



A Better Place for All

ICT GOVERNANCE FRAMEWORK

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1 EXECUTIVE SUMMARY

Information and Communication Technology (ICT) is one of the key assets of a Municipality. ICT, the people, processes, infrastructure and information - is embedded across the Dr NDZ Municipality creating a wide community of owners and stakeholders. A major investment in ICT is expected to deliver value and has been found to deliver a great value for Dr NDZ Municipality when used as a strategic enabler rather than being influenced by a stream of diverse tactical initiatives. Information Technology (IT) Governance is the responsibility of the Board of Directors (**EXCO**) and executive management (**MANCO**). It is an integral part of enterprise governance and consists of leadership and organizational structures and processes that ensure that the organization's IT sustains and extends the organization strategies and objectives.

The issues, opportunities and challenges of effectively governing an organization's IT demands, investments and resources has become a major concern of the Board and executive management in enterprises on a global basis. A rapidly growing number of organizations have become increasingly dependent on a broad array of technologies to manage and improve service delivery. IT is an integral part of most organizations today and will certainly become more critical in the future.

Therefore, IT governance must be an integral part of enterprise governance. IT governance represents a journey (not an end state in itself), which focuses on sustaining value and confidence across the business. Today, many companies start on an arrow path or shot gun approach and focus on the compliance component of IT governance, without developing a balanced approach consisting of both a top down framework and roadmap together with bottom up implementation to address the broad range of IT governance issues and opportunities in a planned, coordinated, prioritized and cost effective manner.

While there is no single right way for organizations to approach improvements in IT governance, Dr NDZ Municipality is committed to a balanced approach consisting of both a top down framework and roadmap together with bottom up implementation based on several critical foundations— leadership, organization and decision rights; flexible and scalable processes and the use of enabling technology solutions.

WHAT IS ICT GOVERNANCE?

ICT Governance is defined as 'specifying the decision rights and accountability framework to encourage desirable behavior in the use of IT. The complexity and difficulty of explaining IT governance is one of the most serious barriers to improvement. ICT governance is about who makes decisions while management is about making and implementing the decisions. A need for a well governed IT function is becoming more apparent as business leaders are forced to critically evaluate their cost and value chains in challenging economic environments. Additionally, their compliance, audit, risk and security environments are becoming the focus of attention in a world where regulatory compliance can fundamentally impair or enable the operations of a business.

HOW ICT GOVERNANCE CAN ASSIST

ICT has become an integral part of doing business today, as it is fundamental to the support, sustainability and growth of the Municipality. ICT cuts across all aspects, components and processes in

business and is therefore not only an operational enabler for a municipality, but an important strategic asset which can be leveraged to create opportunities and to gain competitive advantage. As well as being a strategic asset to the Municipality, ICT also presents municipalities with significant risks. The strategic asset of ICT and its related risks and constraints should be well governed and controlled to ensure that ICT supports the strategic objectives of the organisation.

By adopting this ICT Governance Framework, the Mayors and Municipal Manager will be compliant with King III Code of Governance which stipulates that prudent and reasonable steps must be taken with respect to ICT governance. Adopting a strategic approach to ICT Governance extends the horizon of thinking beyond the boundary of "are we compliant, yes or no?" towards performance management, guiding optimal allocation of the Municipality's finite resources and providing the means to capture value back from the investment.

HOW ICT GOVERNANCE IS USED IN THE MUNICIPALITY

Developing countries such as South Africa have a tremendous potential for rapid and sustainable economic and social development by leveraging the potential of ICT and applying it appropriately within the local government sector.

As such, the Local Government Turnaround Strategy (LGTAS) vision states that:

- ☐ Each municipality has the necessary ICT infrastructure and connectivity; and that
- ☐ ICT systems must be put in place across all municipalities to accelerate service delivery, improve efficiency and accountability

However, technology on its own cannot achieve anything and it must be supported by capable people and tested processes will provide services that the public can have confidence in. Disparities both from within the municipal sector as well as in the larger South African ICT landscape have impacted in the manner municipalities make successful use of ICT. The result is that when it comes to ICT, municipalities:

- ☐ Operate in a very isolated non-uniform manner;
- ☐ Are ill-prepared to face the required ICT resource, skill and budget constraints; and
- ☐ Have limited access to or support from other spheres of government and are often left to the mercy of the market.

The huge ICT skills shortage in South Africa also has a negative impact on the Public Sector, specifically Local Government. Unfortunately, the reality is that staff is made up of under-qualified professionals with watered-down skills that are not geared for real-life ICT crises and challenges. This negatively affects the optimal running of ICT departments and delivery of government ICT projects. The implementation of the IT Governance Framework within the Municipal environment aims to address this epidemic.

2 PURPOSE

ICT Governance is a subset discipline of Corporate Governance focused on the use of ICT systems, their risk and performance management. This document defines the ICT Governance Policy and

Charter that will be used across Dr NDZ Municipality. This document is aligned to the principles and recommendations of COBIT 5, king IV, SALGA and DPSA.

The purpose of the ICT governance framework is to:

- ☐ Promote the alignment of ICT with Dr NDZ Municipality objectives
- ☐ Provide a method for measuring and managing performance against ICT goals
- ☐ Facilitate effective communication between ICT and the business
- ☐ Help mitigate risk, delivering value and improving control over delivery of information systems and services to Dr NDZ Municipality and relevant stakeholders
- ☐ Assist in complying with external legislation and regulations

The following paragraphs outline the purpose of the different sections of the ICT Governance Framework.

ICT Governance Policy– It covers what Dr NDZ Municipality should do to implement the Framework within the municipality's context and governance culture. The Policy depicts Governance of ICT (GICT) delegations, roles and responsibilities and organisational structures that Dr NDZ Municipality will require and utilise for effective and efficient governance of ICT.

ICT Governance Charter - The Charter depicts how the ICT Governance Framework Policy will be implemented and describes the related delegations, roles and responsibilities, functions, processes and reporting.

ICT Risks Profile– The document reports on results of assessing the risk and controls environment of Dr NDZ Municipality with a view of understanding the risk environment to which Dr NDZ Municipality is exposed to and the controls implemented by Dr NDZ Municipality to mitigate these risks. This report highlights areas where risk management practices and the controls over ICT could be improved. It is included as part of the ICT Governance Framework deliverables pack.

ICT Governance Framework– The framework is meant for individuals tasked with management and implementation of specific ICT Governance activities and represents a customised ICT Governance Framework and Implementation roadmap focusing on the governance of the ICT function across Dr NDZ Municipality. This governance framework is broken into major components, the ICT goals based on the Municipality's priorities, the prioritised ICT Governance Framework, the ICT Governance task list broken down into enablers and the ICT Governance, Implementation roadmap. The enablers specified are as follows:

- ☐ Principles, Policies, and Frameworks
- ☐ Processes
- ☐ Organisation Structures
- ☐ Culture, Ethics and Behaviour
- ☐ Information
- ☐ Services, Infrastructure and applications
- ☐ People, Skills and competencies

This is covered within this document.

HOW CAN ICT GOVERNANCE HELP?

Good ICT governance is the foundation for delivering strategic ICT as it:

Aligns ICT with Institutional strategy:

It provides clear and visible decision making at the appropriate level of senior management, and with ICT embedded across the institution, encourages more responsible and accountable business management, creating focus, understanding and improved delivery against goals. Alignment can deliver cost reductions, improved quality of service delivery, strategies for growth and strategies for diversification.

Integrates structural requirements:

Institutional structures and ICT services are harmonized to allow improved delivery of institutional goals. A less fragmented and more integrated approach to the use of ICT will deliver improved quality of information from the rationalization and sharing of services.

Integrates business and technology for ICT value:

Involves professionals, research, administration and ICT, resulting in improved decision making and buy-in for ICT changes.

3 APPROACH TO THE DEVELOPMENT OF THE ICT GOVERNANCE FRAMEWORK

The ICT Governance Framework considers both the risk mitigation and performance considerations required to create a complete ICT governance overview. The Control Objectives for Information and related Technology (COBIT 5) framework has been utilised to provide the basis for process elements of the ICT Governance Framework. COBIT 5 focuses on implementing governance within ICT, controlling ICT and monitoring the performance of ICT.

An understanding of the Dr NDZ Municipality stakeholder needs was followed by an assessment based on the Kaplan-Norton Balanced Scorecard to determine the key priorities of the municipality. These were then used to extract the associated key ICT goals, which were in turn used to define the required performance elements of the ICT Governance Management Framework. Guidelines provided by the Department of Public Services and Administration (DPSA) and South African Local Government Association (SALGA) were considered. Finally, an implementation roadmap for the Governance Framework was formulated based on the input from the ICT related Dr NDZ Municipality documentation. This approach ensures that the resulting Framework and implementation roadmap has been formed to include the relevant areas for Dr NDZ Municipality from the industry accepted ICT governance agendas.

4 ICT GOVERNANCE FRAMEWORK

ICT governance is supported by a number of reference frameworks to guide its implementation. The most prominent are COBIT, the IT Infrastructure Library ("ITIL") and ISO27001 (previously ISO17799). ICT Governance, like Corporate Governance, is a framework that is implemented to support a business. Since no two businesses are exactly alike, it stands to reason that their governance frameworks would need to be catered to the specific risk and performance environment that they operate in. As such, reference frameworks should not be taken as verbatim implementation templates for an organisation, but rather as starting points for a guided discussion on the best governance framework for the organisation.

COBIT is an internationally accepted process framework for implementing governance of ICT. COBIT fully supports the principles of the king IV and the ISO/IEC 38500 standard in the corporate governance of ICT. It provides an authoritative, internal set of generally accepted practices that assists executives and managers to reduce the risks and increase the benefits associated with ICT. COBIT 5 will direct the implementation of ICT governance at Dr NDZ Municipality.

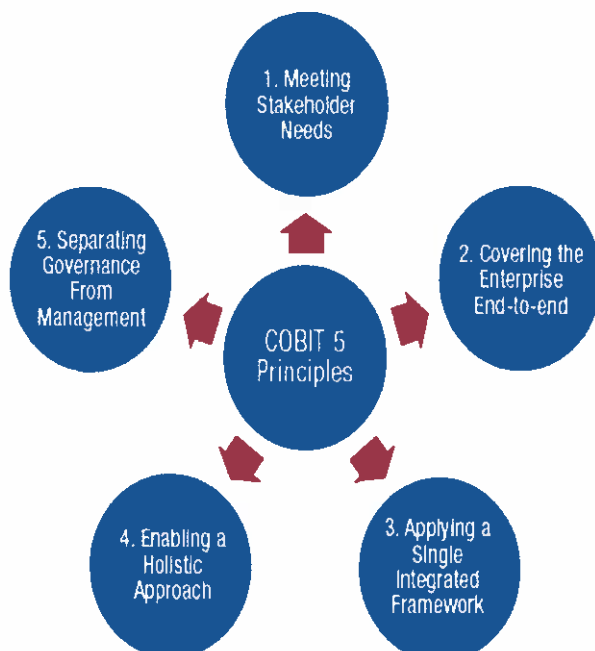
Information is a key resource for all organisations, and from the time that information is created to the moment that it is destroyed, technology plays a significant role. Successful organisations have recognised that the executives need to embrace IT like any other significant part of doing business. COBIT 5 provides a comprehensive framework that assists organisations in achieving their objectives for the governance and management of IT.

Simply stated, it helps organisations create optimal value from IT by maintaining a balance between realising benefits and optimising risk levels and resource use. COBIT 5 enables IT to be governed and managed in a holistic manner for the entire organisation, taking in the full end-to-end business and IT functional areas of responsibility, considering the IT-related interests of internal and external stakeholders.

COBIT 5 is based on five key principles for governance and management of enterprise IT as

detailed below. Together, these principles enable the organisation to build an effective governance and management framework that optimises information and technology investment and use for the benefit of stakeholders.

Principle 1: Meeting Stakeholder Needs—Enterprises exist to create value for their stakeholders by maintaining a balance between the realization of benefits and the optimization of risk and use of resources. COBIT 5 provides all the required processes and other enablers to support business value creation using IT. Because every enterprise



has different objectives, an enterprise can customize COBIT 5 to suit its own context through the goals cascade, translating high-level enterprise goals into manageable, specific, IT-related goals and mapping these to specific processes and practices.

Principle 2: Covering the Enterprise End-to-end - COBIT 5 integrates governance of enterprise IT into enterprise governance:

- It covers all functions and processes within the enterprise; COBIT 5 does not focus only on the IT function but treats information and related technologies as assets that need to be dealt with just like any other asset by everyone in the enterprise.
- It considers all IT-related governance and management enablers to be enterprise wide and end-to-end, inclusive of everything and everyone—internal and external—that is relevant to governance and management of enterprise information and related IT.

Principle 3: Applying a Single, Integrated Framework— there are many IT-related standards and best practices, each providing guidance on a subset of IT activities. COBIT 5 aligns with other relevant standards and frameworks at a high level, and thus can serve as the overarching framework for governance and management of enterprise IT.

Principle 4: Enabling a Holistic Approach—Efficient and effective governance and management of enterprise IT require a holistic approach, considering several interacting components.

COBIT 5 defines a set of enablers to support the implementation of a comprehensive governance and management system for enterprise IT. Enablers are broadly defined as anything that can help to achieve the objectives of the enterprise. The COBIT 5 framework defines seven categories of enablers namely:

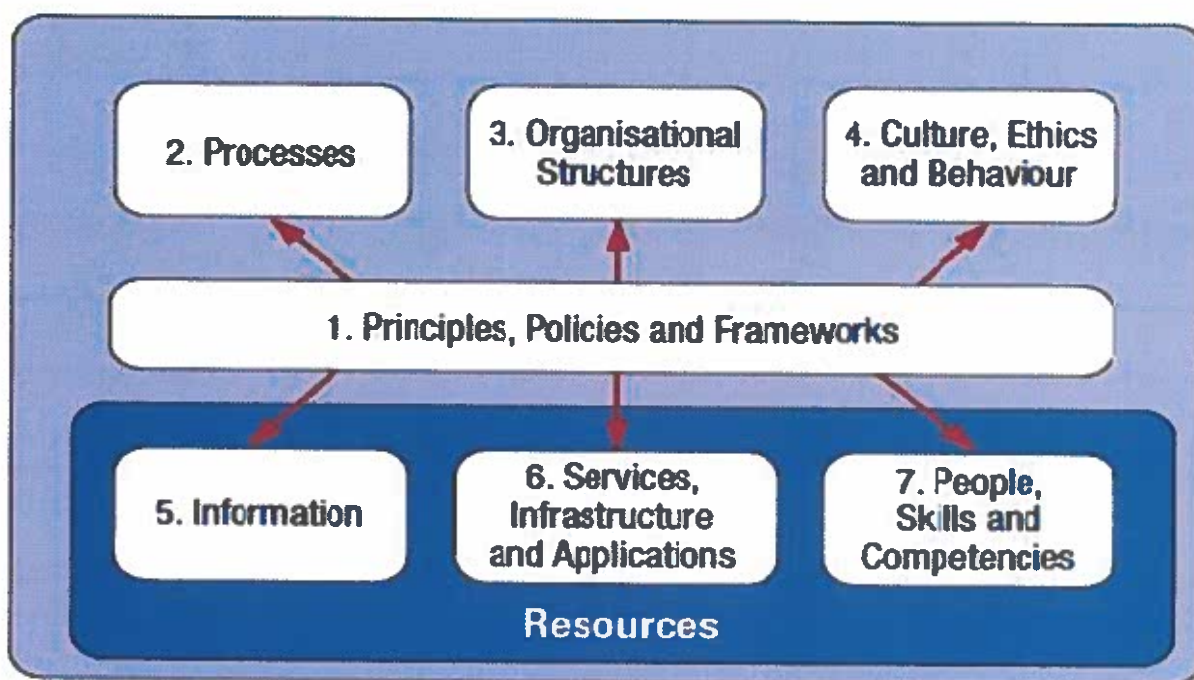
1. Principles, Policies and Framework are the vehicle to translate the desired behaviour into practical guidance for day to day management
2. Processes describe an organised set of practices and activities to achieve certain objectives and produce a set of outputs in support of achieving overall ICT-related goals
3. Organisational Structures are the key decision-making entities in an enterprise
4. Culture, Ethics and Behaviour of individuals and of the enterprise are very often underestimated as a success factor in governance and management activities
5. Information is pervasive throughout any organisation and includes all information produced and used by the enterprise. Information is required for keeping the organisation running and well governed, but at the operational level, information is very often the key product of the enterprise itself
6. Services, Infrastructure and Application include the infrastructure, technology and applications that provide the enterprise with information technology processing and services

7. People, Skills and Competencies are linked to people and are required for successful completion of all activities and for making correct decisions and taking corrective actions

Principle 5: Separating Governance from Management—The COBIT 5 framework makes a clear distinction between governance and management. These two disciplines encompass different types of activities, require different organisational structures and serve different purposes. COBIT5's view on this key distinction between governance and management is:

Governance ensures that stakeholder needs, conditions and options are evaluated to determine balanced, agreed-on enterprise objectives to be achieved; setting direction through prioritization and decision making; and monitoring performance and compliance against agreed-on direction and objectives. In most enterprises, overall governance is the responsibility of the board of directors under the leadership of the chairperson. Specific governance responsibilities may be delegated to special organisational structures at an appropriate level, particularly in larger, complex enterprises.

Management plans, builds, runs and monitors activities in alignment with the direction set by the governance body to achieve the enterprise objectives. In most enterprises, management is the responsibility of the executive management under the leadership of the chief executive officer (CEO).



The outline of the Dr NDZ Municipality Governance, Risk and Compliance Management Framework can be diagrammatically represented as follows:

5 ICT GOVERNANCE PRINCIPLES

Dr NDZ Municipality will adopt the governance of ICT principles as stipulated in the Corporate Governance of ICT Policy Framework (GICTPF). The implementation of the Corporate Governance of ICT at Dr NDZ Municipality will be achieved through the seven principles defined by SALGA and aligned to DPSA as detailed in the table below:

Improved harmonization between institutional goals and ICT accountability and performance measures improves budgetary control and value. Measures of success are defined as service levels and as evaluation criteria for projects.

6 BENEFITS OF CORPORATE GOVERNANCE OF ICT

When the Corporate Governance of ICT is effectively implemented and maintained, the following benefits are realized:

- (a) Public Service positioned to improve delivery on the 12 strategic outcomes;
- (b) Improved achievement of Public Service-wide and departmental strategic Goals;
- (c) Improved effective public service delivery through ICT-enabled access to Government information and services;
- (d) Improved ICT enablement of business;
- (e) Improved delivery of ICT service quality;
- (f) Improved stakeholder communication;
- (g) Continuous improvement of business and ICT alignment;
- (h) Improved trust between ICT, the business and citizens;
- (i) Lower costs;
- (j) Increased alignment of investment towards strategic goals;
- (k) Improved return on ICT-enabled investment;
- (l) ICT risks managed in line with the priorities and appetite of the Public Service and the department;
- (m) Appropriate security measures to protect the departmental and employee Information;
- (n) Improved management of business-related ICT projects;
- (o) Improved management of information as it is managed on the same level as other resources such as people, finance and material in the Public Service;
- (p) ICT pro-actively recognises opportunities and guides departments and the Public Service in timeous adoption of appropriate technology;
- (q) Improved ICT ability to learn and agility to adapt to changing circumstances; and
- (r) ICT executed in line with legislative and regulatory requirements.

7 CORPORATE GOVERNANCE OF ICT GOOD PRACTICE AND STANDARDS

In recognition of the importance of ICT Governance, a number of internationally recognised frameworks and standards have been developed to provide context for the institutionalization of the governance of ICT.

The King III Code: The most commonly accepted Corporate Governance Framework in South Africa is also valid for Municipalities. ICT was used to inform the Governance of ICT principles and practices and to establish the relationship between Corporate Governance of and Governance of ICT.

ISO/IEC 38500: Internationally accepted as the standard for Corporate Governance of ICT; ICT provides governance principles and a model for the effective, efficient, and acceptable use of ICT within municipalities.

Other internationally accepted process frameworks for implementing Governance of ICT.

Principle 1: Political Mandate

Principles defined by SALGA

- ☐ The Corporate Governance of ICT must enable the municipality's political mandate
- ☐ The Executive Authority must ensure that the Corporate Governance of ICT achieves the political mandate of the municipality

How Dr NDZ Municipality will ensure alignment

- ☐ Develop an ICT Governance Framework that is aligned to the CGICTPF
- ☐ Council will approve the ICT Governance Framework after confirming alignment to Dr NDZ Municipality's political mandate
- ☐ Council will monitor the operation of the ICT Governance Framework against the political mandate and suggest improvement where necessary

Principle 2: Strategic Mandate

Principles defined by SALGA

- ☐ The Corporate Governance of ICT must enable the municipality's strategic mandate
- ☐ The Municipal Manager (MM) must ensure that the Corporate Governance of ICT assists in achieving the municipality's strategic plans

How Dr NDZ Municipality will ensure alignment

- ☐ Develop an ICT strategy aligned to the Integrated Development Plan (IDP)
- ☐ The ICT Governance Framework will be the vehicle for ensuring that the initiatives on the ICT strategy are executed successfully to ensure ICT enables the municipality
- ☐ The MM will ensure that the ICT Governance Framework is adhered to throughout the municipality. The adherence to the practices and processes set out in this framework will ensure that ICT contributes to achieving the municipality's strategic plans

Principle 3: Corporate Governance of ICT

Principles defined by SALGA

- ☐ The MM is responsible for the Corporate Governance of ICT
- ☐ The MM must create an enabling environment in respect of the Corporate Governance of ICT within the applicable legislative and regulatory landscape and information security context

How Dr NDZ Municipality will ensure alignment

- ☐ The MM will be ultimately responsible for Corporate Governance of ICT
- ☐ The MM will be the chairman of the ICT Steering committee and ensure that the ICT Steering committee delivers on its terms of reference focused on creating an enabling environment
- ☐ The MM will ensure that municipality adheres to ICT legislative and regulatory requirements including resolution of AG findings

Principle 4: ICT Strategic Alignment

Principles defined by SALGA

- ☐ ICT service delivery must be aligned with the strategic goals of the municipality
- ☐ The Executive Management must ensure that ICT service delivery is aligned with the municipality's strategic goals and that the

How Dr NDZ Municipality will ensure alignment

- ☐ Develop an ICT Strategy aligned to IDP
- ☐ All ICT service delivery initiatives will be aligned to the developed ICT strategy
- ☐ Executive management will commit to the approved ICT

municipality accounts for current and future capabilities of ICT. It must ensure that ICT is fit for purpose at the current service levels and quality for both current and future municipal needs

initiatives detailed on the ICT Strategy roadmap since the roadmap addresses current and future needs

- ☐ Executive management will approve any deviations to priority and execution of the initiatives on the ICT strategy roadmap based on unforeseen changes to the municipality's goals

Principle 5: Significant ICT Expenditure

Principles defined by SALGA

- ☐ The Executive Management must monitor and evaluate significant ICT expenditure
- ☐ Executive Management must monitor and evaluate major ICT expenditure, ensure that the expenditure is made for valid municipal business enabling reasons and monitor and manage the benefits, opportunities, costs and risks resulting from this expenditure, while ensuring that information assets are adequately managed

How Dr NDZ Municipality will ensure alignment

- ☐ All significant expenditure will be evaluated and pre-approved by the ICT Steering committee
- ☐ All significant expenditure will require a business case that will be approved by the ICT Steering committee ICT and executive management
- ☐ The business case will be measured throughout the lifecycle of ICT enabled investments to monitor and manage the benefits, opportunities, costs and risks resulting from this expenditure

Principle 6: Risk Management and Assurance

Principles defined by SALGA

- ☐ Executive Management must ensure that ICT risks are managed and that the ICT function is audited
- ☐ Executive Management must ensure that ICT risks are managed within the municipal risk management practice. It must also ensure that the ICT function is audited as part of the municipal audit plan

How Dr NDZ Municipality will ensure alignment

- ☐ The Risk Officer will ensure that an up-to-date and comprehensive risk register that cover all ICT aspects across the municipality is
- ☐ Risk maintained
- ☐ The Risk Officer will evaluate ICT risks quarterly together with the IT Manager to ensure that agreed actions are taken and manage deviations
- ☐ The Audit Committee will provide input to the Risk based ICT Audit plan to ensure that relevant audits that will add value to the municipality are scheduled

Principle 7: Organizational Behavior

Principles defined by SALGA

- ☐ Executive Management must ensure that ICT service delivery is sensitive to organisational behaviour / culture
- ☐ Executive Management must ensure that the use of ICT demonstrates the understanding of and respect for the organisational behaviour /

How Dr NDZ Municipality will ensure alignment

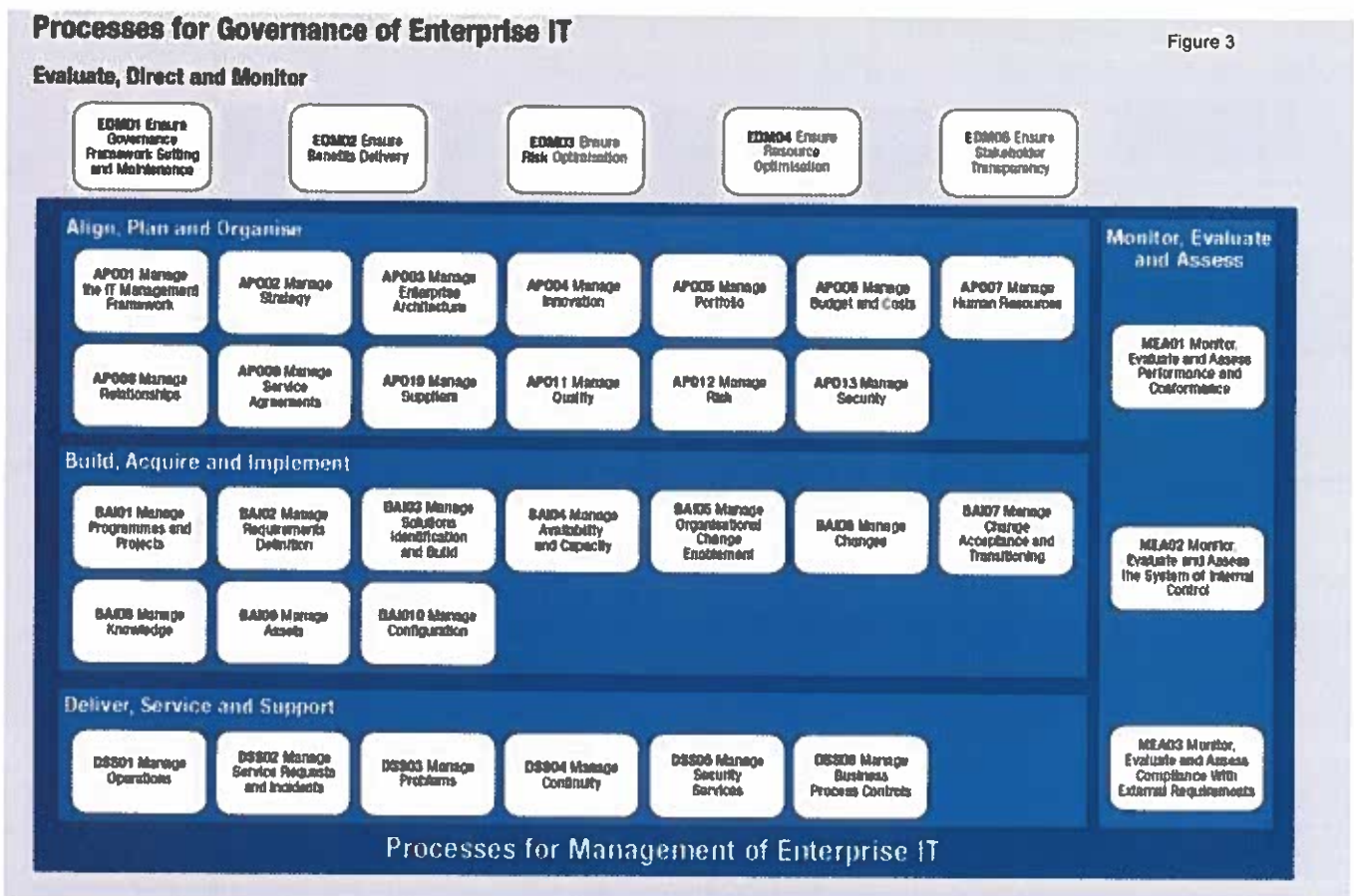
- ☐ ICT service delivery initiatives will be delivered in a way that is aligned to the municipality's way of doing things and gradually introduce change where it is imperative
- ☐ Executive management will ensure that the use of ICT will be aligned to the municipality's effort to change the culture to be performance driven

Table 1

COBIT 5 includes a process reference model, which defines and describes in detail several governance and management processes. It represents all the processes normally found in an enterprise relating to IT activities, providing common reference model understandable to operational IT and business managers. Processes is one of the seven enablers and COBIT is in the process of creating models for the other enablers. In this IT Governance Framework, processes were used as a baseline and the other enablers were considered where relevant under the IT related processes identified to be relevant for Dr NDZ Municipality to meet its Enterprise goals.

A process is defined in the COBIT 5 framework as a collection of practices influenced by the enterprise's policies and procedures that takes inputs from a few sources.

The figure below shows the complete set of 37 governance and management processes within COBIT 5. The details of all processes, according to the process model described previously, are included in a guide entitled COBIT 5: Enabling Processes.



PROVIDES A MECHANISM FOR UNDERSTANDING THE USE AND OPPORTUNITIES FOR ICT:

Improved visibility and accountability for ICT allows institutions to learn from their current ICT experience and encourage improvements for the future. Mechanisms for allowing exceptions to strategy ensure a clear argument; value and justification are visible and understood.

IMPROVES BUDGETARY CONTROL AND RETURN ON INVESTMENT:

8 DESIGN OF THE MUNICIPAL CORPORATE GOVERNANCE OF ICT CHARTER

A charter has been approved at a strategic level in the municipality and contains the following:

- a) How the ICT strategic goals and their related service delivery mechanisms will be aligned with municipal IDP, monitored and reported on to the relevant stakeholders;
- b) How ICT service delivery will be guided at a strategic level to create ICT value in the municipality;
- c) How the administrations ICT-related risks will be managed; and
- d) The establishment of structures to give effect to the Governance of ICT, and the management of ICT functions. The members of these structures and the roles, responsibilities and delegations of each should be defined. The proposed structures are as follows:

STRUCTURE	MEMBERS	MANDATE/RESPONSIBILITIES
ICT STEERING COMMITTEE (Committee of Management)	Designated Members of Management and the ICT Manager. The Chairperson shall be a designated member of the Management of the Municipality duly appointed by the Municipal Manager.	Has a specific delegated responsibility to ensure the planning, monitoring and evaluation, of the municipalities: - ICT structures. - ICT policies. - ICT procedures, processes, mechanisms and controls regarding all aspects of ICT use (Municipal and ICT) are clearly defined, implemented and enforced. - ICT Performance Management. - ICT Change Management. - ICT Contingency Plans. - ICT Strategy development. - Management of ICT Security and Data Integrity. - The establishment of the municipality's ICT Ethical culture. - The evaluation, directing and monitoring of ICT specific projects. - ICT Strategic alignment. - ICT Governance compliance. - ICT Infrastructure Management. - ICT Security. - ICT Application Management. - ICT Value. - ICT Data availability and integrity. - ICT Vendor Management. - The evaluation, directing and monitoring of ICT processes

STRUCTURE	MEMBERS	MANDATE/RESPONSIBILITIES
Audit Committee and Risk Committee	Nominated members of the Audit and Risk committee/s of the municipality and the ICT Manager.	Has a specific responsibility to perform an oversight role for the Identification and Management of ICT audit and governance compliance, and ICT Risks.

Table 3: ICT Governance roles, responsibilities and delegations

8.1 GOVERNANCE DECISIONS AND MECHANISM.

The Municipal Council exercises both legislative and executive functions. This is intended to facilitate hands-on governance and synergy between elected representatives, the executive and the administration. The proximity facilitates a more vibrant and responsive municipality that would ultimately result in efficient service delivery.

ICT Governance therefore is the responsibility of both the political and executive management.

8.2 MUNICIPAL STRUCTURES

Local government legislation establishes various organs within the Municipality and broadly defines the functions of these organs. It also creates various instruments for accountability and oversight. Importantly, the Municipality has defined the precise roles of their organs in delegations and terms of reference.

These role definitions, terms of reference and instruments of accountability are intended to produce clear and sound internal municipal governance arrangements. This, in turn, is meant to define and shape the relationship within the Municipal Council, the Executive Committee, the Administration and Human Resources Portfolio Committee, the IT Steering Committee and the Administration. These structures and mechanisms promote transparency and sound decision making relating to ICT.

8.3 THREE LAYERS OF CORPORATE GOVERNANCE OF ICT

- ☐ The Executive Authority provides the political leadership;
- ☐ The Accounting Officer provides the strategic leadership; and
- ☐ Executive Management is responsible to ensure that governance of ICT is implemented and managed.

Municipal ICT Governance Guidelines

LEVEL**GENERAL DESCRIPTION**

Political
Leadership

The Executive Authority must:

- 1) Provide political leadership and strategic direction;
- 2) Determine policy and provide oversight;
- 3) Ensure that ICT service delivery enables the attainment of the strategic plan;
- 4) Take interest in the Governance of ICT to the extent necessary to obtain comfort that a properly established and functioning governance of ICT is in place to enable the Institution to leverage ICT as a business enabler;
- 5) Assist the Accounting Officer to deal with inter-governmental, political and other ICT– related municipal business issues beyond their direct control or influence;
- 6) Ensure that the municipality's organizational structure makes provision for the corporate governance of ICT.

**Strategic
Leadership**

The Accounting Officer must:

- 1) Provide strategic leadership and management;
- 2) Ensure alignment of the ICT strategic plan with the municipal strategic plan / IDP;
- 3) Ensure that the corporate Governance of ICT is placed on the municipal strategic agenda;
- 4) Ensure that the municipality's organizational structure makes provision for the corporate governance of ICT;
- 5) Ensure the realization of the municipal-wide value through ICT service delivery and management of municipal and ICT related risks;
- 6) The delegation of authority, personal responsibility and –accountability to the Executive Management with regards to the Corporate Governance of ICT;
- 7) The provision of appropriate ICT capability and capacity and the appointment of a suitably qualified and experienced CIO / IT Manager. The CIO / IT Manager should have access to and regularly interact on strategic ICT matters with the Accounting Officer and Executive Management;
- 8) Monitor and evaluate the effectiveness of the Corporate Governance of ICT.

Governance
of ICT

The Executive / Senior Management must:

- 1) Ensure that ICT goals are aligned with the municipal strategic goals and support strategic business processes;
- 2) ICT strategy is integrated with strategic business processes and that related risks are managed;
- 3) Significant ICT investments and expenditure are informed by the municipal enterprise architecture, motivated (Business Cases), monitored and evaluated; and
- 4) Advice is provided to the Accounting Officer on the implementation and management of the Corporate Governance of ICT.

8.4 GOVERNANCE FRAMEWORK

COBIT (CONTROL OBJECTIVES OF INFORMATION AND TECHNOLOGY)			
Planning and organizing	Acquisition and implementation	Delivery and support	Monitoring
☐ Strategic planning ☐ Information architecture ☐ Technological direction ☐ IT organisation and relationships ☐ Manage the IT investment ☐ Communicate aims and direction ☐ Manage human resources ☐ Ensure compliance ☐ Assess risks ☐ Manage projects ☐ Manage quality	☐ Identify solutions ☐ Acquire and maintain application software ☐ Acquire and maintain ☐ Technology architecture ☐ Develop and maintain IT procedures ☐ Install and accredit systems ☐ Manage changes	Define service levels Manage third- party services Manage performance and capacity Ensure systems security Identify and attribute costs Educate and train users Assist and advise IT customers Manage the configuration Manage problems and incidents Manage data Manage facilities Manage operations	Monitor the processes Assess internal control adequacy Obtain independent assurance Provide for independent audit

This IT Governance Framework is based on the COBIT framework. However, other frameworks like the ITIL which emphasizes on IT Service Management, ISO 19000 which emphasizes on Information Security have also been used. King III, which is also popular with South African organisations has also been considered.

This means that the Dr NDZ Municipality IT Governance Framework is a hybrid IT framework because it endeavors to borrow the best from all the frameworks under consideration.

9 STRUCTURAL ISSUES IN IT GOVERNANCE

9.1 REPORTING STRUCTURE

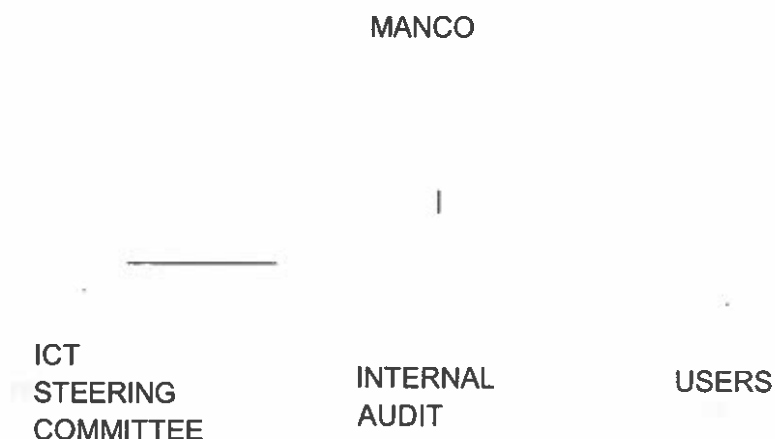
One of the more effective IT governance structures consists of the IT personnel reporting to the IT Manager. This ensures that IT is part of the executive team where most strategy discussions begin and end. Without this seat at the table, IT will almost always be limited to a support organization as opposed to an enabling organization.

9.2 COMMITTEE

Dr NDZ Municipality needs IT Steering Committee to fully cater for IT Governance agenda.

9.3 STRUCTURE

A centralized structure for the Municipality is more desirable. In a centralized IT organization, all IT decision-making and the IT budget are in one place, they are much easier to manage and require much less effort to organize. The IT personnel can take the lead in developing the governance processes and work directly with the MM and executive team. Below is the Dr NDZ structure:



10 ROLES AND RESPONSIBILITIES OF THE ICT GOVERNANCE STRUCTURES

10.1 MANCO

MANCO must play an oversight role on ICT projects and activities and must also ensure that ICT is budgeted for in their respective departments.

10.2 ICT STEERING COMMITTEE

The ICT Steering Committee is responsible for the following:

10.2.1 LEADERSHIP AND DIRECTION

Articulate the Municipal goals and vision, drive, guide and inspire. It must direct Municipality's strategies and operations with a view to achieving sustainable economic, social and environmental performance.

The Committee is to:

- ☐ Place IT on the board agenda
- ☐ Clarify business strategies and objectives, and the role of IT in achieving them
- ☐ Delegate responsibility for implementing an IT governance framework
- ☐ Determine and communicate levels of risk tolerance/appetite
- ☐ Assign accountability for the organizational changes needed for IT to succeed.

10.2.2 MONITOR AND EVALUATE

The Committee is to:

- ☐ Ensure that IT is aligned with Municipality's objectives.
- ☐ Monitor and evaluate the extent to which IT sustains and enhances the Municipality's objectives.
- ☐ Monitor and evaluate the acquisition and appropriate use of technology, process and people.
- ☐ Ensure that an internal control framework has been adopted, implemented and is effective.
- ☐ Use the risk and audit committees to assist the board fulfil its responsibilities.
- ☐ Obtain project assurance from independent experts that IT management applies all basic elements of appropriate project management principles to all IT projects.
- ☐ Obtain independent assurance of the governance and controls supporting outsourced services.
- ☐ Monitor the application of King III governance principles by all parties, at all levels (starting with the Committee), at all stages of business operations, across organizational boundaries (including third parties) and for the acquisition and disposal of IT goods and services.

10.3 INTERNAL AUDIT

10.3.1 ICT INSTITUTIONAL ALIGNMENT

ICT must be taken as a strategic support function of the Municipality and should be located under the office of the Municipal Manager as recommended by the report on corporate governance.

10.3.2 MANAGEMENT OF THE INFORMATION SECURITY

General responsibilities pertaining to this policy are set forth in this section. The following sections list additional specific responsibilities.

10.3.3 INFORMATION OWNERS

The application and data owner's responsibility shall be delegated to the head of that business unit and their responsibility shall be as follows;

- Assign application access rights to existing users and groups within the application.
- ☐ Authorize user removal form.
- ☐ Keep the application administrator passwords in a secure environment.

10.4 CUSTODIANDS OF INFORMATION

The custodianship of the information shall be dedicated to the information Technology department. Their responsibility shall be to;

- ☐ Ensure that all appropriate personnel are aware of and comply with this policy.
- ☐ Create appropriate performance standards, control practices, and procedures designed to provide reasonable assurance that all employees observe this policy.

10.5 INFORMATION USERS

Users will at all times adhere to the Information Security Policy, report all deviations thereof to the Information Security Officer and use the available infrastructure for business purposes only.

10.6 INFORMATION SECURITY SECTION

The dually appointed security officer/information security section provides corporate governance and strategic alliance and empowers ICT STEERING COMMITTEE to enforce this Information Security Policy.

10.7 INTERNAL AUDIT SECTION

The internal section shall conduct regular security audits in line with ISO 17799 checklist and submit reports to the ICT steering committee for deliberation and action

10.8 EMPLOYEE RESPONSIBILITY

Ensure that all reasonable precautions are taken to protect business critical data against unauthorized access, especially data on laptops and portable data storage devices. A locked car in a public area is not a reasonable precaution. It will be the sole responsibility of the user to backup and maintain security of non-business critical data.

11 IMPROVED SELECTION AND USE OF NEW TECHNOLOGY

Except for minor purchases, hardware shall be purchased through a structured evaluation process which shall include the development of a detailed Request for Proposal (RFP)/specification document.

The systems administrator /ICT personnel shall verify and approve specifications for all-new electronic information equipment and software prior to purchase by each department. IT Procurement standards (Refer to paragraph contained in overall Municipal Procurement Policy).

11.1 THIRD PARTY MANAGEMENT

IT service providers are identified, managed and monitored in accordance with service level agreements. Contracts exist to formalise all key relationships with current IT service providers for IT hardware and software maintenance, networks, telephony, etc. These contracts should include the following:

- ☐ Minimum required service levels
- ☐ Key performance indicators (KPIs)
- ☐ Requirements for monthly performance reporting from service provider
- ☐ Penalties for contract violation or non-performance.

11.2 PHYSICAL AND SECURITY CONTROLS

The main objective of this policy is to minimize disruption, damage, or loss of information and technology resources utilized by the Municipality and to comply with the Information Security Policy.

The Municipality must implement the requirements in this Policy to:

- ☐ limit physical access to information assets, information systems, and related equipment to authorized individuals;
- ☐ protect the facility and support infrastructure for information assets;
- ☐ protect information assets against natural disasters and environmental hazards; and
- ☐ provide the appropriate environmental controls and supporting utilities for information assets

The purpose of the Physical Access Control Policy (PACP) is to ensure the physical security of all information-holding assets owned by the Municipality, regardless of where (buildings, computers, files) or how they are stored (digitally, on paper). The PACP aims to assist the Municipality to operate effectively and efficiently, to comply with legislation, information standards (ISO/IEC27001) and good practice, and to safeguard information-holding assets against loss by theft, fraud, malicious or accidental damage, or breach of privacy or confidentiality. Rights of physical access are balanced by responsibilities, with all individuals granted access that is appropriate for their role / designated duties (including privileged access requirements i.e. secure rooms, cupboards).

The authority will have supporting policies (which may include legal or regulatory requirements) in place and will define procedures and provide mechanisms (for specific business areas) to ensure that access to information-holding assets are handled within the appropriate laws and codes of practice. All individuals must operate within this policy and procedural framework and are accountable for their actions.

12 ASSETS MANAGEMENT

As part of ICT Governance, sound mechanisms for the monitoring of IT related assets shall be implemented, such as:

- ☐ New IT Related Assets Register
- ☐ Movement and Return of IT Equipment/ Assets
- ☐ Monthly review of location and maintenance of IT Assets

Performance and capacity, for example disk space, memory etc. of IT systems is appropriately planned and regularly monitored by management. The ICT and Assets Management Policy shall include the timeframe for refreshing/replacement of IT assets.

13 BUSINESS CONTINUITY MANAGEMENT

Business Continuity shall be managed through the Business Continuity Plan, and other management tools are:

- ☐ That ICT continuity and disaster recovery plans are incorporated into the organisational policies and procedures.
- ☐ The distribution, update and testing of the ICT continuity plan and DRP and storage of such at an offsite location.
- ☐ Implementation of an ICT backup and retention strategy.
- ☐ The performance of backup procedures for data and programs according to above strategy.

- ☐ To store backups in a secure offsite storage facility.
- ☐ Implementation of physical access and environmental controls over the offsite storage facility.

14 CHANGE MANAGEMENT

Every change to Dr NDZ Municipality's production information resources is subject to the Change Management Policy and must follow the approved Dr NDZ Municipality's Change Management Procedure Manual. (Addresses COBIT Control Objective AI6.1)

A risk assessment level will be associated with every change and will be assigned using the predetermined criteria. Prior to migration to production, changes are authorized by the appropriate stakeholder. The approving authority will be based on the risk assessment. (Addresses COBIT Control Objective AI6.2)

Procedures must exist to govern emergency changes to information systems and related technology. Criteria that define an emergency change must be clearly documented and communicated. Emergency changes must be documented. Emergency changes must be approved by a member of ICT management authorized to approve emergency changes. (Addresses COBIT Control Objective AI6.3)

Vendor developments or modification must be governed by an approved system development methodology outlined in the service level agreements. Emergency changes, that bypass some of the elements of the established change control system, may need to be performed. Such actions require the authorization of all affected businesses and acknowledgment of the risks involved. Such actions must be controlled, logged, restored and be kept to a minimum.

The development of new application or system software should be kept; both physically and logically, separate from the production environment. The development staff should not normally have access to production systems. For occasional and essential support purposes, the development staff may be granted special access for a limited period of time (e.g., by issuing secure passwords via an emergency access process).

A system must be in place to support the recording and tracking of changes made to information systems. If customer notification is required, it must be completed for each change following the steps contained in Dr NDZ Municipality's Change Management Procedure Manual. (Addresses COBIT Control Objective AI6.4)

Technical and user documentation must be updated to reflect changes made to information systems and related technology. A process must be defined for reviewing changes to ensure successful implementation. (Addresses COBIT Control Objective AI6.5)

A central repository must exist to contain all relevant information on configuration items. This repository includes hardware, application software, middleware, parameters, documentation, procedures and tools for operating, accessing and using the systems and services. (Addresses COBIT Control Objective DS9.1)

15 ICT MANAGEMENT FRAMEWORK

Governance and Management of ICT Framework Governance and Management of ICT (G&M Framework) is concerned with the individual accountability and responsibilities with regards to the ICT function and its operations:

The following documents inform the development:

- ☐ Public Service Act and Regulations (as amended)
- ☐ Public Finance Management Act
- ☐ State IT Agency Act and Regulations (as amended)
- ☐ Cabinet Memorandum 38(a) of 2000
- ☐ The Framework Departmental CGICT Policy and Charter
- ☐ CGICT Assessment Standard
- ☐ COBIT 5 Processes: APO01, APO02, APO12, APO13, BAI01, DSS01, DSS04 and MEA01 [9]

Within this context it is necessary to within the ICT unit, ensure that all delivery of service to the business, infrastructure, systems and related activities are focused on fulfilling the ICT Plan. This is executed by providing a properly structured and sustainable ICT environment and ensuring that risks are appropriately managed. The G&M Framework 12 contains what departments should do to implement governance of ICT within the ICT unit. It is achieved through allocating structures, functions, roles and responsibilities within a governance system and implemented through:

- ☐ Processes
- ☐ Principles and policies
- ☐ Organizational structures
- ☐ Skills and competencies
- ☐ Culture and behavior
- ☐ Service capabilities
- ☐ Information management

The G&M Framework should also address the following:

- ☐ Service delivery structure of the ICT unit with its related functions, responsibilities, delegations and authorities
- ☐ Stakeholders and role-players
- ☐ Supplier Management
- ☐ ICT Strategy management
- ☐ ICT Plan implementation
- ☐ ICT Risk management
- ☐ ICT conformance and performance audit
- ☐ Adhere to applicable ICT prescriptive requirements
- ☐ ICT Program and Project (portfolio) management

- ICT Continuity management
- ICT Security management
- ICT Service management

16 OUTLINE OF DUTIES OF STRATEGIC IT PERSONNEL

The strategic and operational function of the following:

16.1 GOVERNANCE CHAMPION

An experienced person knowledgeable in the business of the department, who will be responsible for driving the implementation, change management and maintenance of Corporate Governance of and Governance of ICT in the department. The Governance Champion must:

- ☐ Be a senior manager at least on the level of a Chief Director who reports to Executive Management. He/she must be an authoritative and articulate person with strong decision-making abilities and the mandate to make decisions and escalate deviances and problems;
- ☐ have a clear understanding of the department's core functions;
- ☐ be actively involved in the oversight of the formal Corporate Governance System of the department;
- ☐ facilitate the alignment process between business and ICT strategy and plans;
- ☐ be responsible for developing, implementing, maintaining and communicating the necessary Corporate Governance of ICT policies, structures, processes, procedures, mechanisms, controls (effective and useful measures), charter and plan;
- ☐ oversee that the Governance of ICT system, as a subset of Corporate Governance of ICT, is developed, implemented and maintained; and
- ☐ Be supported by a cross-functional team, which must include representatives from business and the GITO.

16.2 ENTERPRISE ARCHITECT

A person knowledgeable in the Municipality, who will be responsible for structured planning to articulate the business and related processes of the Municipality in an interrelated and standardized way.

16.3 GOVERNMENT INFORMATION TECHNOLOGY OFFICER

Should perform at Executive Management level and be responsible for aligning the Municipality's ICT strategic goals with its business strategic goals, considering both business and ICT processes.

16.4 ICT MANAGER

Responsible for the operational management of ICT.

16.5 ICT OFFICER

Responsible for providing support functions in relation to hardware/ software installation and systems; maintenance and end users. Gives recommendation on the improvement of systems hardware/ software; management and maintenance of the municipal website and all voice/ data requirements and contracts.

17 PRIORITY I, II AND III COBIT PROCESSES

Priority I	Priority II	Priority III
EDM01 Ensure Governance Framework Setting and Maintenance		EDM05 Ensure Stakeholder Transparency
EDM03 Ensure Risk Optimisation		

APO01 Manage the IT Management Framework APO02 Manage Strategy APO07 Manage Human Resources APO10 Manage Suppliers APO13 Manage Security BAI06 Manage Changes	APO09 Manage Service Agreements APO12 Manage Risk BAI02 Manage Requirements Definition BAI09 Manage Assets DSS02 Manage Service Requests and Incidents DSS03 Manage Problems MEA03 Monitor, Evaluate and Assess Compliance With External Requirements	APO03 Manage Enterprise Architecture APO08 Manage Relationships BAI04 Manage Availability and Capacity DSS06 Manage Business Process Controls MEA02 Monitor, Evaluate and Assess the System of Internal Control
Year 1 – 2	Year 2 – 3	Year 4 - 5

17.1 KEY PRIORITY I INITIATIVES SUMMARISED

Priority I	Initiatives and/or action points
EDM01 Ensure Governance Framework Setting and Maintenance EDM03 Ensure Risk Optimisation APO01 Manage the IT Management Framework APO07 Manage Human Resources	☐ Obtain approval of IT Governance, Risk and Compliance Management Framework and create an awareness of the principles and responsibilities including how effectiveness will be measured ☐ Revise composition and mandate of the IT Steering committee ☐ Ensure IT Steering committee meetings continue to meet on a quarterly basis. It is important that all members of the committee have a good understanding of the terms of reference of the committee for the committee to be effective ☐ Review the IT Risk management framework to ensure that it adequately address how ICT risks will be managed and how the framework feeds into the municipal wide framework ☐ Ensure that the Chief Risk officer has at least two meetings every quarter with IT to discuss progress on ICT action points ☐ Extend Risk management to include significant IT projects and initiatives ☐ Formalise the job descriptions, roles and responsibilities of IT personnel so that performance can be measured ☐ Perform Performance appraisals for IT personnel ☐ Ensure training and succession planning are adequately addressed ☐ Develop, implement and monitor a formal training plan that is relevant to the IT services provided by the Municipality ☐ Track compliance with policies and procedures ☐ Evaluate and enhance communication and coordinating mechanisms between IT and the business

Priority I	Initiatives and/or action points
APO02 Manage Strategy	☐ Develop a formal ICT Strategy relevant to the current period to ensure that ICT enables the business to improve service delivery and obtain a competitive edge ☐ Obtain approval of the ICT Strategy
APO10 Manage Suppliers	☐ Create supplier catalogue and supplier performance evaluation criteria standard ☐ Identify and manage risk relating to supplier's ability to continually provide secure, efficient and effective service delivery ☐ Ensure IT Risk register includes supplier risks where applicable
APO13 Manage Security	☐ Update existing IT Security to include minimum guidelines as recommended by ISO27001 and ISO27002 ☐ Obtain approval of policy and roll out ☐ Conduct Information Security awareness training programs
BAI06 Manage Changes	☐ Obtain approval of Change management policy and procedure and implement ☐ Revise channels through which changes are sent to support providers to ensure there is a central repository and approval of requests is standard ☐ Maintain a schedule of operational activities (through health check checklists), perform the activities, and manage the performance and throughput of the scheduled activities
DSS01 Manage Operations	☐ Integrate critical internal IT management processes with those of outsourced service providers, covering, e.g. performance and capacity planning, change management, configuration management, service request and incident management, problem management, security management, business continuity, and the monitoring of process performance and reporting ☐ Service the fire extinguisher every six months ☐ Use the register to record the entry to the main Municipality server room by the ICT personnel ☐ Maintain user access rights in accordance with business function and process requirements. Align the management of identities and access rights to the defined roles and responsibilities, based on least-privilege, need-to-have and need-to-know principles
DSS05 Manage Security Services	☐ Perform a periodic user access rights (segregation of duties) review on applications ☐ Develop a Business Continuity Plan
DSS04 Manage Continuity	☐ Review and update an ICT DRP based on Business Impact Assessment (BIA) results ☐ Review and update backup strategy and backup procedures for all key municipally systems ☐ Perform restoration tests on key system
MEAO1 Monitor, Evaluate and Assess Performance and Conformance	☐ Identify and engage Stakeholders to understand ICT performance requirements ☐ Document IT Performance requirements in an IT Services catalogue and link it to operational plan through KPIs ☐ Use tools where feasible to generate and combine reporting statistics ☐ Report on performance based on agreed criteria, format and level of detail ☐ Assign responsibility for corrective action and track results for

18 ICT GOVERNANCE IMPLEMENTATION - CRITICAL SUCCESS FACTORS

The following are critical success factors to the attainment of an effective ICT Governance Framework at Dr NDZ Municipality:

- ☐ Leadership visibility and support

- ☐ Buy-in and support from senior management and Council
- ☐ Strong IT representation at strategic level
- ☐ Effective ICT Governance Framework– implemented, measured and supported by top management
- ☐ Availability of appropriately skilled and experienced personnel to drive the identified programs
- ☐ Successful acceptance of the ICT Governance Framework by all departments of the Municipality
- ☐ Business and IT readiness for culture change
- ☐ Availability of budget to secure appropriate resources where applicable
- ☐ Effective communication and awareness of the ICT Governance Framework
- ☐ Culture of continuous improvement.

19 CGICT CHARTER

The purpose of the CGICT Charter is to outline how Dr NDZ Municipality will execute the policy with regards to accountability, roles, responsibility, functions and organisational structures for the CGICT and how it will be implemented. This section only covers the critical committees.

19.1 MM WORKING TOGETHER WITH THE MAYOR AND COUNCIL

The MM as the Accounting Officer retains overall accountability for effective ICT Governance at Dr NDZ Municipality. This includes structures, mechanisms and processes to deliver value by maintaining a balance between the realisation of benefits and the optimisation of risk and use of resources. At a high level the specific responsibilities are to:

- ☐ Evaluate, Direct and Monitor the performance of ICT against plans, internal policies, external obligations and strategic objectives
- ☐ Ratify and give final approval over the aligned business and ICT strategy which must be reviewed periodically and whenever the business goals and objectives change
- ☐ Ascertain that management has put processes and practices in place that ensure ICT delivers provable value to the business
- ☐ Ensure ICT investments represent a balance of risk and benefit and that ICT budgets are acceptable
- ☐ Monitor how management determines what ICT resources are needed to achieve strategic Dr NDZ Municipality goals
 - ☐ Ensure a proper balance of ICT investments for sustaining and growing the Municipality
 - ☐ Be aware of significant ICT risk exposures, their impact and their mitigating measures
- ☐ Periodically assess senior management's performance on the ICT strategy in operation
- ☐ Establish ICT Governance goals or Key Goal Indicators (KGI's) and cascades them down in the municipal ICT organisation
- ☐ Establish an ICT steering committee, chaired by the Director Corporate service, deputy chair IT Manager and secretariat by the IT clerk with the Deputy CFO as a permanent members and other heads of departments are on invitation. This will ensure that coordinated decisions are

taken in respect of ICT

- ☐ Report to, TOP-MANCO, EXCO and Council on ICT governance which includes the strategic, performance and risk aspects of the ICT function

19.2 AUDIT COMMITTEE

Dr NDZ Municipality's audit committee is made up of a Chairperson (External) and 3 additional external members. The current activities driven by the audit committee include:

- ☐ Ensure that there is sufficient collaboration between AG (external audit), Dr NDZ Municipality Internal Audit and Risk management services in ensuring that the Municipality's risks are appropriately managed, and the ICT resources of the Municipality are used responsibly
- ☐ Oversight, guidance and input on reporting on controls effectiveness and efficiency within ICT Governance

19.3 EXCO

- ☐ Ensure that DPSA and SALGA guidelines are adhered to when developing and updating an ICT Strategy and ICT Governance Framework
- ☐ Approval of key policies
- ☐ Approval of all business cases for primary (strategic) projects which have an ICT component and provide approval to continue the project through each project milestone
- ☐ Defines the structure of the ICT function, including committees and key management positions and appoints appropriately skilled and experienced personnel into these positions

19.4 TOP-MANCO

Evaluate the municipal ICT strategic plan, internal and external environment in order to:

- ☐ Identify ICT stakeholder needs and how it should be realised
- ☐ Determine the value ICT is expected to create through its enablement of the business
- ☐ Define the benefits ICT is expected to realise in its enabling of business
- ☐ Articulate the ICT risk appetite and how it should be managed within the risk management regime of Dr NDZ Municipality
- ☐ Facilitate the establishment of sufficient ICT organisational structure, resources, capacity and capability
- ☐ Evaluate and monitor significant ICT expenditure
- ☐ Determine the monitoring criteria and reporting requirements for ICT
- ☐ Broadly understand the implications of the ICT prescriptive environment
- ☐ Evaluate the change management requirements for the implementation of CGICT

Conceptualise and direct business enablement by the

following

- ☐ Ensure integration of CGICT into the agenda of EXCO

- ☐ Approve CGICT policy, charter, ICT strategic plan and other related plans and policies
- ☐ Approve the portfolio of ICT projects and related expenditure

- ☐ Provide direction for the change management requirements for the implementation of CGICT
- ☐ Guide the implementation of the Dr NDZ Municipality CGICT Framework and related policies and strategies

19.5 ICT STEERING COMMITTEE

Currently, the ICT Steering committee is chaired by the Corporate Service director, with the IT Manager as the deputy chair. The ICT Clerk as the secretariat and the deputy CFO as a permanent member of the committee, with other senior managers being invited when required.

It is recommended that the charter be amended to reflect the above. The responsibility of the ICT Steerco is to consolidate the responsibilities of a Governance Champion as outlined in the CGICTPF.

In summary the following will be the responsibilities of the ICT Steering committee:

- ☐ Review of ICT Strategy and advise EXCO on strategic direction of ICT as well as alignment of ICT to the business
- ☐ Issue policy guidance (e.g. risk, funding, sourcing, partnering)
- ☐ Verify strategy compliance (e.g. achievement of strategic goals and objectives)
- ☐ Confirm that the ICT/business architecture is designed to drive maximum business value from ICT
- ☐ Oversee the delivery of value by ICT to the Municipality
- ☐ Provide high-level direction for sourcing and use of ICT resources
- ☐ Confirm that critical risks have been managed
- ☐ Monitors and evaluates significant ICT investments and expenditures and ensures that ICT assets are managed effectively
- ☐ Review the measurement of ICT performance and the contribution of ICT to the business
- ☐ Review of key ICT project statuses and progress
- ☐ Detailed review of business cases for significant ICT expenditure and recommend to EXCO on the action to take

The ICT Steering committee will report to TOP-MANCO.

All the above responsibilities should be included in the ICT Steering committee charter.

19.6 SENIOR MANAGER CORPORATE SERVICES

Regarding ICT governance, the Senior Manager Corporate Services is responsible for executing and reporting to the TOP-MANCO and MM on ICT governance which includes the strategic, performance and risk aspects of the ICT function. The responsibilities include:

- ☐ Educate executives on dependence on ICT, ICT-related costs, technology issues and insights and ICT capabilities
- ☐ Clarify and demonstrate the value of ICT
- ☐ Manage business and executive expectations relative to ICT
- ☐ Ensure that roles critical for driving maximum value from ICT are appropriately defined and staffed

- ☐ Ensure the availability of suitable ICT resources, skills and infrastructure to meet the strategic objectives
- ☐ Assess risks, mitigate efficiently and make risks transparent to the stakeholders

The Director Corporate Service can invite the ICT Manager to be present during TOP-MANCO when highly technical ICT related matters are being discussed.

19.7 ICT MANAGER

The ICT Manager is responsible for management, performance and control of the ICT function. The current hierarchical level of the ICT Manager implies that he has limited access to TOP-MANCO and he has limited authority to execute his duties, especially the ICT Governance related duties. He is represented by the Director Corporate Services at TOP-MANCO. As mentioned since the municipality currently does not have a large ICT department and supports about 115 users only, the current structure is sufficient as long as the other ICT governance structures are working effectively. This may need to be revisited as the municipality expands and changes the way it operates.

He is responsible for the following:

- ☐ Implementation of the ICT strategy
- ☐ Focuses on the day-to-day management aspects of ICT related projects and whether they are on track for implementation
- ☐ Monitors resource and priority conflict between projects
- ☐ Implement an ICT control framework
- ☐ Manages and coordinates the activities of support providers
- ☐ Oversees day-to-day management of ICT service delivery across the ICT function with specific oversight over the following:
 - o Performance of ICT against agreed service levels (monthly)
 - o Key ICT incidents and problems (monthly)
 - o Third party performance (monthly)
 - o Status of ICT audit findings (quarterly)
 - o Status of ICT Risks (quarterly)
 - o Compliance to ICT legislation (bi-annually)
 - o ICT Cost analysis (monthly)
 - o ICT Security and Data Governance (monthly)
 - o ICT Disaster Recovery (annually)
- ☐ Executing the overall approved budget, advising on prioritising ICT projects, managing the overall ICT portfolio, and enforcing all policies and standards within the ICT organisation
- ☐ Prepare the ICT Steerco agenda, packs and provide valuable technical advice during the ICT Steerco
- ☐ The ICT Manager has access to the Accounting Officer (MM) through the ICT Steering committee. Where necessary, he can arrange ad hoc meetings directly with the MM.

19.8 ROLES AND RESPONSIBILITIES– RACI

The responsibility and accountability to execute the CGICT functions should be assigned to different roles and structures and depicted in a RACI chart.

A RACI chart covers the following aspects:

- ☐ R – Who is responsible (the doer)
- ☐ A – Who is accountable (the entity that must make the final decision and who has ultimate ownership)
- ☐ C – Who is consulted (the entity that must be consulted before a decision is taken)
- ☐ I – who is informed (the entity that must be informed that the decision has been taken)

Table 5 below depicts the RACI chart for the CGICT structures within Dr NDZ Municipality. The following CGICT structures and their abbreviations apply:

- ☐ Council
- ☐ Audit Committee (AC)
- ☐ EXCO
- ☐ TOP-MANCO (TM)
- ☐ ICT Steering Committee (ITSC)
- ☐ Director Corporate Service (DCS)
- ☐ ICT Manager (ICTM)

Roles	Council			AC			EXCO			TM and ITSC			DCS			ICTM				
Functions	R	A	C	I	R	A	C	I	R	A	C	I	R	A	C	I	R	A	C	I
ICT Strategic Alignment		■						■		■			■		■				■	
ICT Resource Management		■						■					■		■				■	
ICT Performance Management		■						■					■		■				■	
ICT Value Delivery		■							■				■		■				■	

Signature	Approved By	Date
	SJ Sordani	28 May 2026