**CHAPTER 6**

**MUNICIPAL FINANCIAL MANAGEMENT**

**6.10 INFORMATION COMMUNICATIONS AND TECHNOLOGY BEST PRACTICE GUIDELINE**

**6.10.1 PURPOSE**

To enhance skills and knowledge of employees and councillor at municipalities in the ICT environment. The best practice guideline places the emphasis on the roles and responsibilities of the structures of local government to improve the Corporate Governance of ICT at municipalities.

**6.10.2 LEGISLATIVE MANDATE**

The Cost containment circular issued in terms of section 38(1) of the Public Finance Management Act.

Sections 3891) ( c) (iii) and 51 ( 1) ( b) (iii) pf the PFMA also require accounting officers and accounting authorities to take effective and appropriate steps to manage the available capital of their respective institutions.

**6.10.3 APPLICATION**

1. **GLOSSARY OF TERMS AND DEFINITIONS**

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| **TERM** | **DEFINITION** |
| AG | Auditor-General |
| Accounting Officer | Each municipal council is headed by a municipal manager who is the head of administration and also the accounting officer. The municipal manager advises council and its committees on administrative matters such as policy issues, financial matters, organisational requirements, personnel matters. As accounting officer, the municipal manager is comparable to a director-general in the public service. He/she has to personally provide reasons to council for the way in which the financial affairs of the departments of council had been conducted. |
| BCM | Business Continuity Management |
| Business Goals | Statements that describe what the business will accomplish, or the business value a project will achieve - A clear vision of what you want to achieve; and how |
| Charter | A document that defines the purpose of the initiative, how it will work, and what the expected outcomes is e.g. a project charter is a statement of the scope, objectives and participants in a project. It provides a preliminary delineation of roles and responsibilities, outlines the project objectives, identifies the main stakeholders, and defines the authority of the project manager |
| CobiT | Control Objectives for Information and Related Technology. An IT governance framework and toolset that allows managers to bridge the gap between control requirements, technical issues and business risks |
| CIO | Chief Information Officer |
| Control | A procedure or policy that provides a reasonable assurance that the information technology (IT) used by an organisation operates as intended |
| Corporate Governance | The set of responsibilities and practices exercised by the Council and executive management with the goals 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 |
| Deliverable | A term used in project management to describe a tangible or intangible object produced as a result of the project that is intended to be delivered to a customer |
| DRP | Disaster Recovery Planning |
| DPSA | Department of Public Service and Administration |
| EXCO | Executive Management |
| Executive Authority | Executive Authority means Executing Authority  In a Constitutional Institution: The Chairperson of the Constitutional Institution in relation to a Constitutional Institution with a body of persons, and in relation to a Constitutional Institution with a single office bearer, the incumbent of that office; According to section 11(1) of the Municipal Systems Act (Act No. 32 of 2000) the executive and legislative authority of a municipality is exercised by the council of the municipality. |
| Executive Management | Executive Management could include the Municipal Manager and the section 57 management. This normally constitutes the Executive Committee of the municipality.  Each municipal council is headed by a municipal manager who is the head of administration and also the accounting officer. The municipal manager advises council and its committees on administrative matters such as policy issues, financial matters, organisational requirements, personnel matters. As accounting officer, the municipal manager is comparable to a director-general in the public service. He/she has to personally provide reasons to council for the way in which the financial affairs of the departments of council had been conducted. |
| Framework | A basic conceptual structure with items which supports a particular approach to a specific objective. E.g. CobiT is an IT governance framework |
| GICT | Governance of ICT |
| GITOC | Government Information Technology Officers Council |
| Governance of ICT | The effective and efficient management of IT resources to facilitate the achievement of company strategic objectives. (King III: 2009)  Is the responsibility of executives and the board of directors, and consists of the leadership, organisational structures and processes that ensure that the enterprise’s IT sustains and extends the organisation’s strategy and objectives (ITGI 2005) |
| Governance Principles | The vehicle to translate the desired behaviour into practical guidance for day-to-day management |
| ICT | Information and Communication Technology also referred to as IT |
| ISACA® | Information Systems Audit and Control Association |
| ISMS | Information Security Management System |
| IT Goals | Processes that ensure that IT sustains and extends the organisation’s strategy and objectives |
| IT | Information Technology |
| ITIL | IT Infrastructure Library |
| ISO/IEC | International Standards Organisation (ISO) and the International Electro Technical Commission (IEC) |
| ISO 38500 | Corporate governance of information technology standard. Provides a framework for effective governance of IT to assist those at the highest level of organisations to understand and fulfill their legal, regulatory, and ethical obligations in respect of their organisations’ use of IT |
| King III | The King Code of Corporate Governance for South Africa 2009 |

1. **PURPOSE**

The Department of Co-operative Governance and Traditional affairs has identified the need to empower staff, senior management and councillors on the importance of implementing ICT Corporate Governance in the municipal environment.

Numerous engagements and surveys have indicated that there is a lack of capacity, skill and expertise which has resulted in the non-implementation of ICT Governance. Technological advancements are an integral part of the dynamic and transformational local government sphere and impacts on the effective service delivery to the needs of the community.

This guideline provides useful information to understand the importance of ICT governance as it serves as a business enabler to the organisation. In the event of lack of or non-alignment of ICT systems, the organisation will be deemed as dysfunctional which could impact on promoting sustainable local governance.

1. **LEGISLATIVE FRAMEWORK**

Municipalities must comply with the legislative frameworks applicable, which include the Local Government Municipal Systems Act, Act 32, of 2000, Local Government: Municipal Structures Act, Act 117 of 1998, the Public Administration Management Act, Act 11 of 2014 and the Local Government: Municipal Finance Management Act, Act 56 of 2003.

The following sections of legislation must be considered

**a. In terms of the Municipal Systems Act, Act 32, of 2000, Section 55(1):**

*“The municipal manager of a municipality is, subject to the policy directions of the municipal council, responsible and accountable for:*

(a) The formation and development of an economical effective, efficient and accountable administration:

(i) Equipped to carry out the task of implementing the municipality’s integrated development plan in accordance with Chapter 5:

(ii) Operating in accordance with the municipality’s performance Management system in accordance with Chapter 6;”

**b. In terms of the Municipal Finance Management Act, Act 56 of 2003, Section 62:**

*“The accounting officer of a municipality is responsible for managing the financial administration of the municipality, and must for this purpose take all reasonable steps to ensure—*

(a) That the resources of the municipality are used effectively, efficiently and economically;

(b) That full and proper records of the financial affairs of the municipality are kept in accordance with any prescribed norms and standards;”

**c. In terms of the Municipal Finance Management Act, Act 56 of 2003, Section 78 stipulates that:**

*“Each senior manager of a municipality and each official of a municipality exercising financial management responsibilities must take all reasonable steps within their respective areas of responsibility to ensure—*

(a) That the system of financial management and internal control established for the municipality is carried out diligently;

(b) That the financial and other resources of the municipality are utilised effectively, efficiently, economically and transparently;

(c) That any unauthorised, irregular or fruitless and wasteful expenditure and any other losses are prevented;”

1. **BEST PRACTICES FOR ICT GOVERNANCE**

* **SALGA**
  + Issued municipal guide/Roadmap to successful ICT Governance to guide municipalities towards implementation of Corporate governance of ICT
* **DPSA**
  + Issued Public service Corporate governance of Information and communication Technology policy framework
  + Issued Implementation guideline for corporate governance of information and communication technology policy framework
  + Issued Municipal corporate governance of information, communication and technology policy
* **COBIT**
  + An IT governance framework and toolset that allows managers to bridge the gap between control requirements, technical issues and business risks
* **ISO 38500**
  + Provides a framework for effective governance of IT to assist those at the highest level of organisations to understand and fulfill their legal, regulatory, and ethical obligations in respect of their organisations’ use of IT
* **KING IV CODE**

The recommended practices that the governing body should perform are summarised as:

* + Set the approach and approve the policy for technology and information

governance (including adoption of appropriate frameworks and standards);

* + Delegate to management effective technology and information implementation;
  + Oversee results of managements implementation (including integration, business resilience, monitoring for responsiveness to cyber security and social media risks, third-party and outsourced service provider risks, value delivered from technology investments and projects, disposal of obsolete technology and information, ethical and

responsible use and compliance with laws);

* + Oversee management of information (including use, information architecture, protection of privacy and security) ;
  + Oversee management of technology (including technology architecture, sourcing risks, developments and disruptions);
  + Consider receiving periodic, independent assurance on the effectiveness of the

technology and information, including outsourcing ;

* + Disclose overview of governance and management; areas of current and future focus; significant changes, acquisitions, incident management; monitoring and response thereto.

1. **OBJECTIVES OF THE CORPORATE GOVERNANCE OF ICT**

In order to give effect to the Corporate Governance of ICT in the Public Service, the following objectives were adopted by GITOC:

* Identify, establish and prescribe a uniform Governance of ICT Framework (GICTF) and implementation guideline for the Public Service;
* Embed the Corporate Governance of ICT as a subset of Corporate Governance;
* Create business value through ICT enablement by ensuring business 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 governance of ICT in the department, based on the COBIT process framework.

1. **THE IMPORTANCE OF ICT GOVERNANCE IN THE LOCAL GOVERNMENT SECTOR**

The effective management of information, information systems and communications, is of critical importance to the success of the Public Sector, especially Local Government.

This arises from:

* The dependence on information, services and infrastructure that deliver the information
* The increasing scale and cost of current and future technology-related investments
* The potential for technologies to enable the transformation of enterprises and business practices

Due to lack of or insufficient acceptable guidelines for ICT Governance, SALGA developed the Municipal guide / Roadmap to Successful ICT Governance. These guidelines drew clear directives for management to ensure that effective governance and management processes were in place to create value through optimising benefits at an affordable cost with an acceptable level of risk.

1. **BENEFITS OF CORPORATE GOVERNANCE OF ICT**

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

* Public Service positioned to improve delivery on the 12 strategic outcomes;
* Improved achievement of Public Service-wide and departmental strategic goals;
* Improved effective public service delivery through ICT-enabled access to government information and services;
* Improved ICT enablement of business;
* Improved delivery of ICT service quality;
* Improved stakeholder communication;
* Continuous improvement of business and ICT alignment;
* Improved trust between ICT, the business and citizens;
* Lower costs;
* Increased alignment of investment towards strategic goals;
* Improved return on ICT-enabled investment;
* ICT risks managed in line with the priorities and appetite of the Public Service and the department;
* Appropriate security measures to protect the departmental and employee information;
* Improved management of business-related ICT projects;
* 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;
* ICT pro-actively recognises opportunities and guides departments and the Public Service in timeous adoption of appropriate technology;
* Improved ICT ability to learn and agility to adapt to changing circumstances; and
* ICT executed in line with legislative and regulatory requirements.

1. **CORPORATE GOVERNANCE OF ICT: MUNICIPAL STRUCTURES & LAYERS**

Municipal councils exercise 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 is meant to facilitate 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.

**8.1 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, municipalities themselves must define 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 relationships within the municipal council and between the council and the administration.

**8.2 THREE LAYERS OF CORPORATE GOVERNANCE OF ICT**

The corporate governance of ICT is a subset of corporate governance and is an integral part of the governance system:

* 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.

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| **Level** | **General Description** |
| Political Leadership | The Executive Authority must:   * Provide political leadership and strategic direction * Determine policy and provide oversight; * Ensure that ICT service delivery enables the attainment of the strategic plan; * 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. * Assist the Accounting Officer to deal with inter-governmental, political and other ICT – related municipal business issues beyond their direct control or influence; * Ensure that the municipality’s organizational structure makes provision for the corporate governance of ICT. |
| Strategic Leadership | The Accounting Officer must:   * Provide strategic leadership and management; * Ensure alignment of the ICT strategic plan with the municipal strategic plan / IDP; * Ensure that the corporate Governance of ICT is placed on the municipal strategic agenda; * Ensure that the municipality’s organizational structure makes provision for the corporate governance of ICT. * Ensure the realization of the municipal-wide value through ICT service delivery and management of municipal and ICT related risks; * The delegation of authority, personal responsibility and –accountability to the Executive Management with regards to the Corporate Governance of ICT; * 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; * Monitor and evaluate the effectiveness of the Corporate Governance of ICT. |
| Governance of ICT | The Executive / Senior Management must:   * Ensure that ICT goals are aligned with the municipal strategic goals and support strategic business processes; * ICT strategy is integrated with strategic business processes and that related risks are managed; * Significant ICT investments and expenditure are informed by the municipal enterprise architecture, motivated (Business Cases), monitored and evaluated; and * Advice is provided to the Accounting Officer on the implementation and management of the Corporate Governance of ICT. |

1. **DEFINING APPROPRIATE ORGANISATIONAL STRUCTURES**

A Municipal Manager is part of the Executive Management of a municipality, is both the Accounting Officer and the Information Officer of the municipality. He/she may delegate certain duties/tasks to the Chief Financial Officer, who would be accountable to him/her. The Municipal Manager is therefore accountable:

* For all transactions entered into by his designates.
* For sound record management (information management).

In this regard it is important to ensure that there is no confusion between the Municipal Manager, as the Information Officer, and the Chief Information Officer (CIO) as defined by King III.

Following the intentions of King III, it is suggested that:

1. The municipal ICT function, reside under office of the Municipal Manager, in parallel to Internal Audit;
2. The implementation of the governance of ICT is delegated from the office of the Municipal Manager to a Municipal ICT Steering Committee made of the relevant executive / senior management (section 57 managers) as well as the municipal ICT management (CIO / IT Manager or Director);
3. **RECOMMENDED PLACEMENT OF THE ICT FUNCTION IN MUNICIPAL STRUCTURES**

The diagram/s below shows a suggested placement for ICT within a typical municipality as per SALGA guidelines.

Note that ICT is shown to have a direct link to the Municipal Manager’s office.



1. **SUMMARY OF CORPORATE GOVERNANCE OF ICT PRINCIPLES**

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.

Principle 1: Political Mandate

The Corporate Governance of ICT must enable the municipality’s strategic mandate. The Accounting Officer must ensure that the Corporate Governance of ICT assists in achieving the municipality’s strategic plans

Principle 2: Strategic Mandate

The Accounting Officer is responsible for the Corporate Governance of ICT. The Accounting Officer 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: Corporate Governance of ICT

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 the 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.

Principle 4: ICT Strategic Alignment

Executive Management must ensure that ICT risks are managed and that then 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.

Principle 6: Risk Management and Assurance

The Executive Management must monitor and evaluate significant ICT expenditure. Executive Management must monitor and evaluate major ICT expenditure, ensure that the ICT 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

Principle 5: Significant ICT Expenditure

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

Principle 7: Organisational Behavior

1. **CRITICAL SUCCESS FACTORS FOR A BUSINESS / IT RELATIONSHIP**

Understand your client’s business requirements

* Good business acumen - Understand areas where ICT can add business value
* ICT Strategy sessions - Building a shared vision
* One-on-one sessions with management & peers– Talk in business terms

Manage your client’s expectations

* Good Governance – Monthly ICT Steering Committee
* ICT Architecture Forums/Workgroups: Co-management – Collaborative approach towards building ICT solutions for business
* Best practice project management – on time/ within spec/ within budget
* Cost-effective solutions and at market related prices
* Never promise more than you can deliver

Deliver a consistent and quality service

* ICT support - ICT know-how & experience
* Contingency planning – ICT and Business: Core competencies
* Contract only with reputable service providers with access to competent skills & knowledge resources: SP relationships = Long term investments

Manage the relationships between your clients and with all other stakeholders

* Contracts Management – Co-management: financial & technical transparency – Value for money
* SDA’s - Performance Management & Monitoring with penalties for non-performance
* Change Management - Planned and tested - Mitigation of operational & financial risks
* Problem Management and corrective measures – Prevent re-occurrences – trends analysis
* Monitor and track new service requests and projects

1. **FUNCTIONS OF COMMITTEES**

The ICT Strategic Committee should conceptualise and oversee CGICT, GICT and strategic alignment.

An ICT Steering Committee should coordinate and oversee the planning, implementation and execution of the CGICT, GICT and strategic alignment and related monitoring activities.

The ICT function should have an ICT Operational Committee that keeps track of the day-to-day ICT service management elements and reporting.

1. **ICT Strategic Committee (Executive Committee - level)**
   * This committee is chaired by the HoD/Provincial DG and includes members of Executive Management, the Governance Champion and GITO/Provincial GITO.
   * Evaluate the departmental strategic plan and internal and external environment to:

* Identify stakeholder needs and how it should be realised
* Determine value ICT is expected to create through its enablement of the business
* Define the benefits ICT is expected to realise in its enablement of business
* Articulating ICT risk appetite and how it should be management within the risk
* management regime of the department
* 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
* 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 ICT arrangements:
* Direct the development of the ICT Plan, ICT Implementation Plan and ICT Annual

Performance Plan

* Ensure integration of CGICT into the agenda of the Executive Committee
* Approve CGICT Policy and Charter, ICT Plan, ICT Implementation Plan (MTEF),

ICT Operational Plan (APP) and other related plans and policies

* Approve portfolio of ICT projects and its related expenditure
* Provide direction for the change management requirements for the implementation of CGICT
* Guide implementation of the Framework and related policies and strategies
* Monitor that implementation conforms to the criteria:
* Conformance, performance and assurance oversight and monitoring
* Ensure that risk is managed and the ICT is audited internally and independently

1. **ICT Steering Committee**

* This committee is chaired by a member of Executive Management and includes members of Executive and Senior Management, the Governance Champion and GITO.
* Evaluate:
  + Coordinate development of CGICT Policy
  + Coordinate planning based on direction received from the ICT Strategic Committee
  + Determine, prioritise and recommend plans, policies, strategies, resource/capacity
    - requirements, portfolios of ICT projects and risk management to ICT Strategic Committee and/or HoD
    - Oversee the identification of the ICT prescriptive environment
* Direct:
* Oversee the implementation of approved plans, policies, strategies, resource/capacity requirements, risk management, benefits realisation, portfolios of ICT projects, internal and external audits
* Determine the monitoring criteria and related reporting requirements and processes for conformance, performance and assurance
* Provide direction to all ICT related decisions that may have an impact on the business operations and culture of the department that is escalated to the Committee
* Determine the change management requirements for the implementation of CGICT and report to Strategic Committee
* Monitor:
* Conformance, performance and assurance monitoring and reporting to ICT Strategic Committee
* Oversee and report on the change management implementation for the
* implementation of CGICT

**c ) ICT Operational Committee**

This committee is chaired by the GITO and includes business and ICT management. Provide input into the development of ICT Plan, ICT Implementation Plan, ICT Operational Plan, Governance of ICT Framework and ICT Project Program

* Coordinate implementation of ICT Plan, ICT Implementation Plan, ICT Operational

1. Plan and ICT Project Program

* Day-to-day operational and service management (Manage Suppliers and Service
* Level Agreements)
* Manage ICT Service delivery risk management
* Conformance and performance reporting to ICT Steering Committee

1. **MUNICIPAL ICT STEERING COMMITTEE**

The Municipal ICT Steering Committee is to ensure that everyone in the municipality understands the link between business and ICT goals and accepts their responsibilities with respect to the supply and demand for ICT. The Municipal ICT Steering Committee will ensure that:

* The necessary ethical culture, structures (including outsourcing), policies, procedures, processes, mechanisms and controls regarding all aspects of ICT use (business and ICT) are clearly defined, implemented and enforced;
* ICT performance are assured through independent audit (Auditor General);
* An information security strategy is approved;
* Intellectual property in information systems is appropriately protected; and
* ICT assets, privacy, security and personal information of employees are effectively managed.

1. **THE MUNICIPAL CIO / IT MANAGER OR DIRECTOR**

The implementation and operation of IT governance is the responsibility of the municipal CIO / IT Manager who is expected to report to the IT Steering Committee and the Council about the effective and efficient management of IT resources to facilitate the achievement of corporate objectives.

1. **RACI CHART**

The RACI Chart (Responsible, Accountable, Consulted, and Informed) clarifies the assignment of responsibilities and decision-making rights across a number of roles. The RACI model is built around a simple 2-dimensional matrix which shows the 'involvement' of Functional Roles in a set of Activities.

'Involvement' can be of different kinds: Responsibility, Accountability, Consultancy or Informational.

The model is used during analysis and documentation efforts in all types of Service Management, Quality Management, Process- or Project Management. A resulting RACI chart is a simple and powerful vehicle for communication. Defining and documenting responsibility is one of the fundamental principles in all types of Governance (Corporate or ICT-Governance).

The following chart gives an example of the RACI principles. Based on the capacity of the municipality, its resources and ICT requirements, the chart can be completed accordingly.

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| **Functions** | **Mayoral office** | **Municipal manager** | **Business process owner** | **Head of operations** | **Head development** | **Head of IT Administration** | **PMO** | **Internal Audit** | **Service Desk** |
| **Activities** |  |  |  |  |  |  |  |  |  |
| 1. **Identify needs** | **I** | **R** | **A** | **C** | **C** | **C** | **C** | **I** | **I** |
| a)raise awareness |  |  |  |  |  |  |  |  |  |
| 1. Define scope |  |  |  |  |  |  |  |  |  |
| 1. Define risks |  |  |  |  |  |  |  |  |  |
| 1. Define resources and deliverables |  |  |  |  |  |  |  |  |  |
| 1. Plan program |  |  |  |  |  |  |  |  |  |
| 1. Plan program |  |  |  |  |  |  |  |  |  |
| 1. **Envision solution** |  |  |  |  |  |  |  |  |  |
| 1. Assess actual performance |  |  |  |  |  |  |  |  |  |
| 1. Define target for performance |  |  |  |  |  |  |  |  |  |
| 1. Analyse gaps and identify improvements |  |  |  |  |  |  |  |  |  |
| 1. **Plan solution** |  |  |  |  |  |  |  |  |  |
| 1. Define projects |  |  |  |  |  |  |  |  |  |
| 1. Develop improvement plan |  |  |  |  |  |  |  |  |  |
| 1. **Implement solution** |  |  |  |  |  |  |  |  |  |
| 1. Implement the improvement |  |  |  |  |  |  |  |  |  |
| 1. Monitor implementation performance |  |  |  |  |  |  |  |  |  |
| 1. **Operationalise solution** |  |  |  |  |  |  |  |  |  |
| 1. Build sustainability |  |  |  |  |  |  |  |  |  |
| 1. Identify new governance requirements |  |  |  |  |  |  |  |  |  |

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| |  |  | | --- | --- | | **Roles and Responsibility Categories** | | | **Functional Level** | **Designation** | | Strategic | Mayoral Office, Council & Municipal Manages Office | | Tactical | Municipal Manager, Internal Audit, PMO | | Operational | Business process owner, Head of administration, Service desk | | |
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1. **SKILLS REQUIREMENTS FOR GOOD ICT GOVERNANCE**

While municipalities experience a shortage of ICT skills, critical ICT skills were identified to be able to manage potential crisis areas. The following list gives an indication of the type and level of expertise of ICT skills that is required to move towards and manage a functional ICT Governance Framework.

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| **Skill** | **General Description** |
| Information Management | The overall management of information, as a fundamental business resource, to ensure that the information needs of the business is met. |
| Business risk management | The planning and implementation of organisation-wide processes and procedures for the management of operational risk. |
| Information security | The management of, and provision of expert advice on, the selection, design, justification, implementation and operation of information security controls and management strategies to maintain the confidentiality, integrity, availability, accountability and relevant compliance of information systems. |
| Security administration | The authorisation and monitoring of access to IT facilities or infrastructure in accordance with established organisational policy. Includes the investigation of unauthorised access, compliance with data protection and performance of other administrative duties relating to security management. |
| Information assurance | The protection of systems and information in storage, processing, or transit from unauthorised access or modification. Denial of service to unauthorised users; or the provision of service to authorised users. |
| Systems architecture | The specification of systems architectures, identifying the components needed to meet the present and future requirements, both functional and non-functional (such as security) of the business as a whole, and the interrelationships between these components. |
| Continuity  management | The provision of service continuity planning and support. This includes the identification of information systems that support critical business processes, the assessment of risks to those systems’ availability, integrity and confidentiality and the coordination of planning, designing, testing and maintenance procedures and contingency plans to address exposures and maintain agreed levels of continuity. |
| Network design | The production of network designs and design policies, strategies, architectures and documentation, covering voice, data, text, e-mail, facsimile and image, to support business requirements and strategy. |
| Network operations | The day to day operation and maintenance of networked systems to ensure that the communication needs of the business is met |
| Programming/software development | The design, creation, testing and documenting of new and amended programs from supplied specifications in accordance with agreed standards. |
| Web site specialism | The design, creation, testing, implementation and support of new and amended collections of pages of information on the world wide web or an intranet or extranet. |
| Project management | The management of projects, typically (but not exclusively) involving the development and implementation of business processes to meet identified business needs, acquiring and utilising the necessary resources and skills, within agreed parameters of cost, timescales and quality. |
| Configuration management | The systematic management of information relating to the documentation, software, hardware and firmware assets of an organisation. This will involve identification and appropriate specification of all configuration items (CIs). Required information will relate to storage, access, problem reporting and change control of CIs. |
| Change management | The management of all changes to the components of a live infrastructure, from requests for change (RFC) through to implementation and review, to support the continued availability, effectiveness and safety of the infrastructure. |
| Capacity management | The management of the capability and functionality of hardware, software and network components to meet current and predicted needs in a cost-effective manner. |
| Availability management | The overall control and management of services and their availability to ensure that all services meet all of their agreed availability targets. |
| Financial management for ICT | The overall financial management, control and stewardship of the ICT assets and resources used in the provision of ICT services, ensuring that all governance, legal and regulatory requirements are complied with. |
| Management and operations | The management and operation of the ICT infrastructure (typically hardware, software and communications) and the resources required to plan for, develop, deliver and support properly engineered ICT services and products to meet the needs of a business. |

1. **ICT GOVERNANCE FRAMEWORK COMPONENTS**

A Governance Framework is a management system which enables the effective management of ICT resources. More specifically a Governance Framework should (at least) include the following components:

* An ICT Governance Charter - The Charter outlines the decision making rights and accountability for ICT governance that will enable the desirable culture in the use of ICT within the municipality. This is achieved by requiring ICT management to provide timely information to comply with direction and to conform to the principles of good governance.
* A RACI Chart (Responsible, Accountable, Consulted, Informed) - The RACI chart clarifies the assignment of responsibilities and decision-making rights across a number of roles. Role descriptions are mapped to the key tasks that underpin the ICT services provided using Best Practice such as CobiT and ITIL process models as a reference.
* Measurement and Monitoring – Performance maturity levels are established using the criteria of assigned responsibility to execute tasks in support of the principles and practices.
* ICT Controls - Control activities are the policies, procedures, general, application, user and company level responses that help ensure risk responses are properly executed.
* Internal Audit - Internal audit perform the following functions:
  + Evaluate the municipality’s governance processes;
  + Perform an objective assessment of the effectiveness of risk management and internal controls;
  + Analyse and evaluating business processes and associated controls; and
  + Provide a source of information regarding instances of fraud, corruption, unethical behaviour and irregularities.

1. **MUNICIPAL IDP AND ICT STRATEGIC ALIGNMENT**

Accountability is assigned to the leadership of a municipality through the ICT Corporate Governance Policy which enables the municipality to align the delivery of ICT strategies and services with the municipality’s Integrated Development Plans and strategic goals.

This is achieved through the development and adoption of an ICT strategic plan which is informed by the enterprise architecture plan which clearly outlined the roles, responsibilities and business processes contained in the IDP.

1. **THE CORPORATE GOVERNANCE OF ICT CHARTER**

The Charter should guide the creation and maintenance of effective enabling governance structures, processes and practices. ICT should also clarify the governance of ICT-related roles and responsibilities towards achieving the municipality’s strategic goals.

**20.1 OBJECTIVES OF THE MUNICIPAL CORPORATE GOVERNANCE OF ICT CHARTER**

In order to give effect to the Corporate Governance of ICT in Municipalities, the following objectives should be included in the municipality’s Corporate Governance of ICT Charter:

* 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.

1. **CONCLUSION**

This Corporate Governance of ICT best practice has been designed for the exclusive use and alignment of Municipalities. IT Governance spans the culture, organisation, policy and practices that provide for IT management and control across the environment. IT Governance is not a one-time exercise or something achieved by a mandate or setting of rules. It requires the team effort of all stakeholders in the business environment.

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