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METRO MUNICIPALITY
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INFORMATION COMMUNICATION TECHNOLOGY CORPORATE GOVERNANCE FRAMEWORK

1 OCTOBER 2015

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Description	INFORMATION COMMUNICATION TECHNOLOGY CORPORATE GOVERNANCE POLICY		
Purpose	The purpose of ICT Governance framework policy is to give council and management a measurable framework that allows for strategic direction, monitoring and measuring the effectiveness of the ICT Strategy, and eventually the processes that drive services, mitigate risks and manage the costs of ICT		
Applicable to	<i>Mangaung Metro Municipality</i>		
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VERSION HISTROY			
VERSION	DATE	AUTHOR(S)	CHANGE SUMMARY
1.0	29 September 2015	Lawrence Mahasa	Initial Document

1. DEFINITIONS

In this ICT Corporate Governance Policy, unless the context otherwise indicates, a word or expression to which a meaning has been assigned follows:

- a) **“Change”** means the addition, modification, or removal of approved or supported hardware, network, software, environment, system, desktop build, or associated documentation;
- b) **“CAB”** means Change Advisory Board which comprises of a group of individuals who advise the Change Manager on the implementation of changes;
- c) **“BRM”** means Business Relationship Management ;
- d) **“OPCA”** means Operation Clean Audit;
- e) **“DEMS”** means Disaster and Emergency Management Services;
- f) **“Municipality”** means the Mangaung Metropolitan Municipality, and when
 - a. referred to as –
 - i. (i) an entity, means a municipality as described in section 2 of the Systems Act;
 - and
 - ii. a. a geographic area, means the municipal area determined in terms of the Local Government : Municipal Demarcation Act, 1998 (Act No 27 of 1998);
- g) **“Emergency”** means an unforeseeable and sudden event, with material harmful or potential harmful consequences for the municipality that requires immediate action;
- h) **“ECA”** means the Electronic Communications Act of 2002
- i) **“ECSA”** means the Electronic Communications & Security Act of 2002
- j) **“ICASA”** means the Independent Communications Authority of South Africa
- k) **“ITA”** means the Information Technology Agency responsible for I.T Code of Ethics through all sectors of ICT
- l) **“SALRC”** means the South Africa Law Reform Commission - Email & Internet Laws
- m) **“TCA”** means the Telecommunications Act of 1996
- n) **“COBIT”** means the Control Objectives for Information and Related Technology and 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.

- o) **“ITIL”** means the Information Technology Infrastructure Library, a set of practices for IT Service Management (ITSM) that focuses on aligning IT services with the needs of business.
- p) **“ISACA”** means the Information Systems Audit and Control Association which is an international professional association focused on IT Governance.
- q) **“Prince 2”** means Projects in Controlled Environments, version 2 and is a project management methodology. The methodology encompasses quality management, control and organization of a project with consistency and review to align with the objectives.
- r) **“King III”** means the King Report version 3 (2009) on Corporate Governance and is a ground-breaking code of corporate governance in South Africa issued by the King Committee on Corporate Governance. Compliance with the King Report is a requirement for companies listed on the Johannesburg Stock Exchange. The King Report on Corporate Governance has been cited as "the most effective summary of the best international practices in corporate governance".

2. EXECUTIVE SUMMARY

Information Communication Technology (ICT) Governance has been described as the effective and efficient management of ICT resources and processes to facilitate the achievement of Municipal goals and objectives. The ICT Governance Institute describes ICT Governance as; “the responsibility of the board of directors and executive management.” – Co-operative Governance and Traditional Affairs 2015, *Municipal Corporate Governance of Information and Communication Technology Policy*, Government of South Africa.

Governance is an iterative process that should occur on all management levels in Mangaung Metro Municipality. Accepted best practices and standards for ICT Governance are defined in the King III Code of Good Governance, ISO 38500 Standard for the Corporate Governance of ICT, COBIT 5, ITIL v2 and 3 and other best practice ICT Process Frameworks, on which this document is based on.

ICT Governance is imperative in the alignment of ICT as an enabler to the business. The Strategy of ICT should be carefully aligned to the business objectives of the Municipality; a clear strategic fit should be realised from the performance of ICT within an institution and ways to measure ICT performance should be established. This takes into cognisance risks and costs associated with the operational aspects of ICT.

The view that ICT should be governed and managed at all levels within a given organizational structure is supported by internationally accepted good practice and standards. These practices and standards are defined in the King III Code of Good Governance, ISO 38500 Standard for the Corporate Governance of ICT and other best practice ICT Process Frameworks, which forms the basis of this document.

The Council and Management of Mangaung Metro Municipality need to extend their governance functions to include the Corporate Governance of ICT as mandated by the Corporate Governance of ICT Governance Policy of January 2015. The necessary strategies, architectures, plans, frameworks, policies, structures, procedures, processes, mechanisms and controls, and culture which are in compliance with the best practise ICT Governance Frameworks.

3. INTRODUCTION

Information and Communications Technology (ICT) Governance ensures effective and efficient management of ICT resources to facilitate the achievement of organizational goals, objectives and strategies. The primary goal for ICT Governance is to ensure that there is a balance between technology investments and ICT's alignment to strategic and cross-functional business objectives. Governance activities are targeted at understanding the issues and strategic importance of ICT, enabling the enterprise to sustain its operations, and implementing the strategies required to advance ICT in response to future needs of the Municipality. Governance practices aim at ensuring that the expectations for IT are met and IT risks are mitigated.

As recommended in the National Corporate Governance of ICT Governance Policy, ICT does not exist for its own sake within an organisation; ICT is there to make sure that organizations achieve sustainable success through the use of their ICT. Information Communication Technology is not a support function of an organisation but rather a strategic enabler that encompasses many disciplines and best practices beyond technology.

3.1 PURPOSE

The purpose of this policy is to institutionalise the Corporate Governance of ICT as an integral part of corporate governance within municipalities in a uniform and coordinated manner. The policy provides a set of principles and practices which will assist to institutionalise the Corporate Governance of ICT.

3.2 LEGISLATIVE FRAMEWORK

All Applicable Acts, policies and by-laws including 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.

3.2.1 The following sections of legislation apply:

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 78 of the Municipal Finance Management Act 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;"

3.2.2 Corporate Governance of ICT Governance Policy (January 2015)

3.2.3 COBIT 5 and CMMI

3.2.4 Prince 2

3.2.5 ITIL

3.2.6 ISO/IEC 17799:2005, Security techniques -- Code of practice for information security management

3.2.7 ISO/IEC 38500:2008, Corporate governance of information technology

3.2.8 ECA 2002 (Electronic Communications Act)

3.2.9 ECSA 2002 (Electronic Communications & Security Act)

3.2.10 ICASA (Independent Communications Authority of South Africa)

3.2.11 ITA (Information Technology Agency) responsible for I.T Code of Ethics through all sectors of ICT

3.2.12 SALRC - South Africa Law Reform Commission - Email & Internet Laws, etc.

3.2.13 TELECOMMUNICATIONS ACT (TCA 1996)

3.2.14 Department of Communications Regulatory

4. CORPORATE GOVERNANCE OBJECTIVES

The objectives of this Corporate Governance of ICT Policy for municipalities seek to achieve the following:

- a) Institutionalising a Corporate Governance of ICT Policy that is consistent with the Corporate Governance Frameworks of the municipality;
- b) Aligning the ICT strategic goals and objectives with the municipality's strategic goals and objectives;
- c) Ensuring that optimum Municipal value is realised from ICT-related investment, services and assets;
- d) Ensuring that Municipal and ICT-related risks do not exceed the municipality's risk appetite and risk tolerance;
- e) Ensuring that ICT-related resource needs are met in an optimal manner by providing the organisational structure, capacity and capability;
- f) Ensuring that the communication with stakeholders is transparent, relevant and timely; and
- g) Ensuring transparency of performance and conformance and driving the achievement of strategic goals through monitoring and evaluation.

5. PUBLIC SERVICE CORPORATE GOVERNANCE OF ICT PRINCIPLES

Based on principles of international good practices and standard for ICT governance, namely, King III Code, ISO/IEC 38500 and other best practice process frameworks, these principles have been adopted in the Public Service Corporate Governance of ICT Policy Framework (PSCGICTPF) which have been adapted for municipalities.

PRINCIPLES:

Principles adopted in the Public Service Corporate Governance of ICT Policy Framework (PSCGICTPF).

- 1) **Political Mandate:** The Governance of ICT must enable the municipality's political mandate. The Municipal Council must ensure that Corporate Governance of ICT achieves the service delivery mandate of the municipality.
- 2) **Strategic Mandate:** The Governance of ICT must enable the municipality's strategic mandate. The Municipal Manager must ensure that Corporate Governance of ICT serves as an enabler to the municipality's strategic plans.
- 3) **Corporate Governance of ICT:** The Municipal Manager is responsible for the Corporate Governance of ICT. The Municipal Manager must create an enabling environment in respect of the Corporate Governance of ICT within the applicable legislative and regulatory landscape and information.

- 4) **ICT Strategic Alignment:** ICT service delivery must be aligned with the strategic goals of the municipality. Management must ensure that ICT service delivery is aligned with the municipal strategic goals and that the administration accounts for current and future capabilities of ICT. ICT must ensure that ICT is fit for purpose at the correct service levels and quality for both current and future Municipal needs are met.
- 5) **Significant ICT Expenditure:** Management must monitor and evaluate significant ICT expenditure. Management must monitor and evaluate major ICT expenditure, ensure that ICT expenditure is made for valid Municipal enabling reasons and monitor and manage the benefits, opportunities, costs and risks resulting from this expenditure, while ensuring that information assets are adequately managed.
- 6) **Risk Management and Assurance:** Management must ensure that ICT risks are managed and that the ICT function is audited. Management must ensure that ICT risks are managed within the municipal risk management practice. ICT must also ensure that the ICT function is audited as part of the municipal audit plan.
- 7) **Organisational Behaviour:** Management must ensure that ICT service delivery is sensitive to organisational behaviour/culture.

6. MUNICIPAL CORPORATE GOVERNANCE OF ICT POLICY PRACTICES

The following practices are designated to different structures and officials in order to achieve the objectives and strategies of ICT Governance.

PRACTICES:

These 4 practises are adopted from the ICT Governance Practices.

- 1) The Municipal Council must provide political leadership and strategic direction through:
 - a. Determining policy and providing oversight;
 - b. Take an interest in the Corporate Governance of ICT to the extent necessary to ensure that a properly established and functioning Corporate Governance of ICT system is in place in the municipality to leverage ICT as an enabler the municipal IDP;
 - c. Assist the Municipal Manager to deal with intergovernmental, political and other ICT-related Municipal issues beyond their direct control and influence; and
 - d. Ensure that the municipality's organisational structure makes provision for the Corporate Governance of ICT.

2) The Municipal Manager must:

- a. Provide strategic leadership and management of ICT;
- b. Ensure alignment of the ICT strategic plan with the municipal IDP;
- c. Ensure that the Corporate Governance of ICT is placed on the municipality's strategic agenda;
- d. Ensure that the Corporate Governance of ICT Policy, charter and related policies for the institutionalisation of the Corporate Governance of ICT are developed and implemented by management;
- e. Determine the delegation of authority, personal responsibilities and accountability to the Management with regards to the Corporate Governance of ICT;
- f. Ensure the realisation of municipality-wide value through ICT service delivery and management of Municipal and ICT-related risks;
- g. Ensure that appropriate ICT capability and capacity are provided and a suitably qualified and experienced Governance Champion is designated;
- h. Ensure that appropriate ICT capacity and capability are provided and that a designated official at a Management level takes accountability for the Management of ICT in the municipality; and
- i. Ensure the monitoring and evaluation of the effectiveness of the Corporate Governance of ICT system e.g. ICT steering committee.

3) The Municipal ICT Steering Committee, Risk and Audit Committee must:

- a. Assist the Municipal Manager in carrying out his/her Corporate Governance of ICT accountabilities and responsibilities.

4) Management must ensure:

- a. ICT strategic goals are aligned with the municipality's Municipal strategic goals and support the municipal processes; and
- b. Municipal-related ICT strategic goals are cascaded throughout the municipality for implementation and are reported on.

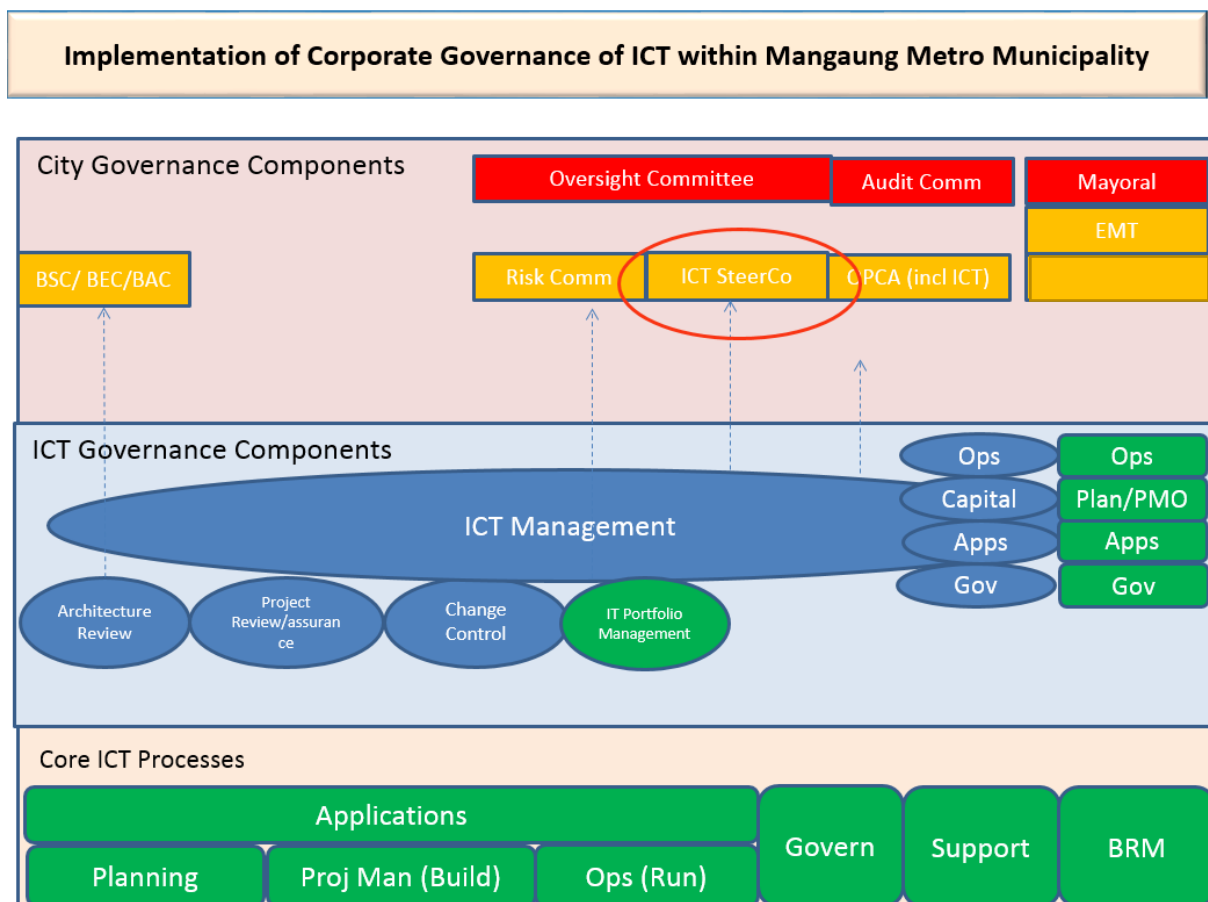
7. HOW STRATEGIC ICT GOVERNANCE FIT INTO THE MUNICIPALITY

Within the scope of the current Mangaung Metro Municipality structures ICT is represented strategically by Corporate Services at EMT (Executive Management Team) level. The IT Steering Committee will be governed by the ICT Governance Framework Policy which includes the ICT Governance Charter. Whilst there is no CIO (Chief Information Officer), the CTO (Chief Technology Officer) represents municipal ICT from both a technological and strategic perspective. The figure below represents the current Governance with proposed legislative and policy changes. Whilst it is a model that will currently be adopted into the functional structures of the municipality, it is key to note the dynamic technological and

governance environment that ICT exists in, nothing can remain rigid and the Municipality must be able to be more agile in the adoption of ICT governance. ICT's key objective is to support the Integrated Development Plan by leveraging off economies of scale, adopting transversal technologies across the spheres of government and most importantly effectively using scarce resources to deliver on the IDPs mandate. ICT must also look beyond the current delivery models of strategic support within the municipality to strategic enabler and empowerment of the citizen beyond what is deemed to be basic services in our current metropolitan city.

The inevitable migration of ICT to enable a smart metro municipality means defining processes of centralization and consolidation of all ICT resources. In a centralized environment everything is done in one location, whereas in a decentralized environment work is done across many locations. ICT has the ability to promote both efficiency and innovation which can lead to saving cost and time to provide better results. A centralized ICT eco system can efficiently reduce duplication and lead to more centralized control, and better standardization.

Figure 1. ICT Governance Structure



8. ICT GOVERNANCE MANDATE

In order to achieve strategic alignment the National Corporate Governance of ICT Governance Policy recommends taking into consideration the following:

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

ICT GOVERNANCE ROLES, RESPONSIBILITIES AND DELEGATIONS		
STRUCTURE	MEMBERS	MANDATE AND RESPONSIBILITIES
ICT STEERING COMMITTEE (Committee of Management)	Designated Members of Management and the ICT Manager. The Chairperson shall be a designated member of the Management of the Municipality duly appointed by the Municipal Manager.	<p>Has a specific delegated responsibility to ensure the planning, monitoring and evaluation, of the municipalities:</p> <ol style="list-style-type: none"> a. ICT structures; b. ICT policies; c. ICT procedures, processes, mechanisms and controls regarding all aspects of ICT use (Municipal and ICT) are clearly defined, implemented and enforced; d. ICT Performance Management; e. ICT Change Management; f. ICT Contingency Plans; g. ICT Strategy development; h. Management of ICT Security and Data Integrity; i. The establishment of the municipalities ICT Ethical culture; j. The evaluation, directing and monitoring of ICT specific projects; k. ICT Strategic alignment; l. ICT Governance compliance; m. ICT Infrastructure Management; n. ICT Security; o. ICT Application Management. p. ICT Value; q. ICT Data availability and integrity; r. ICT Vendor Management; s. The evaluation, directing and monitoring of ICT processes.

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

9. ICT STEERING COMMITTEE CHARTER (See attached Annexure A)

In addition the role of the committee is to:

- a. Determine if projects and operations strategically fit the municipality’s future direction
- b. Ensure the use of existing systems has been adequately considered whenever possible to accomplish the same outcome as any project under implementation consideration
- c. Determine if other systems or business processes will be impacted
- d. Reprioritize the project portfolio as needed
- e. Ensure resources are available to support the project and if not identify additional resource alternatives
- f. Ensure compliance with strategic goals and objectives

10. ICT PROJECT MANAGEMENT FRAMEWORK (See attached Annexure B)

A standardized process for approving and prioritizing potential projects within the Metro’s IT Project Portfolio will be executed under the direction of the IT Steering Committee with input from any ICT Working Groups as established.

10.1 ICT PROJECT GOVERNANCE PROCESS

Proposed logical steps to be followed before the acquisition, development or deployment of any ICT related system or solution that will have any impact on ICT resources and Infrastructure.

Fig 2. Project governance process



10.2 PROJECT ASSURANCE (Refer to Annexure B: Project Management Framework Policy)

Project Assurance covers the primary stakeholder interests (business, user and supplier). Their responsibility is to give assurance to the project board on the actual status of the project. Whilst it is not compulsory to appoint a project assurance team, it is recommended, the following responsibilities which are a key to the success of a project should be taken into consideration:

- a) Reviewing the Outline Business Case
- b) Defining how risk assessment will be carried out.
- c) Giving objective advice to the members of the project board
- d) Participating in impact analysis
- e) Participating in Risk analysis
- f) Monitoring deviation from project tolerances

11. INTERNAL AUDIT COMMITTEE

As a strategic support function, ICT will be subject to internal audit committee recommendations in line with internal audit policies and focus towards achievement of OPCA objectives. Oversight of the risk management function will be the responsibility of internal audit.

12. INDEPENDENT AUDIT COMMITTEE

Established in terms of Municipal Finance Management Act, section 166, this is a mandatory committee, The Audit Committee is an independent advisory body. ICT Steering Committee must be represented in this committee. Recommendations of this committee must be included in the internal risk register and strategic risk register.

13. CHANGE ADVISORY BOARD (Refer to Annexure C: Change Management Policy)

The objective of the Change Management process is to ensure that standardized methods and techniques are used for efficient and prompt handling of all changes in order to enable beneficial changes to be made with minimum disruption to services. To successfully achieve this a Change Advisory Board is appointed and all significant changes are reported to the ICT Steering Committee. The Change Management Policy will outline terms of reference for the Board. The board may serve as part of another working group however all responsibilities related to change management must be considered.

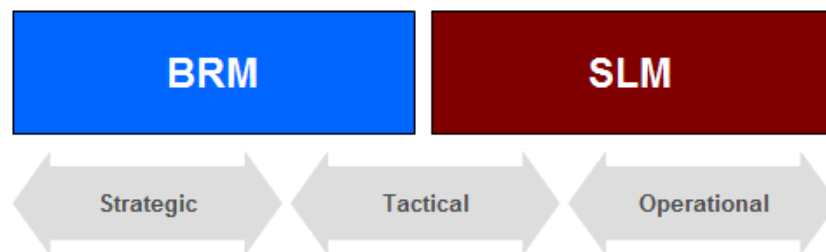
14. BUSINESS RELATIONSHIP MANAGEMENT

Business Relationship Management focus is on strategic and operational, it is the overall relationship between the ICT and the customer. Business Relationship Management (BRM) is critical in IT Service Management, whilst it is ICT's operational goal to move towards a more defined Service Management disposition, currently the ICT maturity is low. The long term goal is to have BRM aligned with senior executives to shape, stimulate and surface business demand for IT investments that will yield high business. Its long term value consolidated and stabilized IT infrastructure, deployed Service Management and Continuous Improvement disciplines, and are able to respond to the types of strategic demand the BRMs will stimulate.

It is proposed that a BRM implementation plan be considered in the medium term and a BRM Framework be considered in the next financial year 2016/17.

Service Level Management (SLM) is an offspring operational level discipline that defines, documents, agrees, monitors, measures, reports and reviews the level of IT Services provided and induces corrective measures that the service has to achieve. The measuring tool of SLM are departmental SLAs. If SLAs are breached, SLM will use internal operational forces to improve or get back on track. Whilst the governance maturity of the Municipality is still low, elements of performance may be included in operational working groups reporting to the ICT Steering Committee, it is however proposed that as part of the BRM process in the mid-term SLAs be considered a standard in service management in 2017/2018 financial years and beyond.

Fig 3. Relationship between BRM and SLM



15. IT GOVERNANCE, PROJECT, RISK AND PORTFOLIO MANAGEMENT

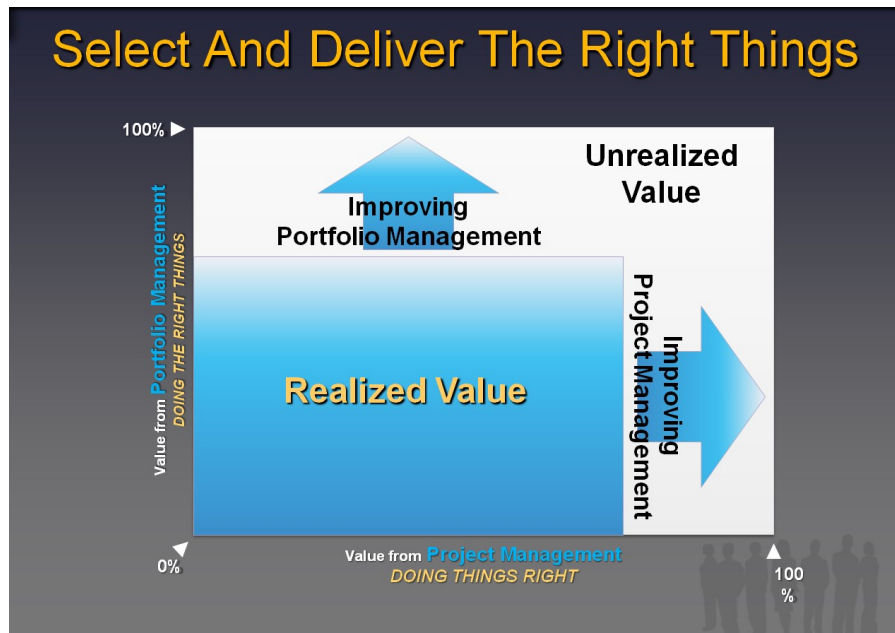
The establishment of an IT Governance, Project, Risk and Portfolio Management is critical to the functioning of ICT within the bounds of the ICT governance. The unit will cover operational and strategic functions to deliver the right solutions to the right business units and vastly improve service delivery. The function will manage aspects of:

- Project management
- Risk management
- Business Relationship Management
- Service Level Management
- Portfolio Management

Project management helps organizations to effectively realize business value, by delivering projects and programs on time and within budget. Portfolio management also helps organizations to identify business value and ensure they are investing in the optimal project portfolios. Investing in both disciplines improves service delivery by enabling ICT to be agile and responsive.

It is therefore proposed that this function be an addition to the ICT structure to better deliver services to business and enable efficient service delivery.

Fig 4. Advantages of Portfolio and Project management



16. SUPPORTING FRAMEWORKS AND POLICIES

16.1 RISK MANAGEMENT POLICY

Currently the Corporate Risk Management Policy is updated and in draft format, ICT will develop an internal IT risk register in line with the corporate risk management policy, which will be reviewed and added to this framework.

16.2 DISASTER RECOVERY AND BACKUP POLICIES AND PROCEDURES

The most important information to the municipality being financial information, this forms the basis of ICT's ability to preserve and restore this information under a disaster and other technical failures. All systems that reside in our primary Bram Fischer server room are back up periodically as per schedule and can be recovered for business continuity. It must be noted however that we have not reached the ability to backup and recover every single document residing on desktops and mobile computing devices, this will be catered for within 2 financial years.

17. CONTINUOUS IMPROVEMENT OF CORPORATE GOVERNANCE OF AND GOVERNANCE OF ICT

Upon Successful implementation of this Framework, measures must be put in place to continuously assess compliancy and maturity of ICT within the Municipality. COBIT suggests the following tasks of assessment:

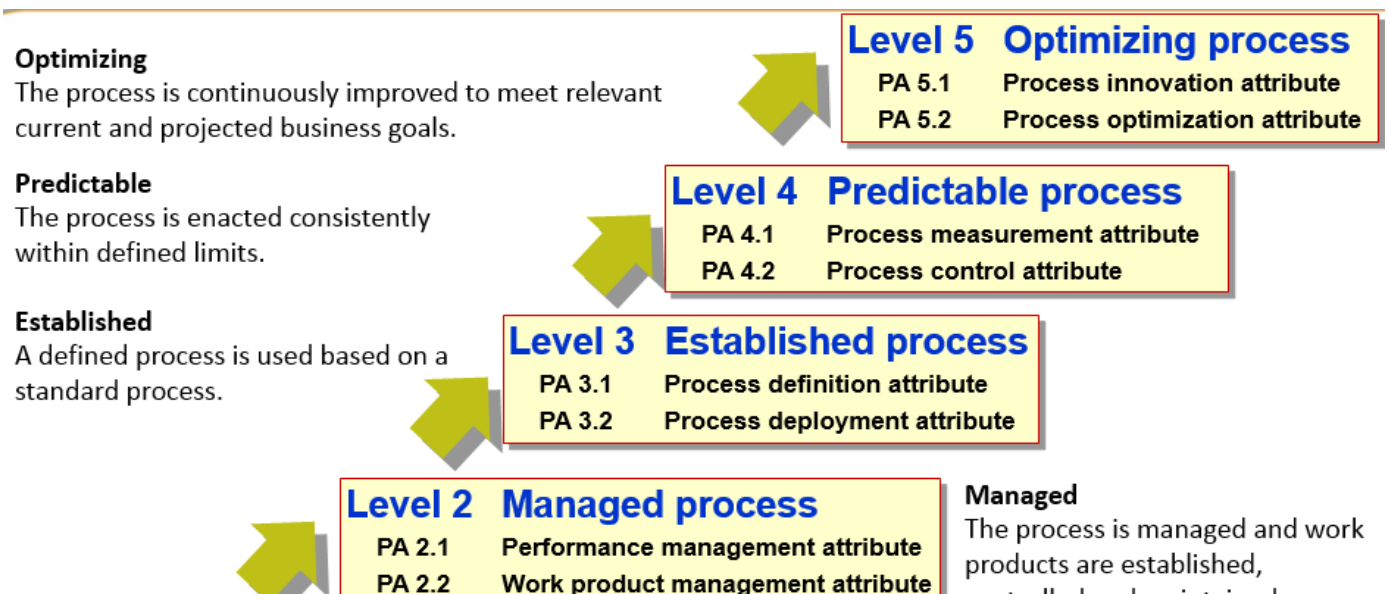
COBIT 5 is based on ISO/IEC 15504 underlining the strong alignment of this framework with the most generally accepted best practices and standards.

In COBIT 5 to achieve a given level of capability, the previous level has to be completely achieved.

THE 6 LEVELS OF THE COBIT 5 PROCESS CAPABILITY MODEL ARE:

- Level 0)** Incomplete process. The process is not placed or it cannot reach its objective. At this level the process has no objective to achieve. For this reason this level has no attribute.
- Level 1)** Performed process. The process is in place and achieves its own purpose. This level has only “Process Performance” as process attribute.
- Level 2)** Managed process. The process is implemented following a series of activities such as planning, monitoring and adjusting activities. The outcomes are established, controlled and maintained. This level has “Performance Management” and “Work Product Management” as process attributes defined process that allows the achievement of the process outcomes. This level has “Process Definition” and “Process Deployment” as process attributes.
- Level 3)** Established process. A defined process is used based on a standard process.
- Level 4)** Predictable process. This level implements processes within a defined boundary that allows the achievement of the processes outcomes. This level has “Process Management” and “Process Control” as process attributes.
- Level 5)** Optimising process. This level implements processes in the way that makes it possible to achieve relevant, current and projected business goals. This level has “Process Innovation” and “Process Optimisation” as process attributes.

Fig 5. COBIT 5 Process Capability Levels



Full assessments may be carried out annually at least 12 months after implementation of this policy. Such assessments must take into consideration the need to fully develop Business Processes for ICT as the basis for assessment.

17.1 ICT STRATEGY AND MASTER SYSTEMS PLAN

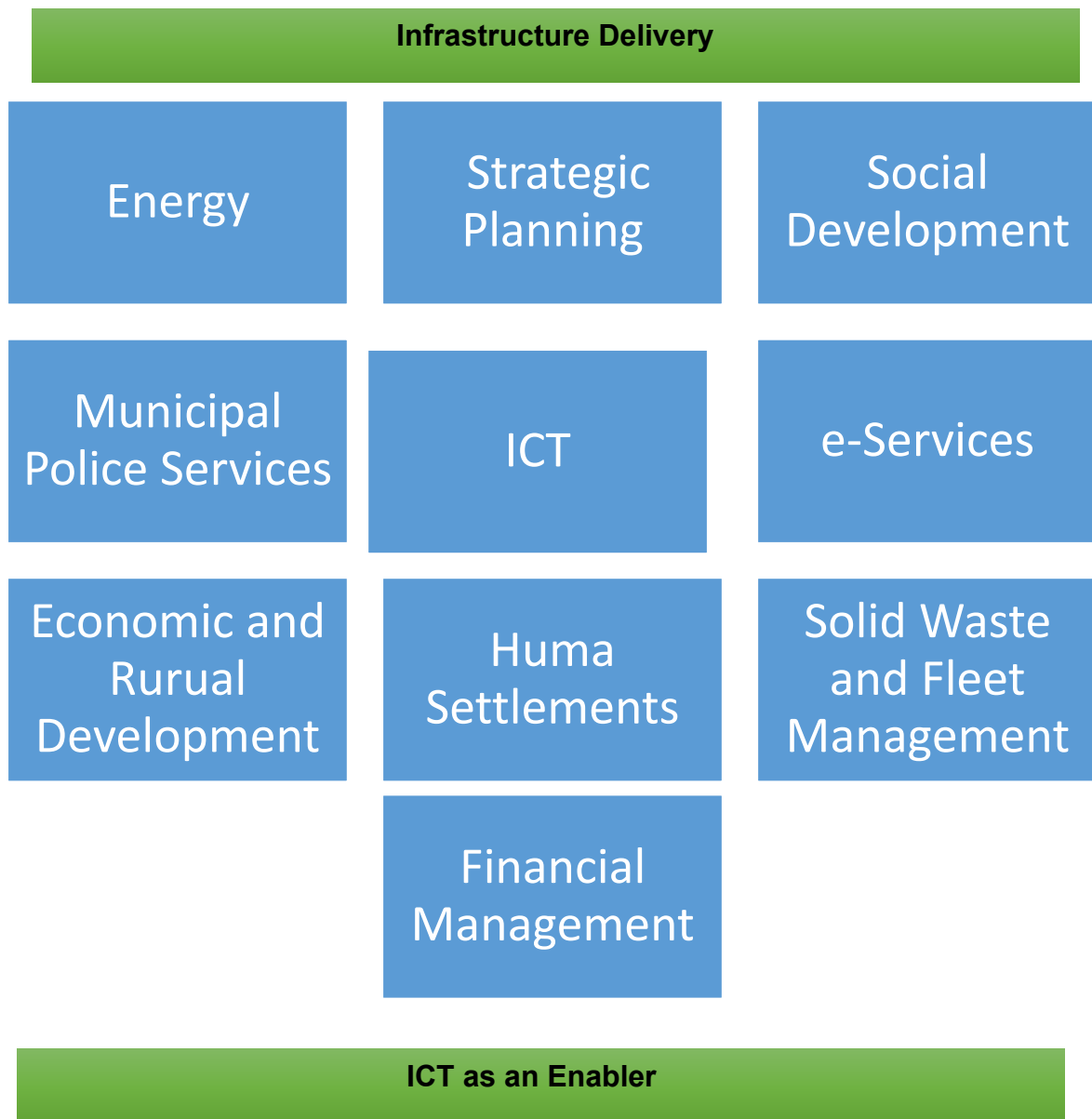
It is ICT's driving force that becomes an integral part of municipal governance and leadership. A true strategic enabler with measurable inputs that lead measurable outputs. As demonstrated in the table below ICT's role spans across all service delivery areas in the Municipality. The goal is understand every single critical process that leads to a service and have the ability make it better, faster and more efficient. In conclusion it is also critical that the ICT Strategy be re-evaluated and the Master Systems Plan be developed.

Key areas that a Master Systems Plan addresses:

- Defines how information technology is to be used across the organization in the future.
- Describes how information technology will support Mangaung Metro Municipality's mission, objectives, initiatives and ICT's alignment.
- Determines and documents the degree of change required – technology, staffing, skills and processes.
- Measures gap between current capabilities and desired future vision.
- Lays out the strategic directions that must be pursued to close the gap.
- Identifies potential solutions.
- Projects long-term funding and resource requirements

Consolidation and Integration of all ICT Systems and Solutions will be key to the success of a Master Systems Plan. Enterprise Resource Planning, Geographical Information Systems and Customer Relations Management Systems will be the basis of resource integration from a systems perspective.

Fig 6. The Role of ICT Master planning in the Metro's Infrastructure planning



END