or governance maturity level improvements).

14.5. As far as ICT is concerned, there are generally three dimensions of ICT portfolio management, namely, infrastructure and operations, applications or information systems, and projects. The greatest area of cost in an ICT portfolio is generally in providing the necessary infrastructure to keep the operations of a business running reliably and being available virtually 24 hours and 365 days a year. It is therefore vital that this infrastructure be managed efficiently and justifications for duplicate or redundant elements of the infrastructure should be constantly interrogated to eliminate waste.

14.6. Uncontrolled, unarchitected application portfolios tend to result in the greatest levels of unplanned ICT waste. They produce activities that do not provide value to customers of a department. Application portfolio management is geared to aligning applications to strategic programmes and sub-programmes and to measure their business value, and to retire costly non-performing and non-value adding investments in a logical and unemotional manner.

14.7. Projects portfolios generally advance the service boundary of the department. More of this will be detailed in paragraph 13.

14.8. ICT portfolio management that is practised by a GITO unit in the department has a higher chance of success when the department itself applies the principles of portfolio management at a corporate or enterprise level as it invests in strategic priorities, programmes and sub-programmes.

14.9. The Portfolio Management Maturity Model of the Portfolio and Project Management methodology may be used by the Department to establish its portfolio management maturity level baseline during the 2015/2016 financial year and to measure its maturation progress towards a targeted maturity level over a period of five years ending in 2019/20 financial year.

15. ICT PROGRAMME MANAGEMENT

15.1. The ultimate goal of a programme is to realise outputs, outcomes and benefits of strategic relevance to the department. To achieve this, a programme is designed as flexible organisation structure to coordinate, direct and oversee the implementation of a set of related sub-programmes, projects and activities in order to deliver the outputs, outcomes and benefits related to the department's strategic objectives. A programme is unlikely to have a lifespan, and should it have one, the lifespan is likely to be several years long.

Programmes usually require commitment and active involvement of more than one business unit or more than one department or organisation to archive the programme objectives. Programme deliver, or enable one or more benefits that the measurable improvements resulting from and output or outcome perceived as an advantage by one or more stakeholders. The term programme portfolio is used to describe the total set of programmes and projects undertaken by the department. An ICT programme should be borne out of the business program as enunciate in the Business strategic plan, annual performance plan and/or ICT plan.

15.2. A change initiative triggered by a strategic priority could spawn a programme. To treat the department change initiative as a programme, there must be justification in terms of the added value to be gained by introducing a layer of management between corporate or enterprise portfolio management and project management. To be worth considering a change initiative as a programme, the initiative must fulfil the following criteria:

15.2.1. Meet a strategic need;

15.2.2. Enable and manage the realisation of the envisaged benefits;

15.2.3. Require a high level of departmental leadership and direction;

15.2.4. Involve a range of projects, work streams or activities which together deliver the changes, outputs and/or outcomes required to enable the benefits;

15.2.5. Be driven by a compelling vision of a better future (e.g. a new piece of policy or policy amendment); or a need for regulatory compliance; or a need to capture or take advantage of an anticipated or emerging opportunity for efficiency gains and/or service department.

15.3. Programmes are generally, and this also applies to ICT programmes, cross-cutting, multi-disciplinary, involve some amount of risk and uncertainty, are of long duration spanning years rather than months, and are influenced by a wide range of interested parties with varying degrees of commitment and/or involvement. They impact one wide range of stakeholders some of whom may be at a disadvantage when it comes to harvesting the benefits of a programme, and they are liable to change direction in the light of implementation experience and external factors,

15.4. There are proven universal principles that apply to all types of programmes which, when they are applied, they help to ensure success. These principles are:

15.4.1. A programme must be aligned to, and during its lifecycle, remain aligned to the departmental strategic plan;

15.4.2. A programme must lead and drive change to work practices and habits, government business culture, employee and customer attitudes and behaviours, amongst others;

15.4.3. A programme must envision and communicate a better future;

15.4.4. A programme must be focused on benefits to beneficiaries (benefits must be realisable during the lifespan of the programme) and on dealing with threats to the delivery of the benefits;

15.4.5. A programme must be designed to deliver a coherent capability (i.e. outputs, outcomes and benefits are dependent on the creation of several related project outputs which must be integrated for successful implementation);

15.4.6.The management culture of the department must learn from the prior implementation experience of similar programmes and bring these lessons to bear on the implementation of a current programme;

15.4.7. A programme must add value (i.e. the cost of additional resources required to manage a change initiative as a programme must be justifiable in terms of an increase in the likelihood of programmes success).

15.5. A programme, as a strategic change initiative, should be triggered top-down by some form of a mandate from a programme sponsor. The programme sponsor articulated the programme vision, objectives and benefits. He/she also gives the programme brief which outlines the programme business case. A detailed programme business case is developed from the outline by an assigned programme manager.

15.6. Programme objectives are likely to morph into projects, some of which may be wholly ICT projects or ICT projects that are part of a business change initiative. There should thus be a dossier of projects and/or activities that together achieve the outputs and outcomes of the programme and realise the benefits that are of strategic importance. ICT projects should be managed in accordance with paragraph 13.

15.7. At programme initiation or conceptualisation stage, programme objectives that respond to strategic priorities, goals and objectives must be agreed upon with all relevant stakeholders. There must be a formal programme definition documents indicating the envisaged or desired outputs, outcomes and benefits. There should be a programme sponsor and programme manager. The structure of the programme, most likely in the form of projects or activities, should correspond with its programme objectives. A benefits map, that is, a map of how several benefits to be delivered by the programme relate to each other, should be drawn up. A stakeholders profile should be compiled in terms of their interest in, or influence on, and support for, the programme. This profile will form the basis of a stakeholder engagement and communication strategy or plan. A risk analysis must be performed and a programme risk register be compiled for the purposes of actively managing programme risks. An issue log to capture and manage issues that arise during programme implementation need to be kept. An opposite programme governance organisation, structure and process must be agreed upon with relevant stakeholder and embodied in the programme definition document.

15.8. A baseline of the things that will improved by the programme must be established during the programme definition stage as well as the benefit targets and the measures and metrics that will be used to gauge the progression from the baselines to the targets.

15.9. Eventually there will come a time when programme has to be wind down and be closed or disbanded. It is advisable to have in place a formal programme closure process. A premature programme closure will be appropriate if the business case of the programme is no longer viable when the portfolio of the programme is assessed or if programme management no longer ads value. It is essential to ensure that benefits realisation and measurement continues even after a programme has been closed. The following are the activities which must be carried out a programme closure:

15.9.1. All stakeholders involved in the programme or affected by the programme must be notified well in advance that the programme is about to close;

15.9.2. An assessment of the completeness of the delivery of the programme must be done;

15.9.3. It must be ensured that all projects ensuing from the programme portfolio have completed satisfactory (in the event of a premature programme closure, any existing projects must be transferred to relevant business units);

15.9.4. A review of the performance of the programme must be undertaken.

15.9.5. Lessons learned from the implementation of the programme must be documented for the benefit of other programmes;

15.9.6. The programme business case fulfilment must be verified;

15.9.7. A final review of benefits realised must take place;

15.9.8. Responsibility for post-programme review of benefits must be allocated;

15.9.9. Ownership of outstanding risks and unresolved issues must be ensured;

15.9.10. Ongoing post-programme operational support arrangements must be put in place;

15.9.11. Programme documentation must be updated, finalised and archived in accordance with departmental records management policy;

15.9.12. The programme organisation structure must be disbanded and resources and support functions must be handed over formally to the department or relevant organisations.

15.10. The programme management maturity model of the portfolio and project management methodology may be used by a department to establish its programme management maturity level baseline and measure its maturation progress towards a targeted maturity level over a period of time, say five years.

16. ICT PROJECT MANAGEMENT

16.1. Project ensue from business programmes or sub-programmes and they form part of the portfolio of the programme they emanate from. Very rarely will a project, more especially an ICT project. Ensue directly from a strategic priority, goal or objective. Projects are implemented as means of achieving a departmental strategic plan and are often a response to requests that cannot be addressed within the normal organisational structure or operational limits. Projects are characterised by a definite beginning and an end (the duration could be several weeks, months or even years), and are undertaken to deliver a

unique product or service or a set of deliverables of a certain quantity and quality using a limited set of resources, including human resources, budget, facilities and materials.

16.2. Projects ensuing from a programme or sub-programme must be related to each other and they must be ranked in priority in terms of their contribution to programme goals and objectives and of their risk profiles.

16.3. A project is managed in terms of project management principles. The Guide to the Project Management Book of Knowledge (PMBOK) issued by the Project Management institute is generally followed for managing mostly non-ICT projects. The PRINCE2 methodology is strongly recommended for the management of ICT projects or for government business projects that have ICT-enablement as one of their major components.

16.4.The PRINCE2 project management methodology is the de factor information systems project management standard. It provides a structured approach for managing ICT projects within a clearly defined framework. It describes procedures for coordinating people and activities in a project, how to design and supervise a project, and what to do if the project does not develop as planned. The methodology encompassed the processes of conceptualisation, initiation, planning, execution, control, closing and post-implementation review of a project. Its process-driven project management method is based on seven principles, namely,

16.4.1. continued business justification,

16.4.2. learning from prior experience,

16.4.3. defined roles and responsibilities,

16.4.4. management by stages or phases,

16.4.5. management by exception,

16.4.6. focus on product deliverables and

16.4.7. Tailoring to suite the environment of the project.

16.4.8 It covers seven themes, namely:

16.4.9. Business case,

16.4.10. Project organisation,

16.4.11. Quality of deliverables,

16.4.12. Project plan,

16.4.13. Project risks,

16.4.14. Change management, and

16.4.15. Progress tracking.

16.5. These seven principles and themes play themselves out in seven project management processes, namely:

16.5.1. Starting a project,

16.5.2. Initiating a project,

16.5.3. Directing a project,

16.5.4. Controlling a stage or phase,

16.5.5. Managing stage or phase boundaries,

16.5.6. Managing product delivery, and

16.5.7. Closing a project.

16.6. Each process is specified with its key inputs and outputs and with specific goals and activities to be carried out, which gives an automatic control of any deviations from the project plan. Its division into manageable project stages enables an efficient control of resources. Each decision into manageable project stages enables an efficient control of resources. Each of these processes has a note on scalability to provide guidance to a project at hand. PRINCE2 provides a common terminology for all participants in the project and stakeholders. The various management roles and responsibility involved in a project are fully described and are adaptable to suite the complexity of a project and the skill levels of organisation in which a project is resident,

16.7. There are PRINCE2 certifications that attest to the proficiency of project management practitioners who claim to make use of this methodology. Thee accreditations are provided by the Association for Project Management (APM) Group internationally. There are at present three levels of accreditation, namely:

1.57.1. PRINCE2 Foundation,

1.57.2. PRINCE2 Practitioner, and

1.57.3. PRINCE2 Professional.

16.8. It is of paramount importance that project manager personnel to be fielded by ICT service providers, including the State Information Technology Agency (SITA), that are contracted by the department to deliver an ICT project have at least the PRINCE2 Practitioner qualification. The APM Group publishes a successful candidate register which can be searched on the web (www.apmg-international.com). The register contains the details of candidates who have sat for the PRINCE2 examinations. It is equally important that government officials who will co-manage an ICT project with a service provider-assigned project manager, be at least PRINCE2 Foundation certified. A government official who has a Project Management Professional (PMP) qualification issued by the Project Management Institute will also be capable of managing an ICT project successfully.

16.9. Project management is a complex discipline and it would be wrong to assume that blind application of the PRINCE2 methodology will result in a successful project. By the same token, it would be wrong to assume that every aspect of the PRINCE2 methodology will be applicable to every ICT project. The scalability note on each process gives a project manager process application flexibility. Thus PRINCE2 can be tailored to the needs of a particular project. A negative aspect of the methodology is that many of these essential elements of PRINCE2 can be omitted and sometimes this could result in a PINO (project in name only) project.

16.10. The department should keep PRINCE2 documentation material in both softcopy and hard copy in one of its libraries, if it does not have a fully functional portfolio, programme and project management office, for use by its ICT project managers.

16.11. The Project Management Maturity Model of the Portfolio and Project management methodology may be used by the department to establish its project management maturity

level baseline during the 2015/16 financial year and to measure its maturation progress towards a targeted maturity level over a period of five years ending in the 2019/20 financial year.

17. ICT OPERATIONS, SERVICE PROVISION AND DELIVERY

17.1. ICT operations involving infrastructure and information systems or applications are often the results of projects and acquisitions through insourcing and outsourcing ICT services acquired by a GITO from external service providers should be managed in terms of service level agreements, and ICT services provided by the department to external customers and clients should also be managed in terms of a service level agreement. ICT services provided by a GITO unit to internal customers or clients in the department should be managed in terms of an operations level agreement.

17.2. ICT services are managed in terms of an IT service Management Framework which should be based on ITIL. The description or overview if ITIL falls outside the scope of the ICT Portfolio and Project Management Framework. A department must have a soft copy and a hard copy of the ITIL Framework in one of its libraries for use by its GITO unit. GITO unit staff members need to be capacitated to know and apply the ITIL Framework.

17.3. ICT security management services are managed in accordance with the ISO 27000 security management practice standard set. A soft copy and hard copy of this international ICT security management practice set, which is obtainable at a fee from the South African Bureau for Standards (SABS), should be in one of the libraries of the department.

17.4. It should be borne in mind that the elements of an ICT infrastructure and operations form part of specific portfolios and that some elements could be part of more than one portfolio. Thus when a portfolio I assessed, the ICT infrastructure and operations forming that part of a portfolio need to be taken into consideration.

18. EFFECTIVE DATE OF THIS PORTFOLIO AND PROJECT MANAGEMENT FRAMEWORK

18.1. This framework comes into operation with effect from April 2016 or alternatively on the first business day of the month following the date of its approval, whichever comes first.

19. ICT PORTFOLIO, PROGRAMME AND PROJECT MANAGEMENT FRAMEWORK REVISION

19.1. This framework needs to be revised and updated with inputs and observations that would be made during the application of this framework by the department after a period not exceeding 18 months from the date of approval of this framework in order to bring improvements either to the framework itself or its application.

20. CONCLUSION

investments that bring value to the ultimate investors, namely, the taxpayers, for their benefit and for the attainment of a better life for all in the Mpumalanga Province.

20.1. It is hoped that the application of this framework will bring to an end the kind of wasteful and fruitless expenditure pattern or trend that has occurred in the department repeatedly during the past 20 years of democratic government. In other words, the experimentation that has occurred in the past in ICT projects that have shown serious misalignment with government strategic priorities, goals and objectives or superficially appeared to meet these objectives without aspiring or adhering to rigorous portfolio programme, and project management discipline must give way to sound ICT.

21. POLICY APPROVED

MR. EM MAHLANGU
ACTING HEAD: CULTURE, SPORT AND RECREATION
DATE: 07 / 11 /2025

ANNEXURE A: ICT PLAN DEVELOPMENT AND REVIEW CHECKLIST

This is a service-oriented information plan development checklist that is biased towards assisting a provincial government institution to improve the service it renders of the provision or supply of its products to its customers using information and communication technology.

21.1. Key input Documents/Materials

i. National Development Plan Vision 2030
ii. Mpumalanga Development Plan (MDP) 2015-2025 and/or Municipal Integrated Development Plans
iii. Mpumalanga Electronic Government Strategy Framework
iv. White Paper on the Transformation of the Public Service
v. White Paper on the Transformation of Public Service Delivery (Batho Pele White Paper) vi. Electronic Communications and Transaction Act, 2001
vii. Electronic Communications Act, 2005
viii. Promotion of Access to Information Act, 2000
ix. Promotion of Administrative Justice Act, 2000
x. Protection of Personal Information Act, 2013
xi. Protection of Government Information Act, 1982
xii. Public service Act, 1994
xiii. Public Finance Management Act, 1999
xiv. State Information Technology Agency Act, 1998
xv. SITA General Regulations, 2005
xvi. Public service regulations, 2001
xvii. ISO/IEC 27001 & 27002 Information Security Management Practice Guidelines
xviii. The Medium Term Strategic Framework, 2014-2019
xix. Minimum Interoperability Standards (MIOS)
xx. Government Enterprise Architecture Framework (GWEAF)
xxi. Minimum Information Security Standards (MISS)
xxii. The Departmental Medium Term Expenditure Framework
xxiii. The Departmental Strategic Plan 2015-2020

xxiv. The Departmental Annual Performance Plan

xxv. The Provincial Knowledge Management Strategy and Implementation Plan 2013

The above is by no means and exhaustive list of legislative, regulatory, policy and strategy input documents, e.g. those that deal with the raison détre of the department, have not been stated here, and they too need to be studied.

Checklist for constructing or reviewing the Departmental Information Plan, Information Systems Plan, and Information and Communication Technology Infrastructure Plan

The public Service Regulations, 2001, demand of an accounting officer or executive authority to have in place an information plan, an information systems plan and an information and communication technology (ICT) infrastructure plan, amongst others:

i. What are the vision and mission of the department? ii. What are strategic objectives of the department and their targets, outputs and outcomes?

iii. Identify customers of the department and their customs

iv. Identify stakeholders (e.g. regulators, oversight bodies, communities, organisations, donors, etc.) of the department and their stakes in the department.

v. What is the value propositions offered by the department to the customers and stakeholders or to a segment/s of the customers or stakeholders? In other words, why would the customers want the services or products offered by the department? Why would the stakeholders have a stake in the department? vi. What are the strategic strengths and weaknesses of the department? vii. What are the opportunities and threats facing the department?

viii. What plans are in place to build on the existing strengths, to overcome the existing weaknesses, to take advantage of the opportunities, and to eschew or mitigate the threats? How adequate, credible and realistic are these plans?

ix. Identify the chains of these service/products

x. Identify the value added, if any, along a value chain by the participants in the value chain

xi. What are the primary or main outputs of the department: the services/s or the products/s? Are the products/s produced incidentally in support of the service/s, or are the service/s rendered incidentally in support of the products/s? Clarify the relationship interplays between the services and the products.

xii. What are the primary or main outputs of the department: the service/s or the product/s? Are the product/s produced incidentally in support of the service/s, or are the service/s rendered incidentally in support of the product/s? Clarify the relationship interplays between the services and the products.

xiii. Identify recipients of these services and/or consumers of these products, in addition to the customers, if any

xiv. What is the quality and value of these services/products to the recipients? The quality and/or value could be factual or perceived.

xv. Identify any possible sources of competition for the provision/delivery of these services or products, strategies and potential strategies of these competitors, and evaluate the prospects of the institution to successfully compete with them on the basis of value for money, affordability, brand perception, cost of service/product, service reach, etc.

xvi. To what extent are the services/products marketed to the recipients/consumers/customers?

xvii. Does the service or product have a life cycle? And if so, reduce the lifecycle to a schematic

xviii. Identify standards or levels (quality) of these services/products

xix. Identify within the institution the providers and/or deliverers of these services and the producers of these products

xx. Identify other role players and clarify role interplays

xxi. What is the quality, quantity, frequency, form and convenience of services/products as required by the recipients from their point of view?

xxii. What is the quality, quantity, frequency, form and convenience of the services/products currently being provided, viewed from the perspective of the recipients?

xxiii. What is the gap/s between the above, and what do the service providers or product producers internal to the institution intend doing to close the gaps and how they intended to achieve this, over what timeframe, and what will be the cost.