



KOUGA

local municipality

Good Governance through Service Excellence

CORPORATE GOVERNANCE OF ICT POLICY

DOCUMENT INFORMATION SHEET

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SIGNING OF THE ORIGINAL DOCUMENT

This policy is approved by the signatories listed below whom by signing this document confirm their acceptance of its content and authorise the implementation/adoption thereof.

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27 August 2021

Signature: ICT Manager

Date



27 August 2021

Signature: Chief Financial Officer

Date



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Signature: Municipal Manager

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DOCUMENT ADMINISTRATION

Glossary of Terms

Term	Description
AGSA	Auditor General of South Africa
CFO	Chief Financial Officer
CGICTPF	Corporate Governance of ICT Policy Framework
Corporate Governance	<p>“...The set of responsibilities and practices exercised by the board and executive management with the goal of providing strategic direction, ensuring that objectives are achieved, ascertaining that risks are managed appropriately and verifying that the enterprise’s resources are used responsibly.” – IT Governance Institute</p> <p>“Procedures and processes according to which an organisation is directed and controlled.” – Organisation of Economic and Co-operation Development</p>
Corporate Governance of ICT	<p>“The system by which the current and future use of ICT is directed and controlled.” – ISO/IEC 38500</p> <p>“Corporate governance of ICT involves evaluation and directing the use of ICT to support the organisation, and monitoring this use to achieve plan. It includes the strategy and policies for using ICT within an organisation.” – ISO/IEC 38500</p>
Corporate Governance of ICT Framework	This is the framework used by the organisation to establish transparent accountability of individual decisions related to IT and ensures the traceability of decisions to assigned responsibilities
COBIT®	Control Objectives for Information and Related Technologies, is a framework created by ISACA for information technology (IT) management and IT Governance. It is a supporting toolset that allows managers to bridge the gap between control requirements, technical issues and business risks.
DPSA	Department of Public Service and Administration
Executive	The Executive Management of the Municipality is made up of the Municipal Manager, Deputy Municipal Manager and all the Directors of

Management	the Municipality. This normally constitutes the Executive Committee of the Municipality.
GICT	Corporate Governance of ICT
ICT	Information and Communications Technology, also referred to as IT
Governance Champion	The Manager in the municipality who is responsible to drive Corporate Governance of and Governance of ICT.
Governance of ICT	<p>“The effective and efficient management of IT resources to facilitate the achievement of company strategic objectives.” – King III Code, 2009</p> <p>“Is the responsibility of executives and the municipal council, and consists of the leadership, organisational structures and processes that ensure that the municipality’s IT sustains and extends the municipal strategy and objectives.” – ITGI, 2005</p>
Governance Principles	“The vehicle to translate the desired behaviour into practical guidance for day-to-day management.” – COBIT 5 Framework, 2012
ISO/IEC 38500	International Standard on Corporate Governance of ICT
IT	Information Technology, also referred to as ICT
Investment	Allocation of human, capital and other resources to achieve defined objectives and other benefits.
Management	The system of controls and processes required to achieve the strategic objectives set by the organization’s governing body. Management is subject to the policy guidance and monitoring set through corporate governance.
MISS	Minimum Information Security Standards
MIOS	Minimum Interoperability Standards
Policy	Clear and measurable statements of preferred direction and behavior to condition the decisions made within an organization.
Proposal	Compilation of benefits, costs, risks, opportunities, and other factors applicable to decisions to be made. Includes business cases.
RACI	Responsibility, Accountability, Consulting, Information
Resources	People, procedures, software, information, equipment, consumables, infrastructure, capital and operating funds, and time.

CORPORATE GOVERNANCE OF ICT POLICY

1. Introduction

Most municipalities use ICT as a fundamental business tool and few can function effectively without it. Investments in information systems hardware, software, and telecommunications equipment now constitute significant portions of all capital investments. The result of this massive spending is reflected in the way municipalities conduct business. Cell phones, email, electronic processing have all become essential municipal tools.

While ICT is significantly becoming a business tool and investments are soaring, a return on investment is often not being realized. This may be resultant of the fact that ICT performance is not being adequately measured and a lack of accountability and involvement from municipal management. Not to mention, but it may also relate to the fact that municipal goals are not being adequately aligned with the ICT portfolio.

To ensure that the above problems does not materialize within Kouga Municipality, this policy provides a framework for the effective governance of ICT, to assist those at the highest level of the municipality to understand and fulfil their legal, regulatory and ethical obligations in respect of the municipality's use of ICT.

The purpose of this document is to define Kouga Municipality's Corporate Governance of ICT framework that will be used across all municipal units. The purpose of the framework is to:

- Promote the alignment of ICT with the municipal strategic objectives
- Provide a method for measuring and managing performance against ICT goals
- Facilitate effective communication between ICT and business
- Help mitigate risk, delivering value and improving controls over delivery of information systems and services to the municipality and all relevant stakeholders

— Assist in complying with external legislation and regulations.

This framework should be approved and implemented across the municipality and should be supported by a detailed implementation plan (referred to as the Implementation Road Map) to facilitate the successful implementation of the framework.

2. Background to Corporate Governance of ICT

A need for a well governed ICT function is becoming more apparent as business leaders are forced to critically evaluate their cost and value chains in challenging economic environments. Globally, enterprises—whether public or private, large or small—increasingly understand that information is a key resource and that ICT is a strategic asset and important contributor to success. 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.

From a South African public sector perspective, the purpose of ICT is to enable the Public Service in its quest for service delivery as the government endeavors to achieve its formally stated 12 strategic outcomes. Various reviews to determine whether ICT in the Public Service delivers an enabling service and the shortcomings that need attention were performed, in particular by the Auditor General of South Africa (AGSA). The first of these was the 1998 Presidential Review Commission (PRC) report, which stated that all-important ICT-decisions should come from the senior political and managerial leadership and not be delegated to the technology specialists, and further that the management of ICT should be on the same level as the management of other resources. It furthermore advocated a common enabling framework of governance. This was a starting point for the South African public sector to begin recognizing the importance and need for ICT governance frameworks for each institution including regulatory authorities.

The DPSA in collaboration with the Government Information Technology Officer Council (GITOC) and the AGSA developed the Corporate Governance of ICT Policy Framework (CGICTPF). The CGICTPF is applicable to all spheres of government, organs of state and public enterprises.

A number of reference frameworks to guide its implementation supports the CGICTPF. Of these, probably the most prominent are Control Objectives for Information and related Technology ("COBIT"), ISO/IEC 38500 on IT Governance, the IT Infrastructure Library ("ITIL") and ISO27001 (previously ISO17799) on Information Security. Also from a South African Public sector perspective, reference frameworks were interpreted and captured in the CGICTPF as developed by the DPSA. Corporate Governance of ICT, like Corporate Governance, is a framework that is implemented to support business. Since no two businesses are exactly alike, it makes sense that their governance frameworks would need to be catered to the specific resource, risk and performance environment that they operate in. As such, reference frameworks should not be taken as prescriptive implementation templates for an organization, but rather as starting points for a guided discussion on the best governance framework for the organization.

In summary, Corporate Governance of ICT is:

- An integral part of Corporate Governance
- The responsibility of the Council and Executive management
- A mechanism to deliver ICT value, manage performance, and mitigate risk
- A method to assign accountability for ICT decisions and performance
- ICT policies, procedures, management committees, performance metrics, and related management techniques working in unison toward common business goals.

3. Context of Corporate Governance of ICT within the Kouga Local Municipality

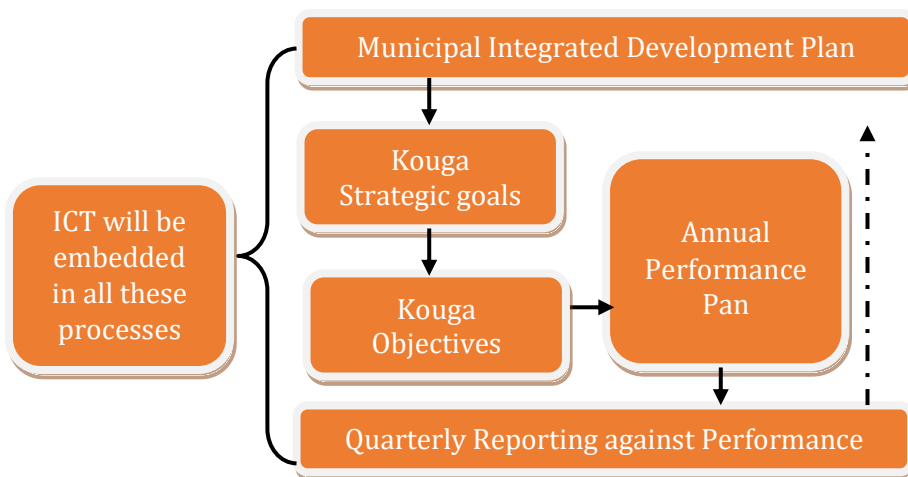
Corporate governance consists of a governance system that depicts the way Kouga municipality is managed and controlled.

It defines the relationships between the municipality's stakeholders, the strategic goals of the national government, the serving community as well as those of the Municipal Council.

The Municipal IDP, that is established every 5 years by the Municipal Council, governs the municipality's priorities and focus areas.

The IDP outlines on a high-level what the municipality plans to achieve and how it aims to realize its vision to be a safe, equitable, and harmonious home, with prosperous and sustainable livelihoods for all its serving community.

To ensure that what is planned in the IDP materializes, the IDP makes provision for key goals to be specified. The municipality subsequent to defining goals, is required to compile an annual performance plan on how success will be measured and a performance report showing progress against these objectives are produced to the serving community. Thus, facilitating performance management to take place. Reporting on the performance plans occurs quarterly. This is represented diagrammatically below:



The Council performs both legislative and executive functions. It focuses on legislative, oversight and participatory roles, and has delegated its executive function to the Executive Mayor and the Mayoral Committee. The Council's role is to debate issues publicly and to facilitate political debate and discussion.

Apart from functions as decision makers, councillors are also actively involved in community work and the various social programmes in the municipal area, including ICT related matters such as automation of municipal services (SMART Municipality).

The mayoral committee consists of six (6) members, each of which has been assigned specific portfolio's including:

- Finance

- Corporate Services
- Planning and Development
- Community Services
- Infrastructure and Engineering
- Local Economic Development and Tourism

These members (supported by their own committees) monitor the delivery and outputs of the executive and may request directorates to account for the outputs of their functions. The full-time councilors account for the executive decisions and operations performed in terms of the general policy framework agreed to by Council and although the portfolio committees play an oversight role.

The Municipal Manager, who has a Deputy Manager and five (5) directors who report directly to him, heads the administration component of Kouga Municipality:

- Deputy Municipal Manager
- Director Community Services
- Director Planning and Development
- Chief Financial Officer
- Director Infrastructure and Engineering
- Director Corporate Services

Given the above, it can be confirmed that Kouga Municipality has established an all-encompassing governance structure to address all municipal activities and client services. It is the wishes of management, to utilize these existing structure as far as possible to govern ICT. The exception being that an additional ICT steering committee has been introduced, that will both provide ICT oversight and direct all management activities on behalf of the mayoral committee.

For further information, refer to the Corporate Governance of ICT Charter that details the various governance structures and committees governing Kouga municipality's ICT operations.

While the ICT Manager reports to the Chief Financial Officer (CFO), this document outlines how ICT related matters would be given the necessary attention by the highest authorities while not diluting the integral part that ICT plays within the municipality.

4. CGICT Policy

4.1. Objectives and Critical Success Factors

The following are the objectives of the policy and critical success factors to the attainment of an effective Corporate Governance of ICT framework across the Municipality:

Objectives (as per the DPSA Implementation Guideline)	Critical Success Factors
<p>Embed the Corporate Governance of ICT and Governance of ICT as a subset of Corporate Governance in the Municipality</p>	<ul style="list-style-type: none"> • Leadership visibility and support • Buy-in and support from municipal management • Strong ICT representation at strategic committees, meetings and planning sessions • Effective ICT governance framework – implemented, measured and supported by municipal management.
<p>Create business value through ICT enablement by ensuring municipal IDP and ICT strategic alignment</p>	<ul style="list-style-type: none"> • Successful acceptance of the ICT Governance framework by the municipal departments • Municipal IDP and ICT Strategy aligned and monitored • ICT Portfolio that matches the ICT Strategy • Business and ICT readiness for cultural change.
<p>Provide relevant ICT resources, organisational structure, capacity and capability to enable ICT service delivery</p>	<ul style="list-style-type: none"> • Availability of budget to secure appropriate ICT resources • Availability of appropriately skilled and experienced ICT personnel to drive the identified programs. • Scheduled training to ensure ICT personnel are kept up-to-date

<p>Achieve and monitor ICT service delivery performance and conformance to relevant internal and external policies, frameworks, laws, regulations, standards and practices</p>	<ul style="list-style-type: none"> • Effective communication, reporting and awareness of the ICT governance framework and plan • Periodic auditing of ICT control and process maturity • Culture of continuous communication and improvement of ICT services.
<p>Representation of the ICT function on Municipal Management level</p>	<ul style="list-style-type: none"> • A Governance Champion must be appointed to oversee the ICT department and all Corporate Governance of ICT matters • An ICT Steering committee, a sub-committee of council, must be established and be responsible for the strategic leadership and governance of the ICT function, while also directing the management and operational functions of ICT.

4.2. CGICT Principles and Practices

The CGICTPF is based on principles as explained in the international good practice and standard for ICT Governance, namely *King III Code*¹, *ISO/IEC 38500* and *COBIT*. The implementation of the Corporate Governance of ICT at Kouga Municipality will be achieved through the seven principles defined by the DPSA (Refer to page 16 of the *Public Service Corporate Governance of Information and Communication Technology Policy Framework*) as detailed in the table below:

¹ The King IV code has been released, and will only be applicable from 1 April 2017. Provision has been made for newly introduced changes, but further investigation will need to be made during policy review.

Mapping of CGICT accountability, principles and practices		
Structure	Principles defined by DPSA	Practice
<p>Executive Authority</p> <p>Mayoral Committee as highest authority.</p>	<ul style="list-style-type: none"> • Must ensure that the Corporate Governance of ICT achieves the political mandate (Principal 1). 	<ul style="list-style-type: none"> • Provide political leadership and strategic direction, determine policy and provide oversight • Ensure that ICT service delivery enables the realisation of the municipal IDP • Ensure that Corporate Governance of ICT is a subset of overall Municipal corporate governance processes • Approve the ICT Governance framework after confirming alignment to the Municipal mandate • Monitor the implementation of the ICT Governance framework against the political mandate and suggest improvements where necessary.
<p>Municipal Manager</p>	<ul style="list-style-type: none"> • Must ensure that the Corporate Governance of ICT achieves the municipal mandate (Principle 2) • Must create an enabling environment in respect of the Corporate Governance of ICT within the applicable legislative and regulatory landscape and information security context (Principle 3). 	<ul style="list-style-type: none"> • Provide strategic leadership and ensure alignment • Place CGICT on the strategic agendas and be ultimately responsible • Ensure the CGICT policy is implemented • Ensure roles and responsibilities are defined • Where required, delegate authority, responsibility and accountability to the Chief Financial Officer, and ICT Steering Committee • Ensure that the ICT Governance framework is adhered to throughout the Municipality by tracking and reporting on the implementation thereof in the ICT

Mapping of CGICT accountability, principles and practices		
Structure	Principles defined by DPSA	Practice
		<p>Steering meetings</p> <ul style="list-style-type: none"> • A council member is chairing the ICT Steering committee and ensure that the committee delivers on its terms of reference focused on creating an enabling ICT environment • Ensure that the Municipality adheres to ICT legislative and regulatory requirements including resolution of AG and internal audit findings. • Ensure that the Municipality adheres to applicable ICT standards and best practices, as is reasonable for a government institution
<p>Executive Management</p> <p>(ICT Steering Committee)</p>	<ul style="list-style-type: none"> • ICT service delivery must be aligned with the municipal IDP • Must ensure that the municipality accounts for current and future capabilities of ICT. • Must ensure that ICT is fit for purpose at the required service levels and quality for both current and future municipal needs (Principle 4). 	<ul style="list-style-type: none"> • Ensure alignment of ICT service delivery initiatives to the approved ICT strategy • Ensure the development of an ICT strategy roadmap or implementation plan to optimize ICT service delivery • The ICT Steering Committee will commit to the approved ICT initiatives detailed on the ICT Strategy roadmap since the roadmap addresses current and future needs • Approve any deviations of priority and execution of the initiatives on the ICT strategy roadmap based on unforeseen changes to the municipal goals.
<p>Executive Management</p> <p>(ICT Steering Committee)</p>	<ul style="list-style-type: none"> • Must monitor and evaluate major ICT expenditure, ensure that the ICT expenditure is made for valid municipal enabling reasons and monitor and manage the benefits, opportunities, costs 	<ul style="list-style-type: none"> • Ensure that ICT expenditure follows municipal approved procurement policies and procedures (Refer to the Finance and Procurement Policy) • Ensure that all significant

Mapping of CGICT accountability, principles and practices		
Structure	Principles defined by DPSA	Practice
	<p>and risks resulting from this expenditure, while ensuring that information assets are adequately managed (Principle 5).</p>	<p>expenditure are evaluated and pre-approved by the ICT Steering Committee, and Budget & Treasury Manager)</p> <ul style="list-style-type: none"> • Ensure that all significant expenditure are monitored by the ICT Steering Committee • Ensure that all significant ICT expenditure are part of Strategic Planning, Annual Performance Plans and the writing of internal submissions • Ensure that all significant ICT investments are measured in quarterly plans and annual report.
<p>Executive Management</p> <p>(ICT Steering Committee)</p>	<ul style="list-style-type: none"> • 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 annual audit plan (Principle 6). 	<ul style="list-style-type: none"> • Ensure an Enterprise Risk Management Framework is drafted and that the ICT unit forms part of this; or at least establishes its own Risk Management Framework • Ensure that an up-to-date and comprehensive risk register covering all ICT aspects across the Municipality is established and maintained • Evaluate ICT risks quarterly together with input from the ICT manager to ensure that agreed actions are taken and manage deviations • Provide input to the Risk-based ICT Audit plan to ensure that relevant audits, that will add value to the Municipality, are scheduled.

Mapping of CGICT accountability, principles and practices		
Structure	Principles defined by DPSA	Practice
Executive Management (ICT Steering Committee)	<ul style="list-style-type: none"> • Must ensure that the use of ICT demonstrates the understanding of and respect for the municipal behaviour / culture (Principle 7). 	<ul style="list-style-type: none"> • ICT service delivery initiatives will be delivered in a way that is aligned to the municipal culture and gradually introduce change where it is imperative • Ensure training and awareness to users on ICT Service Delivery • Ensure that the use of ICT will be aligned to the municipal efforts to change the culture to be more performance driven.

Please refer to Appendix A for a full listing of the seven principles whereby Kouga Municipality will govern its ICT function. Also, refer to Appendix B for a listing of all international and best practices principles that will be applicable to the Municipality.

4.3. Municipal Requirements

Kouga Municipality has compiled a 5-year IDP that maps out the strategic direction of the municipality as part of an integrated system of planning and delivery. The 4th Generation of the current IDP clearly outlines the strategic objectives, focus areas and operational priorities for the municipality.

In summary, Kouga Municipality has identified seven (5) strategic objectives that give effect to its strategic goals:

- 1 Bucket eradication in the whole of the Kouga municipal area
- 2 Increasing housing opportunities
- 3 Fire Prevention and Bush Clearing
- 4 Formalization of illegal electricity connections
- 5 Stimulate the informal economy in disadvantaged areas

Although not explicitly referred to in the objectives, the municipal ICT function will play a critical role in supporting all municipal departments in achieving these objectives.

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Essential to objective #3, #4 and #5 above, the ICT function under the supervision of the ICT steering committee shall need to drive innovation, transformation and optimization throughout the various municipal processes.

4.4. Municipal and ICT Alignment, Planning & Execution

The Corporate Governance of ICT is concerned with ICT's delivery of value to the municipality. As part of this, strategic alignment of ICT with the municipal goals (as established in the previous section) is an integral part of the Governance Framework. An ICT strategy, aligned to Municipal IDP, shall be developed by the ICT manager and shall be regularly reviewed and updated for approval by the ICT Steering Committee.

The said ICT strategy shall be supported by various plans, policies, an ICT portfolio of projects, and a performance management framework. These will need to be established by the ICT manager, while consulting with executive management and consideration for the existing processes of the Municipality.

Critical to the execution of the above, the ICT Steering Committee will need to direct, evaluate and monitor the ICT functions progress made against the ICT strategic plan and proactively be informed of any key risks preventing ICT from achieving its objectives and goals. Although a variety of best practices exist to allow the committee to perform these duties, it shall refer to the Corporate Governance of ICT standard (ISO/IEC 38500) for all major activities.

Lastly, ICT management, through the ICT manager, shall be responsible for measuring and providing adequate reporting on ICT to each of the governance structures, aligned to the mandate defined for those structures in terms of ICT. The ICT Steering Committee shall ensure it receives such reporting in support of its mandate given in the previous paragraph.

5. CGICT Charter

A Corporate Governance of ICT framework constitutes various artefacts, such as processes, structures, roles and responsibilities, lifecycles and policies. The Kouga Municipality Corporate Governance of ICT framework incorporates these fundamental components to ensure a comprehensive, practical framework that is customized to the environment, integrated into the key municipal objectives, managed across all stakeholders and monitored for compliance and performance.

Critical in the execution of such a framework is to ensure that adequately roles, responsibilities and structures are established. To this extent, the Municipality has established a dedicated ICT charter.

The ICT charter serves to accomplish a variety of objectives, which will ultimately both assist in the execution of the Corporate Governance of ICT Framework and the accountability of those tasked.

These objectives include, to:

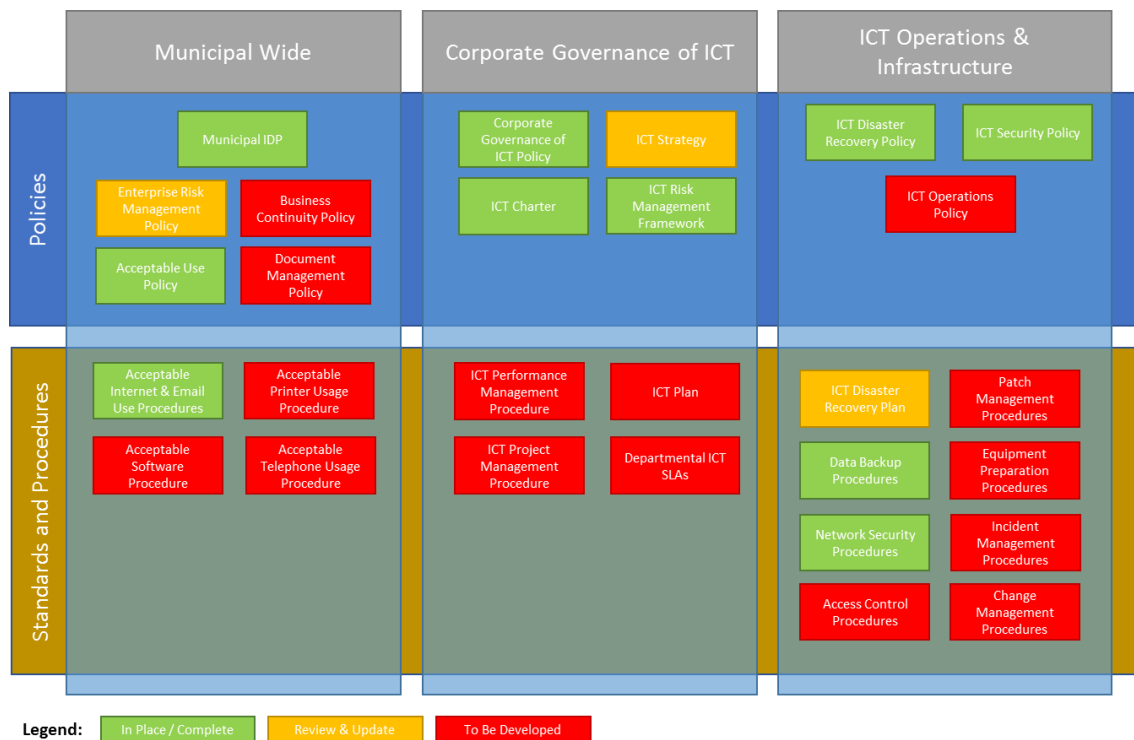
- Identify and establish a Corporate Governance of ICT Policy and implementation guideline for the municipality. Policy must first be in place then the Charter.
- Embed the Corporate Governance of ICT as a subset of the municipal governance objectives.
- Create Municipal value through ICT enablement by ensuring municipal IDP and ICT strategic alignment;
- Provide relevant ICT resources, organisational structure, capacity and capability to enable ICT service delivery;
- Achieve and monitor ICT service delivery performance and conformance to relevant internal and external policies, frameworks, laws, regulations, standards and practices;
- Implement the corporate governance of ICT in the municipality, based on an approved implementation plan.

6. ICT Policy Framework

Policies are a fundamental component of the toolset to help ensure that good governance is in place throughout a municipality. It is essential within Kouga Municipality that executive management ensure relevant ICT policies are implemented to maximize the governance, risk and security of the municipality and to enable ICT to best support service delivery.

The ICT Policy Framework below represents a one-page view of what the ICT policy universe will include at the Municipality, as based upon COBIT 5 and the DPSA recommendations. It reflects the policies, standards and procedures as well as guidelines that the municipality has both currently defined and those that it will need to draft to enhance its ICT governance, risk and security posture further.

The established framework should serve as a register, against which all ICT policies should be compared. In the event that an additional policy must be added, then such policy should be adequately justified. Added hereto, ICT policies must be developed in deliberation, and consideration for end-users and should follow official approval procedures.



6.1. Types of Policy

Policy

Within the context of the policy framework, a policy can be considered as a "Statement of Intent" or a "Commitment".

All policy will set the tone of what should be done in the municipality as well as the acceptable ways for doing this. Policies will be supported by procedures that provide detailed steps of actions that need to be carried out to fulfil a policy statement.

Standards and Procedures

In support of policy, procedures will establish a series of interrelated steps that should be taken to implement a policy or part thereof. These procedural documents will not operate in isolation, but will need to be carefully read and understood in conjunction with the related policies.

Meanwhile, standards will document established uniform criteria, methods, processes and practices that the municipality wish to comply to. Often procedures will depend on such standards to ensure consistency, and to allow the ICT department to best utilize its available resources.

6.2. Focus Areas of Policy

Municipal Wide

Municipal Wide documents shall encompass activities that are applicable to whole of the municipality, ranging from the municipal strategy to acceptable use of resources and beyond. The municipal wide policies, standards and procedures will define all the principles that the municipality will use to adequately direct, monitor and control both business and ICT functions. Their usage will be aimed at all municipal employees, and will serve as input into the various other ICT-specific policies.

ICT resources and infrastructure is critical to the continued operations of the municipality. The acceptable usage policies, procedures and standards will define usage rules applicable to end-users, owners and managers throughout the municipality (e.g., applications, network, email) that restrict the ways in which these resources may be used.

Corporate Governance of ICT

Governance encompasses a variety of activities, ranging from strategic alignment to resource management and beyond. The Corporate Governance of ICT policies, standards and procedures will define all the principles that the municipality will use to adequately direct, monitor and control the ICT function. Their usage will be aimed primarily at municipal management, but will serve as a guide for the operations of the ICT function and its management.

ICT Operations & Infrastructure

The ICT operations and infrastructure policies, standards and procedures will address constraints on data and system functions, constraints on access and will ultimately aim to manage the day-to-day activities of the ICT function and any risks that may exist within the ICT environment. These policies will address aspects such as security, data backups, incident management and a variety of others.

Additionally, these policies will also ensure the general upkeep of the ICT infrastructure. That is, that ICT equipment is adequately planned, implemented and maintained throughout its lifecycle. The infrastructure-related policies, procedures and standards will govern the use of ICT assets (i.e., hardware, software, networks, and facilities). They will define how the assets should be used to best develop, test, deliver, monitor, control and support ICT services.

6.3 ICT Policy Approval Process

The establishment and approval of ICT policies, will involve a variety of municipal stakeholders. These stakeholders should carry knowledge of their responsibilities and the role they will play in the approval process. The table below provides an overview of the stakeholders and their associated responsibilities:

Stakeholder	Responsibility in terms of the IT Policy Framework
Mayoral Committee	<ul style="list-style-type: none"> • Informed and approve all ICT policies as recommended by the ICT Steering Committee.
Executive	<ul style="list-style-type: none"> • Approval of ICT policies.

Management	
ICT Steering Committee	<ul style="list-style-type: none"> • Approve and submit ICT policies to Executive Management for final approval and recommendation to Council.
ICT Governance Champion	<ul style="list-style-type: none"> • Recommendations and input on ICT policies for submitting to ICT Steering Committee.
ICT Manager	<ul style="list-style-type: none"> • Drafting of ICT policies for submission to ICT governance champion • Drafting and approval of guidelines and technical standards • Annual review of all ICT policies prior to sending to IT Steering Committee
ICT Staff	<ul style="list-style-type: none"> • Inputs and recommendations to ICT policies, for possible amendments or requirements for new policy.

7. Governance and Management of ICT Framework

DPSA has expressed that the implementation of Corporate Governance of ICT encompasses two levels of decision-making authority and accountability to satisfy the expectations of all municipal stakeholders:

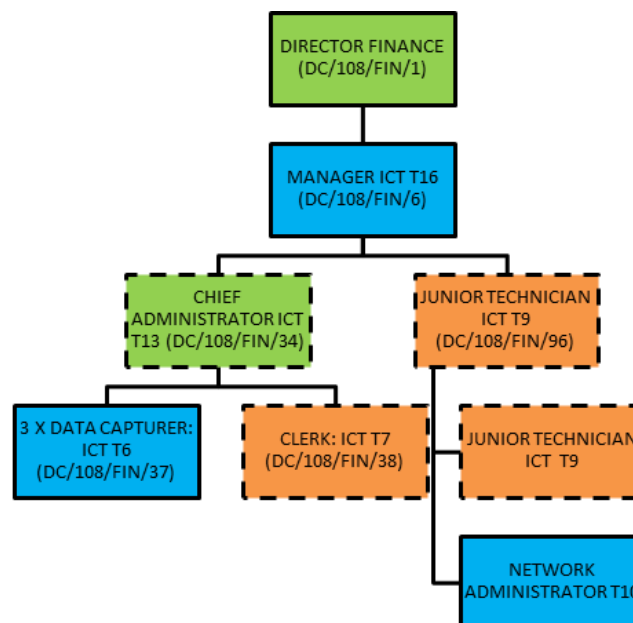
- Facilitating the achievement of a municipality's strategic goals (Corporate Governance of ICT); and
- The efficient and effective management of ICT service delivery (Governance of ICT)

While this policy thus far as explicitly discussed the specifics around how the municipality will be addressing Corporate Governance of ICT, it has not yet discussed Governance of ICT. That is, how the municipality will ensure efficient and effective management of ICT service delivery.

Kouga Municipality has in-line with DPSA recommendations, adopted COBIT as the overarching Governance of ICT framework. COBIT is an internationally accepted process framework for implementing Governance of ICT. It supports both the King III Code², but also the ISO/IEC 38500 standard of Corporate Governance of ICT. Thus, it aligns with the current wishes of municipal management.

7.1 Service Delivery Structure of the ICT Department

The Governance of ICT focuses on the daily operations of the ICT department. That is the structure and processes that it employs to ensure ICT service delivery. With reference to the structure of the ICT department, municipal management should ensure that the structure adequately address both the current and future requirements of the municipality. Further, that adequate roles and responsibilities are established for all ICT staff.



Upon inspection of the current structure, it can be confirmed that the ICT department operates under the direct authority of the Chief Financial Officer (CFO). The ICT manager, who has two administrators and multiple technicians under his direct ambit, manages the ICT department. Each of these individuals have clearly defined roles and responsibilities

² The King IV code has been released, and will only be applicable from 1 April 2017. Provision has been made for newly introduced changes, but further investigation will need to be made during policy review.

established, which should be continually revisited as the ICT department continues to deliver value to the municipality and the municipality has intentions to grow the responsibility of ICT unit by putting the ICT as a toll to transform the organization. As it currently stands the unit does not have the capacity to initiate the level of transformation required to place the municipality as a leader in the class at which it belongs. Capacity plan should be developed in view of the ICT delivery business model at which it will be decided upon in the near future.

Collectively, the ICT department will need to employ various processes to ensure adequate planning, building, running and monitoring of several aspects, including:

- Supplier management;
- ICT strategy management;
- Performance measurement;
- ICT risk management;
- Resource management;
- ICT program and project (portfolio) management;
- Continuity management; and
- Security management.

The remainder of this section focusses on establishing policy for the above given aspects that the ICT department will need to address per its Governance of ICT mandate.

7.2. ICT Supplier Management

It will remain the ICT department's duty to allocate and assign accountability for supplier management. To do so, the ICT department shall be required to develop a third party service provider governance process and communicate this to all third parties that render ICT services to the municipality.

The governance process shall need to cater for both the issuance, monitoring and control of third party service level agreements. Further, it shall ensure that performance can be actively measured against such agreements, and reported to municipal management on a pre-determined basis.

The ICT department shall refer to all the requirements, recommendations and guidelines as outlined in COBIT 5 process *APO10* when inferring its supplier processes.

7.3. ICT Strategy Management

An ICT strategy has been developed and approved by the Municipal Council. As part of Governance of ICT, the municipality shall commit to implement and prioritize all ICT initiatives outlined in the strategy. At all times such initiatives shall remain aligned to the municipal IDP, unless otherwise authorized by the ICT steering committee.

The ICT strategy shall be reviewed annually, as a minimum, to ensure alignment with the municipal IDP. Should the municipal IDP be updated, or the municipal strategic direction change; then the ICT strategy will be updated soonest to reflect such change.

The municipal management shall ensure that it takes reasonable steps to educate all applicable stakeholders of the ICT strategy and how it will be executed in support of the municipal operations and service delivery. Further, it shall ensure that adequate reporting processes are established to measure ICT performance against the strategy. Such reporting shall be presented to the appropriate forums on a quarterly basis.

The ICT department and municipal management shall refer to all the requirements, recommendations and guidelines outlined in COBIT 5 processes *APO02* and *APO03* when establishing the ICT strategy and establishing the performance monitoring framework(s).

7.4. ICT Risk Management*

Within Kouga Municipality, ICT risk management shall form part of the larger enterprise wide risk management processes. That is, ICT risks shall be considered within the larger municipal context, be both recorded in an ICT-specific risk register, and be aggregated into the larger municipal risk register as well.

The ICT department, as part of its ICT risk management responsibilities shall address safeguarding of ICT assets, disaster recovery and continuity of operations. The ICT department shall establish necessary policy, plans and processes to allow for this.

ICT risks shall receive equal level of attention than other business units within the Municipality, and such attention shall extend to their identification, assessment, mitigation, management, communication and monitoring.

Risk management shall also not be limited to ICT infrastructure, but shall also extend and be pervasive in all ICT activities including ICT projects and changes. To this extent, risks shall be documented for all ICT projects and changes during their initial planning and implementation.

Added hereto, the ICT manager shall provide sufficient information to demonstrate consideration for risks when changes are performed across the ICT environment.

Considering that ICT risk management constitute a significant process within the ambit of the ICT department, the ICT manager and ICT steering committee shall refer to best practice when addressing this matter. Of particular relevance is COBIT processes *APO12* and *EDM03*.

**Given the vast scope and consideration for ICT risk management, the municipality has established a separate framework to deal with this matter in more detail. The reader is referred to the Kouga ICT Risk Management Framework for additional information.*

7.5. ICT Resource Management

At Kouga Municipality, ICT resource management shall extend beyond the ICT infrastructure and include the ICT staff, systems and municipal information. It shall remain ICT management's responsibility to ensure that these resources are optimally utilized where they are needed most.

The ICT strategy shall accommodate for the current and future needs of ICT-related resources. Beyond this, the municipal budgeting and strategic planning processes will ensure adequate consideration for ICT resources. This will include consideration of resourcing options (including sourcing strategies) and allocation and management principles to meet the needs of the Municipality at optimal cost.

Those tasked with ICT resource management shall refer to COBIT processes *APO01* and *EDM04* in performing their duties.

ICT Staff

To enable annual ICT service delivery, an assessment of the existing organizational structure and ICT resources shall be performed annually. The aim of this exercise shall be to ascertain whether current capacity and capability is sufficient to deliver and support the ICT services expected by the Municipality.

The ICT portfolio, planned ICT initiatives and any changes in the municipal environment that may warrant changes in ICT shall influence this assessment. The outcome of periodic ICT strategy reviews will also provide further input into the assessment.

Based upon the assessment(s), the municipal management shall ensure that quality ICT people are recruited, each ICT staff member completes their performance management process at the stipulated intervals, clear retention mechanisms for the ICT staff are in place and that each ICT staff member has a training and development plan.

Infrastructure

ICT infrastructure signifies a significant portion of the ICT spending, and a necessary expense to ensure that the ICT department operates optimally. Consequently, municipal management shall proactively ensure that adequate infrastructure services are in place and that the required funding is made available.

The resources that shall be considered on a continuous basis will include:

- Local Area Networking
- Wide Area Networking (Microwave)
- Email services and Internet access
- Provisioning of computer equipment, servers, printers, mobile devices; etc.

The ICT department shall ensure that the ICT strategy roadmap pre-empts infrastructure projects necessary for ICT to deliver on business requirements from both a functionality and risk perspective.

Applications / Systems

ICT infrastructure alone does not provide business value, instead it depends on the installation of appropriate and adequate ICT systems. Consequently, municipal management shall manage the ICT systems and ensure full utilization of all available functionality.

The municipal management shall ensure that acquisition of new applications follow a thorough process of scrutiny and approval to ensure that ICT systems bring new functionality and add business value to the municipality. Such acquisitions however shall be carefully considered, such that emphasis can be placed on integration between systems and prevention of duplicate functionality and processes.

Information

Information forms the backbone of the municipality. As such, municipal management shall have to formally recognize, evaluate, store and manage information commensurate with its level of sensitivity.

Municipal management shall refrain from storing information in physical format, and rather opt to utilize more modern paradigms e.g., by going paperless. Not only will this ensure cost saving, but it will enhance the business continuity processes and ensure that information is not duplicated within the municipal operations.

7.6. ICT Project (Portfolio) Management

The ICT project portfolio constitutes a significant control in ensuring that the ICT strategy is both implementable and that the ICT department's endeavors are best optimized to offer business value. However, preparing such a portfolio in itself is not sufficient, as it also must be adequately managed.

Kouga Municipal Management commits to ensuring a project management methodology is approved, and followed by all ICT projects.

In the event of in-house system development, the project management methodology shall further be integrated with the approved system development methodology (SDLC) and a change control process shall be followed.

It shall remain the responsibility of the ICT department to ensure all ICT projects are accompanied by a valid business case. Each business case shall demonstrate the expected quantitative and qualitative outcomes, highlighting the return on investment and the creation of value. Further, all ICT projects shall follow the procurement policies instigated by the municipality. At the end of each project, an evaluation on whether expected benefits were realized shall be performed.

ICT projects shall be monitored throughout their lifecycle, via regular stage gate reviews, to ensure that the project processes are adhered to. Deviations from these processes shall be identified in a timely and proactive manner. Further, lessons learnt shall be formally logged and these should be used as input prior to commencing new projects in the future.

In addition to the regular stage gate reviews, the ICT manager shall be responsible to ensure a regular review of all ICT projects across the municipality (whether already fully implemented, or still pending). The results of these reviews shall be made available to the various committees in the governance structure, to ensure they are adequately informed of project progress, risks, and whether they are on track to meet agreed timelines and budgets.

The ICT manager shall also ensure formal reporting to the ICT steering committee, audit committee and risk committee on the benefits, risks and status of all major ICT investments. These shall be based on the current ICT project portfolio, but may also include other investments where warranted.

Those charged with project portfolio management shall refer to COBIT 5 processes EDM02, BAI01, and APO05 for recommendations, guidance and best practices.

7.7. ICT Continuity Management

The ICT department shall establish a backup policy, and ensure the implementation of an offsite storage strategy. Such strategy shall accommodate both any file servers, but also the backup of the ICT infrastructure (e.g., image files, configuration file).

As backup is performed, periodic recovery testing shall be scheduled. The testing shall ensure that each system is tested at least once a year and particular focus is given to the key ICT systems. The ICT manager shall maintain a log of all backups tested and review such logs on an agreed timeframe.

In addition to the backup strategy, the ICT department jointly with the municipal management shall establish continuity policy, plans and measures to ensure the continued operation of ICT in the event of a disaster. These shall be supported by training and awareness sessions for all relevant staff.

Any ICT continuity policy, plans and measures implemented, shall be tested periodically. The performance of these tests shall be formally documented and all relevant audit material kept for safekeeping. Every test shall also be accompanied by approval from the municipal management, and business users.

Continuity management at Kouga Municipality shall extend to environmental control equipment. As such, the ICT department shall schedule and perform periodic servicing of such equipment (e.g., generator, fire suppression). Periodic servicing shall be recorded, and may be subject to auditing by the audit and risk committees.

For additional policy and guidance, the ICT department shall refer to COBIT 5 process DSS04.

7.8. ICT Security Management

Kouga Municipal Management considers ICT security to be a top priority for the continued operations of the municipality. Consequently, responsibilities shall be assigned to ICT staff and management to ensure adequate information security and awareness programs.

The ICT manager shall ensure an information security policy is drafted, implemented and approved by Council. This policy shall address, as a minimum, matters arising from access control, change control, acceptable usage of ICT infrastructure, network security, and all other areas that pose a risk to the ICT environment.

The ICT department shall ensure it investigates, implements and continuously monitors tools in support of the security policy. Such tools will extent to access management software, network monitoring, and vulnerability assessment software.

When performing its security management responsibilities, the ICT manager and ICT staff shall refer to COBIT 5 process APO13 for additional insight and recommendations.

7.9. ICT Conformance and Performance Management

There is a direct link between the ICT department's success and the achievement of performance management objectives. Rendering supporting services to municipal departments and attaining business value, is at the heart of the ICT department's activities. Therefore, the ICT department shall be motivated and managed in such a way that the following requirements will be met:

- The department shall know what outputs it should produce. These outputs must add value to the municipality.
- The outputs shall be meaningful in the sense that their contributions shall be contextualized within the bigger picture of the municipal operations
- Regular feedback shall serve to reinforce the quest for continuous improvement. This shall ensure that similar outputs will be produced more regularly and the core competencies are continuously developed.
- The ICT department shall receive some form of recognition for performance that complies with the set criteria and reward if performance exceeds the set criteria

To facilitate the above requirements, the Municipality has opted to adopt the ICT Balanced Scorecard (ITBSC) system to translate the municipal objectives into measurable ICT objectives and ultimately into ICT metrics. Such metrics shall form part of the reporting processes by which the ICT department reports on its progress to municipal management.

Metrics defined for performance management purposes, shall address at least the following areas:

✓ – Must be reported ✖ – Not included in the reporting pack ♦ – Significant issues are reported

Reporting element	ICT Steering Committee	Audit / Risk Committee	ICT Manager
ICT Strategic plan and implementation	✓	✗	✓
ICT Audit results	♦	✓	✓
ICT Risk and Compliance	♦	✓	✓
ICT value delivery (i.e. financial analysis including benefits realised)	✓	✗	✓
ICT Security Management	✓	♦	✓
ICT Governance	♦	♦	✓
Service levels provided by ICT to the business units	♦	✗	✓
Continuity of Information Systems / ICT Disaster Recovery	♦	♦	✓
ICT Operations	♦	✗	✓
ICT Program and Project (Portfolio) Management	♦	✗	✓

Each of the governance structures, including the ICT management, shall define their own supporting performance metrics for each of the above given areas. Consideration shall be given for how the ICT Balanced Scorecard could be used to measure these aspects.

It is important to note, however, that the content, nature and extent to which each area will be reported, shall differ for each of the governance structure. That said, they shall be directed by the key requirements defined by that structure's mandate; as expressed in the ICT charter. Further, the reporting frequency of each structure shall be different:

- ICT Steering Committee: The committee shall submit detailed quarterly reports to municipal management

- Audit and Risk Committee: The committee shall submit quarterly reports on ICT risk and audit aspects
- ICT Manager: The manager shall submit detailed bi-monthly reports on the risk and day-to-day performance of ICT to the governance champion and/or the Chief Financial Officer.

At Kouga Municipality performance management and the stakeholder communication forthcoming from it shall not be ignored or degraded. Instead, it shall form the primarily basis upon which the ICT function operates. This will ensure that stakeholders are effectively informed and that key decisions are adequately made around the operations of the ICT function.

8. ICT Process Framework

8.1. Structuring of the ICT Process Framework

This policy has expressed that Kouga Municipality shall instigate a process framework in support of the Corporate Governance of ICT and Governance of ICT mandate. This process framework shall be aligned to COBIT 5, based upon the DPSA recommendations.

Undertaking the implementation of any process framework is laborious and time-consuming; therefore, it is essential that key milestones be established. Kouga Municipal Management has identified key initiatives that ICT management should be focusing on the next 2 years.

Below is a list of priorities and the required initiatives and points:

Priority	Initiatives and/or action points
EDM01 Ensure Governance Framework Setting and Maintenance	<ul style="list-style-type: none"> • Obtain approval of ICT Governance Framework and create an awareness of the principles and responsibilities including how effectiveness will be measured • Ensure ICT Steering committee meetings are held • Ensure ICT manager is trained on ICT Governance, COBIT and considers joining ISACA.
APO01 Manage the ICT Management Framework	<ul style="list-style-type: none"> • Track compliance with policies and procedures • Ensure training and succession planning are adequately addressed • Evaluate and enhance communication and coordinating mechanisms between ICT and the business • Clarify and manage expectations by ensuring that business units understand priorities, dependencies, financial constraints and the need to schedule requests.
APO02 Manage Strategy	<ul style="list-style-type: none"> • Alignment of ICT and municipal IDP and plans • Obtain approval of ICT Strategy and immediately begin implementing initiatives on the road map • Clearly communicate the objectives and associated accountabilities so that they are understood by all, with the ICT strategic options identified and integrated with municipal plans.
APO03 Manage Enterprise Architecture	<ul style="list-style-type: none"> • Develop a target ICT architecture and plan the necessary transformation. • Identify and plan ICT project that coincide with the target ICT architecture.
APO05 Manage Portfolio	<ul style="list-style-type: none"> • Return on investment management (on the development of innovative capabilities) • Comparing spending on established ICT systems based upon their relative value to the municipality • Performing benefits realization on all ICT-related projects.

APO10 Manage Suppliers	<ul style="list-style-type: none"> • Create supplier catalogue and supplier performance evaluation criteria standards • Identify and manage risk relating to supplier's ability to continually provide secure, efficient and effective service delivery • Establish and ensure an ICT Risk register that includes supplier risks where applicable.
APO12 Manage Risk	<ul style="list-style-type: none"> • Implement ways on how to collect ICT-related business risks • Continually identify, assesses and reduce ICT-related risk within levels of tolerance set by municipal management • Integrate the management of ICT-related business risk with overall Enterprise Risk Management.
APO13 Manage Security	<ul style="list-style-type: none"> • Allocate responsibility for information security • Review existing ICT Security policies to ensure minimum guidelines are covered • Users to sign compliance forms, and be made aware of any policy updates • Continue performing periodic Information Security awareness training programs.
BAI01 Manage Programmes and Projects	<ul style="list-style-type: none"> • Determine which project management methodology will be adopted or used for internal projects • Establish ICT project management principles.
DSS01 Manage Operations	<ul style="list-style-type: none"> • Develop and maintain operational procedures and related activities to support all delivered services • Maintain a schedule of operational activities (Operations health checklist), perform the activities, and manage the performance and throughput of the scheduled activities.
DSS04 Manage Continuity	<ul style="list-style-type: none"> • Continue operation of offsite storage of backup media • Expand offsite backup strategy, to include machine images, configurations, and files not stored on central servers • Continue critical business operations and maintain availability of information at a level acceptable to the

	municipality in the event of a significant disruption.
MEA01 Monitor, Evaluate and Assess Performance and Conformance	<ul style="list-style-type: none"> • Identify and engage Stakeholders to understand ICT performance requirements • Document ICT Performance requirements in an ICT Services catalogue, or in Departmental SLAs and link them to an annual ICT performance plan through KPIs • Monitor that processes are performing against agreed-on performance and conformance goals and metrics and provide reporting that is systematic and timely • 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 resolution.

Any deviation or amendments to the above process structure shall be promptly reported to the various governance structures. Further, the ICT department jointly with municipal management shall establish an ICT strategy and roadmap inclusive of this process framework.

9. Exceptions

Deviations from this policy and its associated procedures will only be permitted in the following circumstances:

- a) When specific provisions have been made for it in the ICT steering committee meetings or municipal management meetings (reasons for allowing non-compliance shall be documented within the minutes of meetings, and formal approval sought per written permission)
- b) On written permissions of the municipal manager of Kouga Local Municipality (reasons for allowing non-compliance to one or more aspects of the policy shall be clearly stated in such permission; no blanket non-compliance shall be allowed under any circumstances)

10. Monitoring of Compliance

The municipal council, with the assistance of the ICT steering and audit committees, must ensure compliance with this policy and its associated procedures

The ICT manager shall frequently report on the compliance with this policy, and report such compliance to the ICT steering committee. In the event of non-compliance or insufficient progress, such findings shall be reported to the municipal manager.

Municipal management hereby reserves the right to action disciplinary reform on both the ICT steering committee and ICT manager should compliance to this policy not be satisfactory. Such reforms may take the form of verbal and written warnings, or at worst, termination of contract or employment.

11. Review and Update Process

The ICT manager, assisted by the ICT steering committee, must ensure that this policy and its associated procedure are reviewed and updated after two years at most, or as and when necessary.

12. Conclusion

This Corporate Governance of ICT Policy has been designed for the exclusive use and alignment of Kouga Municipality. The implementation thereof shall be phased over a two-year period to provide the municipality with the time required to implement it effectively. Those tasked with Corporate Governance of ICT, as per the ICT charter, shall ensure that a supplementary implementation plan is developed that will give guidance to the practical implementation of the framework.