



# **GOVERNMENT ICT STANDARDS**

IT Governance Standard

ICTA. 5.002: 2019

Second Edition

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### **REVISION OF ICT STANDARDS**

In order to keep abreast of progress in industry, ICTA Standards shall be regularly reviewed. Suggestions for improvements to published standards, addressed to the Chief Executive Officer, ICT Authority, are welcome.

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## FOREWORD

The ICT Authority has the mandate to set and enforce ICT standards and guidelines across all aspects of information and communication technology including Systems, Infrastructure, Processes, Human Resources and Technology for the public service. The overall purpose of this mandate is to ensure coherent and unified approach to acquisition, deployment, management and operation of ICTs across the public service in order to achieve secure, efficient, flexible, integrated and cost effective deployment and use of ICTs.

To achieve this mandate, the Authority established a standards committee to identify the relevant standard domains and oversee the standards development process. The committee consulted and researched broadly among subject matter experts to ensure conformity to acceptable international and national industry best practices as well as relevance to the Kenyan public service. The committee eventually adopted the Kenya Bureau of Standards (KEBS) format and procedure for standards development. In an engagement founded on a memorandum of understanding KEBS, participated in the development of these Standards and gave invaluable advice and guidance.

For example, the IT Governance Standard, which falls under the overall Government Enterprise Architecture (GEA), has therefore been prepared in accordance with KEBS standards development guidelines which are, in turn, based on the international best practices by standards development organizations including ISO.

The Authority's Directorate of Programmes and Standards has the oversight role and responsibility for management, enforcement and review of this standard. The Directorate shall carry out quarterly audits in all the Ministries, Counties, and Agencies (MCA) to determine compliance to this Standard. The Authority shall issue a certificate for compliance to agencies upon inspection and assessment of the level of compliance to the standard. For non-compliant agencies, a report detailing the extent of the deviation and the prevailing circumstances shall be tabled before the Standards Review Board who shall advise and make recommendations to remedy the shortfall.

The ICT Authority management, conscious of the central and core role that standards play in public service integration, fostering shared services and increasing value in ICT investments, shall prioritize the adoption of this standard by all Government agencies. The Authority therefore encourages agencies to adhere to this standard in order to obtain value from their ICT investments.

Dr. Katherine W. Getao, EBS Chief Executive Officer ICT Authority

# 1.0 INTRODUCTION

IT Governance is part of the wider Corporate Governance activity but with a specific focus to IT. IT Governance covers the culture, organization, policies, and practices that provide oversight and transparency of IT. For organizational investment in IT to deliver full value, IT has to be fully aligned to organizational strategies. The benefits of good IT risk management, oversight, and clear communication not only reduce the cost and damage caused by IT failures – but also engenders greater trust, teamwork, and confidence in the use of IT itself and the people trusted with IT services.

The biggest risk and concern to the government today is failing to align IT to real business needs, and a failure to deliver or be seen to be delivering, value to the business. Since IT can have such a dramatic effect on MCDA performance and competitiveness, a failure to manage IT effectively can have a very serious impact on the organization as a whole.

The current climate of cost reduction and budget restriction has resulted in new norms – there is an expectation that IT resources should always be used as efficiently as possible and that steps are taken to organize these IT resources ready for the next cycle of growth and new IT developments. A key aspect of these factors is the increasing use of third-party service providers and the need to manage these suppliers properly to avoid costly and damaging service failures. In addition, IT governance recognizes the critical role IT functions play in an organization and the need to place it at par with other core functions in terms of reporting lines.

IT governance shall assist MCAs to:

- Create deeper understanding and awareness of all IT related risks likely to have an impact on their organization;
- Know how to improve the management processes within IT to manage these risks;
- Ensure there are manageable relationships with suppliers, service providers and with the business (customers);
- Contract and managed IT suppliers with expect level of performance
- Ensure there is a transparent and understandable communication of these IT activities and management processes to satisfy interested stakeholders.
- Recruit and maintain IT Professionals who are competent and regulated

IT Governance is not a one-time exercise or something achieved by a mandate or set of rules. It requires a commitment from top management of the organization to instill a better way of dealing with the management and control of IT. IT Governance is an ongoing activity that requires a continuous improvement mentality and responsiveness to the fast-changing IT environment.

IT governance shall result in:

- a. Transparency and accountability
- Improved transparency of IT costs, IT process, IT portfolio (projects and services).

- Clarified decision-making accountabilities and definition of user and provider relationships.

- b. Return on investment
- Improved understanding of overall IT costs and their input to ROI cases.
- Combining focused cost-cutting with an ability to reason for investment.
- Stakeholders allowed seeing IT risk/returns.
- c. Opportunities and Partnerships
- Provide route to realize opportunities that might not receive attention or sponsorship.
- Positioning of IT as a business partner (and clarifying what sort of business partner IT is).

- Facilitate joint ventures with other organizations.
- Facilitate more business like relationships with key IT partners (vendors and suppliers).
- Achieve a consistent approach to taking risks.
- Enables IT participation in business strategy (which is then reflected in IT strategy) and vice versa.
- Improve responsiveness to challenges and opportunities.
- d. External Compliance
- Enables an integrated approach to meeting government legal and regulatory requirements.

# **1.1 DESCRIPTION OF STANDARD**

IT governance is defined as the processes that ensure effective and efficient use of IT in enabling an organization to achieve its goals.

# 2.0 SCOPE

IT governance consists of the leadership and organizational structures and processes that ensure the enterprise sustains and extends strategies and objectives. It spans the culture, organization, policy, and practices that provide for IT management and control across five key areas:

- Alignment Provide for strategic direction of IT and the alignment of IT and the business with respect to services and projects.
- Value delivery Confirm that the IT/Business organization is designed to drive maximum business value from IT. Oversee the delivery of value by IT to the business, and assessment of ROI.
- **Risk Management** Ascertain that processes are in place to ensure that risks have been adequately managed. This includes the assessment of the risk aspects of IT investments.
- Resource management Provide high-level direction for sourcing and use of IT resources. Oversee the aggregate funding of IT at the enterprise level. Ensure there is adequate IT capability and infrastructure to support current and expected future business requirements. Ensure competent human resource with desired ethical behaviors and norms.
- Performance Verify strategic compliance, i.e. achievement of strategic IT objectives. Review the measurement of IT performance and the contribution of IT to the business (i.e. delivery of promised business value). Ensure that IT service providers are regulated and managed so as to maintain expected level of performance in delivery of their services to government

# **APPLICATION**

This standard applies to:

- Central Government of Kenya
- County Governments
- Constitutional Commissions
- State Corporations
- Government Institutions

# **3.0 NORMATIVE REFERENCES**

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. All standards are subject to revision and, since any reference to a standard is deemed to be a reference to the latest edition of that standard, parties to agreements based on this standard are encouraged to take steps to ensure the use of the most recent editions of the standards indicated below. Information on currently valid national and international standards can be obtained from the Kenya Bureau of Standards.

- PRINCE2
- ✤ COBIT 5
- ✤ ITIL V4
- CISA Review Manual 27th edition
- Government Enterprise Architecture

Managers of projects dealing with software products or software-intensive systems may find the contents of the PMBOK®6 Guide and ISO 10006:2018 helpful, in managing their projects to a successful conclusion.

# 4.0 TERMS AND DEFINITIONS

### 4.1 Entreprise Architecture

Enterprise architecture (EA) is a conceptual blueprint that defines the structure and operation of ICTin an organization. EA involves documenting an organization's IT assets in a structured manner to facilitate understanding, management, and planning for IT investments. An EA often involves both a current state and an optimized future-state representation (e.g., a road map).

### 4.2 Enterprise IT Governance

EGIT is about the stewardship of IT resources on behalf of all stakeholders (internal and external) who expect their interests to be met. Management, processes, operational governance structure of the enterprise ICT.

### 4.3 Service desk

A Service Desk is a primary IT function within the discipline of IT service management. It is intended to provide a Single Point of Contact to meet the communication needs of both users and IT staff.

# 4.4 ABBREVIATIONS

4.1 <b>EA</b>	Enterprise Architecture
6.2 WAN	Wide Area Network
6.3 <b>LAN</b>	Local Area Network
6.4 <b>SLA</b>	Service Level Agreement
6.5 MCDA	Ministry, County, and agency
6.6 ICTA	ICT Authority
6.7 <b>ROI</b>	Return on Investment
6.8 NEMA	National Environment Management Authority
6.9 <b>CIO</b>	Chief Information Officer
6.10 <b>QOS</b>	Quality of Service
6.11 COBIT	Control Objectives for IT
6.12 <b>PMBOK</b>	Project Management Book
6.13 <b>SWOT</b>	Strength Weakness Opportunity and Threat
6.14 CMMI	Capability Maturity Model Integration
6.15 <b>COSO</b>	Committee of Sponsoring Organizations
6.16 <b>PPP</b>	Public-Private Partnership
6.17 <b>GEA</b>	Government Enterprise Architecture
6.18 CISO	Chief Information Security Officer
6.19 <b>IT</b>	Information Technology

# **5.0 ENTERPRISE ARCHITECTURE**

a) MCDAs shall develop an Enterprise architecture as a conceptual blueprint that defines the structure and operation of ICT in an organization

b) MCDAs shall be guided by the approved Government Enterprise Architecture when developing their enterprise Architecture based on appropriate business, application, information, and infrastructure, security, performance, and project governance architecture to support the entire ecosystem

#### 5.1. Business Architecture

#### 5.1.1 Business plans and objectives

- a) MCDAs shall adopt principles of their specific business architecture in line with the Government Enterprise Architecture.
- b) MCDAs shall have clearly defined ICT plans, objectives and metrics that support business goals
- c) MCDAs shall have mechanisms for monitoring the performance of ICT investments.

#### 5.1.2 Business Process

- a) MCDAs shall have business processes designed and applied to focus on service to Citizens provided as a single interface through multiple access platforms
- b) MCDAs will seek to optimize business processes and then use performance standards to define automation requirements

#### **5.2 Application Architecture**

a. MCDAs shall ensure the design; implementation and delivery of the application architecture shall adhere to the application architecture principles as guided by GEA.

#### 5.3 Information/data Architecture

- a) MCDAs shall adopt appropriate analytical services for discovery interpretation of meaningful data patterns
- b) MCDAs shall implement master data management to define and manage their critical data with integration and a single point of reference.

#### 5.4 Infrastructure Architecture

- a. MCDAs shall ensure the design, implementation, and delivery of the infrastructure architecture shall adhere to the infrastructure architecture principles as guided by GEA. The principles are:-
- i) Ensuring technology diversity is contained
- ii) Technology components are able to interoperate and exchange information
- b. The MCDAs shall implement LAN/WAN, internet, computing, enterprise networks, storage, and data center to support business operations in line with the GEA and Infrastructure Standard

#### 5.5 Security and Compliance

- a) MCDAs shall ensure the design, implementation, and delivery of information security shall adhere to the information security architecture principles as guided in the GEA
- b) MCDAs shall establish information security governance structure as guided by appendix 9 b

#### 5.6 Project Management and Governance Architecture

a) MCDAs shall ensure the design, implementation, and delivery of ICT projects shall adhere to the project management and governance architecture principles as defined in the GEA

#### 5.7 Performance Architecture

#### 5.7.1 Capability Maturity Model Integration (CMMI)

a) MCDAs shall improve business goals or develop process guidance models that provide a clear definition to promote improved performance.

#### 5.7.2 Balanced Scorecard

b) MCDAs shall have an ICT Balanced Scorecard to measure performance consisting of four perspectives: IT Value, User, Operational Excellence, and Future Orientation

# 6.0 ICT GOVERNANCE

#### 6.1 Independent ICT Function

a) MCDAs shall have a defined structure for the ICT function in the organization reporting to the Accounting Officer or the Chief Executive Officer (CEO).

#### **6.2 ICT Governance Committees**

MCDAs shall establish two ICT governance committees;

- a) An IT Strategy committee to provide strategic advice on ICT initiatives and investments to the board as defined in Appendix 9.
- b) An IT Steering Committee to define the IT mission and goals aligned with the strategic direction of the organization; authorize and direct the development of the services and operation plans as defined in Appendix 9

#### 6.3 ICT Organization

- a) MCDAs shall establish an ICT organization structure that adequately responds to the business goals, mandate, and vision of the organization.
- b) The head of the ICT function shall report to the accounting officer and shall hold either the following titles
- i. Chief Information Officer (CIO)
- ii. Chief Information Technology Officer (CITO)
- iii. Chief Technology Officer (CTO)
- iv. Director ICT (DICT) or Head of IT(HIT)

#### 6.4 IT strategy

- a) IT shall be a strategic objective in the overall strategic plan of the MCDAs.
- b) The MCDAs shall prepare and maintain an ICT strategic plan with a clear IT vision and mission that defines how the MCDAs plan to improve internal services and services to businesses and citizens.
- c) The strategy shall be developed with input from internal and external stakeholders.
- d) The strategy shall be informed by a situational analysis of the internal and external business environment
- e) The strategy shall define specific tasks and responsibilities for achieving value delivery from ICT investment
- f) The strategy shall be implemented to achieve ICT optimized investment

#### 6.5 IT Project governance

- a) MCDAs shall establish a Project Management Office.
- b) Projects shall be based on clear and compelling concept and business case.
- c) A project charter shall be prepared for all projects.
- d) A project implementation committee shall be created to report to the IT steering committee and shall be led by a project manager.
- e) MCDAs shall adopt and approve a project's implementation methodology based on globally accepted approaches such as PMBOK or Prince 2.
- f) MCDAs shall adopt software development methodologies that include waterfall, agile, SDLC and SCRUM. as guided by the Systems and Applications standard
- g) MCDAs shall carry out their project management as guided in Appendix 11-19.

# 7.0 IT SERVICE MANAGEMENT

### 7.1 IT Service Strategy

a) MCDAs shall develop an IT service strategy to create new and improved services.

#### 7.1. 2 IT Service management

- a) MCDAs shall have a service charter for IT enabled services.
- b) The charter shall define the desired outcomes of the services.
- c) The charter shall define the assets required to offer the services.
- d) MCDAs shall annually evaluate usage of the IT enabled services and customer satisfaction.

#### 7.2 Service level management

- a) MCDAs shall develop and sign service level agreement (SLA) with service providers (internet, systems support, maintenance, etc.) to ensure the availability and reliability of IT enabled services.
- b) The SLA shall define performance metrics for the service providers.
- c) MCDAs shall monitor achievement of service levels and compare them with agreed service targets in the SLA
- d) SLAs shall have penalties for failure to meet agreed service levels

### 7.2.1 Service desk

- a) MCDAs shall establish an IT service desk management system to handle all requests from end-users
- b) The service desk shall have 1stlevel, 2nd level, and 3rd level support
- c) The service desk shall develop and document standard operating procedures for IT services
- d) MCDAs shall have a system to track customer complaints, compliments, and resolution

### 7.2.2 IT Operations Control

- a) MCDAs shall designate staff to manage the day to day operational activities in IT e.g. back up, routine maintenance, print and output management, installations to ensure they are done in a reliable and timely manner
- b) MCDAs should manage fraud using the COSO framework
- c) MCDAs should adopt IT service and governance framework such as COBIT for internal controls and management of IT

#### 7.2.3 Business Relationship Management

- a) MCDA shall conduct and document customer satisfaction surveys on IT enabled services annually for internal and external customers
- b) MCDA shall conduct training and awareness programs annually to sensitize internal and external customers on IT enabled services

### 7.3 IT Service Design

#### 7.3.1 Availability Management

- a) MCDAs shall develop and implement quarterly preventive maintenance plans for IT equipment
- b) MCDAs shall develop and maintain manuals on how to operate and maintain systems and equipment
- c) MCDAs shall develop a disaster recovery plan for all services

#### 7.3.2 IT Infrastructure Capacity Management

- a) MCDAs shall annually evaluate the capacity of IT infrastructure to understand the current environment and plan for future needs. The ICT Authority shall validate such evaluation
- b) MCDAs shall establish a framework for IT infrastructure improvement
- c) MCDAs shall set realistic targets for IT infrastructure improvement, prioritize gaps and propose achievable solutions

#### 7.3.3 Information Security Management

a) MCDAs shall establish an information security management framework as guided by the information security standard

b) The Information Security function shall be separate from the IT department. The head of the Information Security function may report to the CIO or have a dotted-line (indirect reporting relationship to the CIO. The implementation of this requirement shall be guided by appendix 12 depending on the risk levels of the organization.

#### 7.3. 4 Supplier management

a) All ICT suppliers and contractors Government shall be registered by the ICT Authority in accordance with the requirements stipulated in Appendix 33

#### 7.4 IT Service transition

#### 7.4.1 IT Service change management

a) MCDAs shall develop a policy to ensure that any changes to IT enabled services are conducted with minimal disruption to services

#### 7.4.2 Knowledge management

a) MCDAs shall implement an ICT knowledge base which shall contain a database of common IT service problems and how to solve them

#### 7.5 IT Continuous service improvement

#### 7.5.1 Service and process performance review

- a) MCDAs shall conduct annual performance reviews of IT processes and IT enabled services. The review shall include suggestions for improvement. MCDA s shall seek guidance from ICT Authority
- b) MCDAs shall conduct benchmarking with the aim of identifying shortcoming and developing plans for improvement
- c) MCDAs shall in collaboration with ICT Authority, conduct regular system audits for all systems to ensure compliance and conformity to the ICT standards.

# 8.0 LEGAL AND REGULATORY

#### 8.1 Kenya laws on ICT

- a) MCDAs shall identify the specific laws and regulations affecting IT in their organizations and respond accordingly. The Kenya laws on ICT include:
- i. Computer Misuse and Cybercrime Act 2018 Information Security, Systems and Applications
- ii. Access to Information Act 2016- E-records, Systems, and Applications
- iii. Kenya Information and Communications Act 2013- E- records and Data Management, Systems and applications
- iv. Evidence Act 2014- E-records and Data Management

- v. Legal Notice 183, 2013( The Information and Communication Technology Authority Order 2013)- IT Governance, Information Security, Systems and Applications, E-records and Data Management
- vi. Public Archives and Documentation Service Act 2012- E-records and Data Management
- vii. Industrial Property Act 2001 and Copyright Act- End User Devices, Systems and applications, cloud computing, Information Security
- viii. Public Officers Ethics Act 2003- End-user devices, IT Governance, Systems, and Applications
- ix. NEMA guidelines on E-waste- End-User Devices
- x. Private-Public Partnership Act 2013 IT Governance

#### 8.2 Roles and Responsibilities

- a) IT functions in MCDAs shall seek legal advice as necessary internally or externally to better manage contracts
- b) MCDAs shall seek technical advice or service from a competent third party as maybe required from the ICT Authority.

#### 9.0 ICT RISK MANAGEMENT

#### 9.1 General

a) ICT risk management will be undertaken as guided in Appendix 21, 22 and 23

#### 9.2 ICT Risk Framework

- a) MCDAs shall develop a risk strategy
- b) MCDAs shall set acceptable levels of risk.
- c) MCDAs shall undertake a regular risk assessment for identification, recording, analysis, and mitigation.
- d) Responsibility for risk mitigation shall be assigned to the relevant function for managing key risks depending on the type of risk and its possible impact, the MCDAs shall adopt any of the following mitigation measures: Reduce, Transfer, Accept and Mitigate risks.

# 10.0 SOURCING, RESOURCING, AND FINANCING OF IT FUNCTIONS

### 10.1 General

a) To support IT Governance, MCDAs shall establish structures to manage IT resources as per Appendix 11.

#### 10.2 Sourcing of ICT equipment, products, and services

a) MCDAs shall source ICT resources while adhering to the GoK ICT standards. as per the guidelines in Appendix 10

#### 10.3 Resourcing

- a) MCDAs should develop a guideline for the engagement of consultants, contractors and external service providers. The guidelines should document the decision to acquire external support. The guidelines should provide a framework for the accounting of the consultancy, contracting and external service providers.
- b) The MCDA should develop a risk assessment and management framework for the consultants, contractors and external suppliers.
- c) MCDAs while resourcing the ICT functions should ensure there is clear segregation of roles in the assigned functions as per the GoK ICT Human Capacity and Workforce Development standard.
- d) MCDAs must use a consistent and evidence-based ICT resources strategic planning process.
- e) MCDAs can use the public-private partnership to resource their ICT functions while guided by the GoK PPP Legal and regulatory framework that includes Private Public Partnership Policy, Private Public Partnership Act and Private Public Partnership regulations.
- f) All ICT professionals shall be registered as guided in Appendix 34 and the ICT human capacity standard

#### 10. 4 Financing

- a) MCDAs shall allocate funds for ICT activities through the annual budget. The ratio of ICT to the institutional budget shall be at least 5%
- b) The budget shall be aligned to the ICT strategy
- c) The budget shall be allocated for development and recurrent purposes
- d) The development budget shall cover ICT Infrastructure enhancement and improvement
- e) The recurrent budget shall cover ICT infrastructure maintenance and servicing
- f) Donor funded government ICT initiatives shall be subject to the requirements of government ICT standards.

#### 10.5 Asset management

- a) MCDAs shall maintain and update an inventory of all ICT assets. The inventory system shall be automated and shall show relationships between these assets
- b) MCDA should ensure that their ICT equipment are physically standard tagged for identification and tracking.

#### 10.6 Capacity building

- a) The IT establishment shall cover all the relevant IT technical cadres including Basic support, Network, systems and database administration, IT service management, IT project management, Web administrators, information security officers, other contextual IT roles
- b) MCDAs shall develop and implement ICT training policy in line with ICT human resource development standard
- c) The policy shall define required ICT qualifications for different cadres of staff as per the ICT human capacity standard IT education, training, and development needs shall be fully identified and addressed for all staff regularly
- d) IT staff shall be trained on professional courses, ethics, and code of conduct outlined in the ICT Human Capacity Development Standard

#### 10. 7 Tools

 a) ICT personnel shall be issued the relevant software and hardware tools to manage IT resources (e.g. for user support, hardware maintenance, IT service and project management, application development)

#### **10.8 Innovation**

- a) MCDAs shall establish a resource centre for IT research and innovation
- b) The resource centre shall manage knowledge through databases and online resources to spur innovation

#### Appendix1: Compliance Checklist for Enterprise Architecture

Enterprise Architecture		YES/NO	Comment
	MCDA has developed an Enterprise architecture as a conceptual blueprint that defines the structure and operation of ICT in an organization		
	MCDA has been guided by the approved Government Enterprise Architecture when developing their enterprise Architecture based on appropriate business, application, information, and infrastructure, security, performance and project governance architecture to support the entire ecosystem		
	Business Architecture		
	Business plans and objectives		
	MCDA has adapted principles of their specific business architecture in line with the Government Enterprise Architecture.		
	MCDA has clearly defined its ICT plans, objectives and metrics that support business goals		
	MCDA has mechanisms for monitoring the performance of ICT investments.		
	Business Process		
	MCDA has business processes designed and applied to focus on service to Citizens provided as a single interface through multiple access platforms		
	MCDA will seek to optimize business processes and then use performance standards to define automation requirements		
	Application Architecture		

Enterprise Architecture		YES/NO	Comment
	MCDA has ensured the design, implementation, and delivery of the application architecture has adhered to the application architecture principles as guided by GEA.		
	Information Architecture		
	MCDA has adopted an appropriate analytical services for discovery, interpretation of meaningful data patterns		
	MCDA has implemented a master data management to define and manage their critical data with integration and a single point of reference.		
	Infrastructure Architecture		
	MCDA has ensured the design, implementation, and delivery of the infrastructure architecture has adhered to the infrastructure architecture principles as guided by GEA.		
	MCDA has implemented LAN/WAN, internet, computing, enterprise networks, storage, and data center to support business operations in line with the GEA and Infrastructure Standard		
	Security and Compliance		
	MCDA has ensured the design, implementation, and delivery of information security shall adhere to the information security architecture principles as guided in the GEA		
	MCDA has established an information security governance structure as guided by appendix 9 b		
	Project Management and Governance Architecture		
	MCDA has ensured the design, implementation, and delivery of ICT projects has adhered to the project management and governance architecture principles as defined in the GEA		
	Performance Architecture		
	Capability Maturity Model Integration (CMMI)		
	MCDAs have improved business goals or develop process guidance models that provide a clear definition to promote improved performance.		
	Balanced Scorecard		

Enterprise Architecture		YES/NO	Comment
	MCDA has an ICT Balanced Scorecard to measure performance consisting of four perspectives: IT Value, User, Operational Excellence, and Future Orientation		

# Appendix 2: Compliance Checklist for ICT Governance

Checklist for ICT Governance		YES/NO	Comment
	Independent ICT Function		
	MCDA has a defined structure for the ICT function in the organization reporting to the Accounting Officer or the Chief Executive Officer (CEO).		
	ICT Governance Committees		
	MCDA has established two ICT governance committees;		
	i) An IT Strategy committee to provide strategic advice on ICT initiatives and investments to the board as defined in Appendix 9.		
	ii) An IT Steering Committee to define the IT mission and goals aligned with the strategic direction of the organization; authorize and direct the development of the services and operation plans as defined in Appendix 9		
	ICT Organization		
	MCDA has established an ICT organization structure that adequately responds to the business goals, mandate, and vision of the organization.		
	The head of the ICT function reports to the accounting officer and shall hold either thefollowing titles		
	i. Chief Information Officer (CIO)		
	ii. Chief Information Technology Officer (CITO)		
	iii. Chief Technology Officer (CTO)		
	iv. Director ICT (DICT) or Head of IT(HIT)		
	IT strategy		
	IT is a strategic objective in the overall strategic plan of the MCDA.		

MCDA has prepared and maintained an ICT strategic plan with a clear IT vision and	
mission that defines how the MCDA plans	
to improve internal services and services to	
businesses and citizens.	
The strategy has been developed with input	
from internal and external stakeholders.	
The strategy has been informed by a	
situational analysis of the internal and	
external business environment	
The strategy has defined specific tasks and	
responsibilities for achieving value delivery	
from ICT investment	
The strategy has been implemented to achieve	
ICT optimized investment	
IT Project governance	
MCDA has established a Project Management	
Office.	
Projects are based on clear and compelling	
concept and business case.	
A project charter has been prepared for all	
projects.	
A project implementation committee has been	
created to report to the IT st <mark>eeri</mark> ng committee	
and is led by a project man <mark>ager.</mark>	
MCDAs has adopted and approved a project	
implementation method <mark>ology b</mark> ased on a	
globally accepted approach such as PMBOK or	
Prince 2.	
MCDA has adopted a software development	
methodologies that include waterfall, agile,	
SDLC and SCRUM. as guided by the Systems	
and Applications standard	
MCDA has carried out their project	
management as guided in Appendix 11-19.	

# Appendix 3: Compliance Checklist for IT Legal and regulatory

Legal and Regulatory	Legal and Regulatory	YES/NO	Comment
	Kenya laws on ICT		
	MCDAs has identified the specific laws and regulations affecting IT in their organizations and respond accordingly. The Kenya laws on ICT include:		
	Computer Misuse and Cybercrime Act 2018 -Information Security, Systems and Applications		
	Access to Information Act 2016- E-records, Systems, and Applications		
	Kenya Information and Communications Act 2013- E- Records and Data Management, Systems and applications		
	Evidence Act 2014- E-records and Data Management		

Legal and Regulatory	Legal and Regulatory	YES/NO	Comment
	Legal Notice 183, 2013 (The Information and Communication Technology Authority Order 2013)- IT Governance, Information Security, Systems and Applications, E-records and Data Management		
	Public Archives and Documentation Service Act 2012- E-records and Data Management		
	Industrial Property Act 2001 and Copyright Act- End User Devices, Systems and applications, cloud computing, Information Security		
	Public Officers Ethics Act 2003- End-user devices, IT Governance, Systems, and Applications		
	NEMA guidelines on E-waste- End-User Devices		
	Private Public Partnership Act 2013 – IT Governance		
	Roles and responsibilities		
	IT functions in MCDA has sought legal advice as necessary internally or externally to better manage contracts		

Legal and Regulatory	Legal and Regulatory	YES/NO	Comment
	MCDA has sought technical advice or service from a competent third party as maybe required from the ICT Authority.		

### Appendix 4: Compliance Checklist for IT Service Management

Service Management	Service Management	YES/NO	Comment
	IT Service Strategy		
	MCDA has developed an IT service strategy to create new and improved services.		
	IT Service management		
	MCDA has a service charter for IT enabled services.		
	The charter defines the desired outcomes of the services.		
	The charter defines the assets required to offer the services.		
	MCDA, annually evaluates usage of the IT enabled services and customer satisfaction.		
	Service level management		
	MCDA has developed and signed service level agreement(s) (SLA) with service providers (internet, systems support, maintenance, etc.) to ensure the availability and reliability of IT enabled services.		

Service Management	Service Management	YES/N0	Comment
	The SLA shall define performance metrics for the service providers.		
	MCDA monitors achievement of service levels and compares them with agreed service targets in the SLA		
	SLAs has penalties for failure to meet agreed service levels		
	Service desk		
	MCDA has established an IT service desk management system to handle all requests from end-users		
	The service desk has 1st level, 2nd level, and 3rd level support		
	The service desk has developed and documented standard operatingprocedures for IT services		
	MCDA has a system to track customer complaints, compliments, and resolution		
	IT Operations Control		
	MCDA has designated staff to manage the day to day operational activities in IT e.g. back up, routine maintenance, print and output management, installations to ensure they are done in a reliable and timely manner		

Service Management	Service Management	YES/NO	Comment
	MCDA has managed fraud using the COSO framework		
	MCDA has adopted IT service and governance framework such as COBIT for internal controls and management of IT		
	Business Relationship Management		
	MCDA has conducted and document customer satisfaction surveys on IT enabled services annually for internal and external customers		
	MCDA conducts training and awareness programs annually to sensitize internal and external customers on IT enabled services		
	IT Service Design		
	Availability Management		
	MCDA has developed and implemented quarterly preventive maintenance plans for IT equipment		
	MCDA has developed and maintained manuals on how to operate and maintain systems and equipment		
	MCDAs has developed a disaster recovery plan for all services		
	IT Infrastructure Capacity Management		

Service Management	Service Management	YES/NO	Comment
	MCDA annually evaluates the capacity of IT infrastructure to understand the current environment and plan for future needs. The ICT Authority has validated such evaluation		
	MCDA has established a framework for IT infrastructure improvement		
	MCDA has set realistic targets for IT infrastructure improvement, prioritize gaps and propose achievable solutions		
	Information Security		
	Management		
	MCDA has established an information security management framework as guided by the information security standard		
	The Information Security function has a separate from the IT department. The head of the Information Security function may report to the CIO or have a dotted-line (indirect reporting relationship to the CIO. The implementation of this requirement shall be guided by appendix 12 depending on the risk levels of the organization.		

Service Management	Service Management	YES/NO	Comment
	Supplier management		
	All ICT suppliers and contractors Government have been registered by ICT Authority in accordance with the requirements stipulated in Appendix 33		
	IT Service transition		
	IT Service change management		
	MCDA has developed a policy to ensure that any changes to IT enabled services are conducted with minimal disruption to services		
	Knowledge management		
	MCDA has implemented an ICT knowledge base which contains a database of common IT service problems and how to solve them		
	IT Continuous service improvement		
	Service and process performance review		
	MCDA conducts annual performance reviews of IT processes and IT enabled services. The review includes suggestions for improvement.		
	MCDA has sought from the ICT Authority		

Service Management	Service Management	YES/NO	Comment
	MCDA has conducted benchmarking with the aim of identifying shortcoming and developing plans for improvement		
	MCDA has in collaboration with the ICT Authority, conducted regular system audits for all systems to ensure compliance and conformity to the ICT standards.		

### Appendix 5: Compliance Checklist for ICT and Risk Management

ICT Risk management				
S/No			YES/NO	Comment
	General	MCDA has undertaken ICT risk management as guided in Appendix 20, 21 and 22		
	ICT Risk framework	MCDA has developed a risk strategy		
		MCDA has set acceptable levels of risk.		
		MCDA has undertaken a regular risk assessment for identification, recording, analysis and mitigation.		

ICT Risk management		
	Responsibility for risk mitigation has been assigned to the relevant function for managing key risks depending on the type of risk and its possible impact, MCDA has adopted any of the following mitigation measures: Reduce, Transfer, Accept and Mitigate risks.	

#### Appendix 6: IT Project Management

#### 1.1 Project Governance

a) MCDAs shall ensure that governance of all ICT projects comply with the governance structures as per Appendix 7 and Appendix 30

#### **1 Project initiation**

- a) The project shall have an objective and documented business case/ project proposal
- b) The proposal shall define the expected benefits/outputs and outcomes
- c) The project shall have appropriate approval

#### 1.2 Project planning

- a) The project shall have a project management plan with activity schedules
- b) The project shall have risk management and communication plan
- c) The project shall have an implementation, testing and training strategy
- d) The Project shall have a stakeholder management plan

#### 1.3 Analysis and design

- a) The project shall have user requirements
- b) The project shall have user systems and technical specifications
- c) The project shall have a system acceptance test plan

#### 1.4 Project Building and testing

- a) There shall be a development and test environment
- b) There shall be operational and training procedures
- c) There shall be detailed test plans

#### **1.5 Project Implementation**

- a) There shall be a system installation and migration plan
- b) There shall be a data conversion plan
- c) There shall be a training and contingency plan

#### **1.6 Project Completion**

- a) There shall be a post-implementation review report
- b) There shall be a documented system support group
- c) There shall be project closure sign off

#### Appendix 7: Performance management

#### 1.1 IT service management

- a) Overall financial performance (costs v. budgets)
- b) Performance with respect to reliability and availability of critical services
- c) Complaints (QOS) and customer perception
- d) Number of significant reactive fixes to errors
- e) SLA performance by third parties
- f) Relationships with suppliers (quality & value)
- g) Capability e.g. process maturity
- h) Internal and external benchmarks
- i) Business continuity status

#### 1.2 Project management

a) Major project delivery performance (objectives, time and budget)b) ROI for IT investments (business benefit)

#### 1.3 Risk management

- a) Status of critical risks
- b) Audit weaknesses
- c) Human Resource measures for people involved in IT activities

### Appendix 8: Risk management

Subject	Requirement
Define a framework	<ul> <li>MCDAs has ensured the following staff are trained in risk management in their specific areas :[e.g CobiT, ISO17799, ITIL, ISO9000 PMBOK and Prince2]</li> <li>IT Auditors</li> <li>IT Project Managers</li> <li>IT Risk Managers</li> <li>Business Analysts</li> <li>Infrastructure Management</li> <li>Procurement/Contract Management</li> <li>IS Strategy – alignment with the business</li> <li>Quality Management</li> <li>Business Relationship Management</li> <li>Programme Managers</li> </ul>
	MCDAs shall conduct benchmarking to compare how risk management is being addressed within the organization in relation to best practice, industry peer groups and other organizations.

Subject	Requirement
Identify risks	<ul> <li>MCDA has ensured that new risks are identified in a timely manner?</li> <li>The following risks are identified</li> <li>Business-specific risk (e.g. Operational risk of mandate not being delivered)</li> <li>Generic common IT risk (e.g. IT availability risk)</li> <li>Specific IT risk (e.g. Denial of service attack on Internet customer request system)</li> </ul>
Identify probable risk owners	Auditors provide initial momentum by highlighting to senior management inadequate risk management practices of specific risks that are not being adequately addressed?
	Responsibility is allocated at a senior level for managing key risks?
	Every risk has an owner?
	MCDAs has adopted a mechanism for reporting issues – ultimately to the individual who has to retain overall responsibility?
Evaluate the risks	MCDAs has set acceptable levels of risk MCDA has developed a risk register. The risk register has a prioritized list of risks which must be subsequently addressed
Identify suitable response to risk	MCDA has implemented suitable response to risks

### Appendix 9: IT GOVERNING COMMITTEES

### a) Committees

Level	IT Strategy Committee	IT Steering Committee
Responsibility	<ul> <li>Provides insight and advice to the board on topics such as:</li> <li>The relevance of the development in IT from a business perspective</li> <li>The alignment of IT with the business direction</li> <li>The achievement of strategic IT objectives</li> <li>The availability of suitable IT resources, skills and infrastructure to meet the strategic objectives</li> <li>Optimization of IT costs, including the role of and value delivery of external IT sourcing</li> <li>Risk, return and competitive aspects of IT investments</li> <li>The contribution of IT to the business.</li> <li>Exposure to IT Risks, including compliance risks</li> <li>Direction to management relative to IT strategy</li> <li>Drivers and catalysts for the boards IT</li> </ul>	<ul> <li>Decides the overall level of IT spending and how costs will be allocated</li> <li>Aligns and approves the enterprise's IT architecture</li> <li>Approves project plans and budgets, setting priorities and milestones</li> <li>Acquires and assigns appropriate resources</li> <li>Ensures that projects continuously meet business requirements including a reevaluation of the business case</li> <li>Monitors projects plan for delivery of expected value and desired outcomes, on time and within budget</li> <li>Monitors resource and priority conflict between enterprise divisions and the IT functions as well as between projects.</li> <li>Makes recommendations and requests for changes to strategic plans (Priorities, funding, technology approaches and resources)</li> <li>Communicates strategic goals to projects teams</li> <li>Is a major contributor to management's IT governance responsibilities and practices</li> </ul>
Authority	-Advises the board and management on IT strategy -Is delegated by the board to provide input to the strategy and prepare its approval -Focuses on the current and future strategic IT issues	<ul> <li>Assists the executive in the delivery of the IT strategy</li> <li>Oversees the day to day management of the IT service delivery and IT projects</li> <li>Focuses on implementation</li> </ul>

Level	IT Strategy Committee	IT Steering Committee
Membership	Board members and specialists non board members	-Sponsoring executive -Business executive -Chief information officer -Key advisors as required (IT, audit, legal, finance)

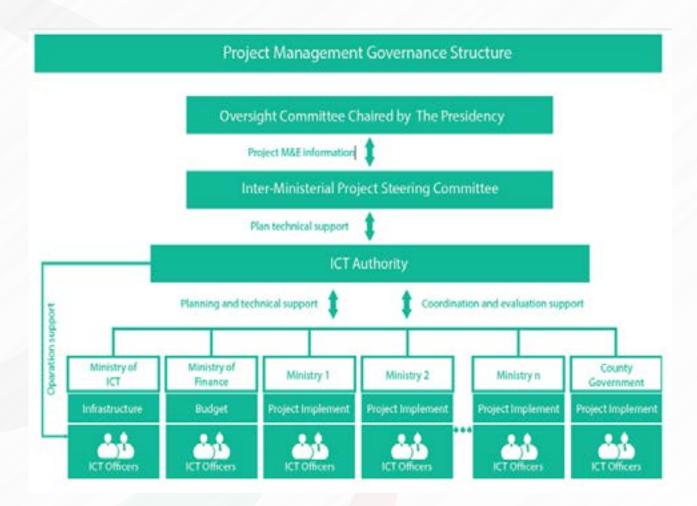
### a) Sub-Committees

Committee	Responsibilities	Membership
Information Security Sub- Committee	<ul> <li>Facilitates achieving consensus on priorities and trade-offs.</li> <li>Serves as an effective communications channel and provides an ongoing basis for ensuring the alignment of the security program with business objectives.</li> <li>The committee will deliberate on the suitability of recommended controls and good practices in the context of the organization, including the secure configuration of operating systems (OSs) and databases.</li> </ul>	<ul> <li>C-level executive management and senior managers from IT,</li> <li>Application owners,</li> <li>Business process owners,</li> <li>Operations,</li> <li>HR, audit and</li> <li>Legal</li> </ul>
Project steering committee	<ul> <li>Reviews project progress regularly (e.g., semimonthly or monthly) and Holds emergency meetings when required.</li> <li>Serves as coordinator and advisor. Members of the committee should be available to answer questions and make user-related decisions about system and program design.</li> <li>Takes corrective action if necessary due to project progress and issues escalated to the committee.</li> </ul>	<ul> <li>A senior representative from each business area</li> <li>The project manager</li> <li>The project sponsor who assumes the overall ownership and accountability of the project and chairs the steering committee</li> </ul>

# Appendix 10: Guidelines for Sourcing

- a) MCDAs should evaluate its ICT function and determine the most appropriate method of delivering the ICT function based on the following;
- 1. Is this a core function of the organization
- 2. Does this function have specific knowledge, processes, and staff critical to meeting its goals and objectives and that cannot be replicated externally or in another location?
- 3. Can this function be performed by another party or in another location for the same or lower price, with the same or higher quality and without increasing risk?
- 4. Does the organization have experiences managing third parties or using remote/offshore locations to execute IS or business functions?
- 5. Are there any contractual or regulatory restrictions preventing offshore locations or use of foreign materials.
- b) On completion of the sourcing strategy, the IT steering committee should review and approve the strategy. At this point, if the committee has chosen to use outsourcing, a rigorous process should be followed including the following steps
- 1. Define the IT function to be outsourced
- 2. Describe the service levels required and minimum metrics to be met
- 3. Know the desired level of knowledge, skills, and quality of the expected service provider
- 4. Know the current in-house cost information to compare with third party bids
- 5. Conduct due diligence reviews of potential service providers
- 6. Confirm any considerations to meeting contractual or regulatory requirements.

Appendix 11: GoK Project Management Governance Structure

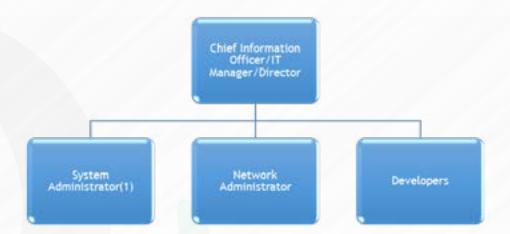


#### **Appendix 12: ICT Organization Structures**

#### i. Large MCDA's



## iii. Small MCDA's



# Appendix13: Project governance roles

Project Role	Accountabilities, responsibilities and tasks
Corporate Client	<ul> <li>Has ultimate authority in large, complex or politically driven projects.</li> <li>Is the champion of the project, promotes the benefits of the project to the community and may be viewed as the 'public face' of the project. For example, the Corporate Client may be the Premier, Minister of the State or Head of Agency.</li> <li>May also be the Project Funder. In a small, less complex project, there would be no Corporate Client, but the Project Sponsor would act as the champion of the project, and fulfil the role of the Project Champion.</li> </ul>

Project Role	Accountabilities, responsibilities and tasks
Project Sponsor	Accountabilities, responsibilities and tasks - Ultimately accountable and responsible for the project, and is sometimes referred to as the Project Owner Responsible for the attainment of the agreed Project Target Outcomes. The Target Outcomes should be secured before the project is closed formally Member of the Steering Committee, and is usually the Committee Chair. For projects where there is no Steering Committee, the Sponsor assumes responsibility for approving the project scope and all subsequent decision- making Oversight of the business management and project management issues that arise outside the formal business of the Steering Committee. - Provides support by advocacy at senior levels, and ensures that the necessary resources [both financial and human] are available to the project May also be the Business Owner for the project and can also be the Funder, but it varies within government, depending on the budgetary arrangements and decisions about who will be managing the Outputs after the project closes. In the case of large whole-of-government projects, the project funds may be managed by one Agency on behalf of the government, but there may be several Business Owners. The Corporate Client and Project Sponsor may be the same person for some projects. The Project Sponsor must be identified for all projects, no matter what the size or complexity. Accountable to: Corporate Client [where applicable]

Project Role	Accountabilities, responsibilities and tasks
Steering Committee	<ul> <li>Responsible and accountable for policy and resourcing decisions essential to the delivery of project Output and the attainment of project's Target Outcomes.</li> <li>Accountable to the Corporate Client and/or Sponsor for providing the Project Manager and Team with effective management and guidance in the development of the project Outputs and implementation of required organisational change, in order to attain the project's Outcomes.</li> <li>Responsible for ensuring appropriate management of the project Coutines outlined in the endorsed Project Business Plan, which usually includes approving the initial Project Proposal or Business Case and then the Project Business Plan.</li> <li>Responsible for assessing, approving or rejecting changes to the scope as documented in the Project Business Plan as the project progresses.</li> <li>Responsible for monitoring progress (not just activity) and scrutinising the project's budget.</li> <li>Ultimately accountable for ensuring appropriate risk management processes are applied, which may include responsibility for undertaking specific risk management activities.</li> <li>Must also consider how (or iff the project's objective(s(, Outcomes, Target Outcomes, and longer-term business benefits align with the organisational strategic agenda and direction, and making the hard decisions to re-scope or terminate the project if there is little or no alignment.</li> <li>Should develop an agreed Terms of Reference for how the Steering Committee will operate.</li> </ul>

<ul> <li>Contracted by the Project Sponsor and/or Steering Committee to implement the change management described in the Outcome Realisation Plan, and thereby achieve the project's Outcomes, Target Outcomes and realise the business benefits</li> <li>May be required to contribute resources to the project to ensure the change management described in the Outcome Realisation Plan implemented effectively.</li> <li>'Owns' the Project Outcome Realisation Plan although the Project Manager may assist in its development.</li> <li>Must be satisfied that the project scope includes all of the Outputs necessary for the realisation of the project's Target Outcomes and agreed business benefits.</li> <li>May be required to contribute resources to the project to ensure that the Outputs are developed satisfactorily and 'fit for purpose</li> <li>Responsible after project closure for ongoin ownership and maintenance of the project Outputs, which may require revised budget</li> </ul>	Business Owner(s)	<ul> <li>Responsible for managing the project Outputs for utilisation by Project Customers.</li> <li>Responsible for ongoing maintenance (including costs) of the project Outputs after the project closes.</li> <li>Accountable to the Project Sponsor and/or Corporate Client (or their delegate(s)) following formal project closure for the achievement of and reporting against the project's Target Outcomes and realisation of the longer-term business benefits.</li> <li>Must be satisfied that the project's Outcomes (including Target Outcomes( and longer term business benefits are meaningful in the context of the Business Unit's operational environment and forward strategic agenda</li> </ul>
		<ul> <li>environment and forward strategic agenda.</li> <li>Contracted by the Project Sponsor and/or Steering Committee to implement the change management described in the Outcome Realisation Plan, and thereby achieve the project's Outcomes, Target Outcomes and realise the business benefits.</li> <li>May be required to contribute resources to the project to ensure the change management described in the Outcome Realisation Plan is implemented effectively.</li> <li>'Owns' the Project Outcome Realisation Plan, although the Project Manager may assist in its development.</li> <li>Must be satisfied that the project scope includes all of the Outputs necessary for the realisation of the project's Target Outcomes and agreed business benefits.</li> <li>May be required to contribute resources to the project to ensure that the Outputs are developed satisfactorily and 'fit for purpose'.</li> <li>Responsible after project closure for ongoing ownership and maintenance of the project Outputs, which may require revised budget forecasts to accommodate maintenance costs</li> </ul>

	<ul> <li>Responsible after project closure for ensuring the project's Target Outcomes and agreed longer-term business benefits are used to revise the Business Unit's relevant performance measures. Agency or Divisional Corporate or Annual Business Plans should be updated appropriately. Reporting lines and requirements may also need to be updated post-project.</li> <li>Responsible after project closure for ongoing ownership and maintenance of the project Outputs, which may require revised budget forecasts to accommodate maintenance costs and staffing implications.</li> </ul>
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Project Customers	The person or entities that will utilise the project Outputs to undertake their own activity, and therefore unconsciously generate the project Outcomes and business benefits as a by-product of this utilisation. For example, the Tasmanian public, who transacts business with Service Tasmania, would have been classed as Project Customers when the entity was set up. Project Customers are sometimes described as Beneficiaries

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Project Observer	<ul> <li>May be a role in a large, complex or politically driven project, possibly involving whole-of-government or more than one Agency where potential learnings through observation of project processes are possible.</li> <li>Usually present at Steering Committee meetings or Project Team meetings to act as an information channel to the Agency/organisation they are representing.</li> <li>The Observer's Agency may not necessarily be represented on the Steering Committee if they are not Business Owners.</li> <li>Cannot participate in decision-making while attending meetings.</li> <li>May raise issues for discussion on the understanding that those issues may or may not be addressed or resolved as part of the meetings. The issues may be considered outside of the formal meeting structure.</li> <li>Accountable to the Agency they are representing. If issues arise that may have implications for the Agency/organisation, they have a responsibility to report these issues back to their Agency/organisation. The Agency/organisation may then wish to raise these issues formally with the Project Sponsor.</li> </ul>
Quality Consultants	<ul> <li>Work independently of the Project Team.</li> <li>Often contracted from outside the Agency/ organisation.</li> <li>Maybe contracted to undertake formal Quality Review of the project as a whole in terms of structure, processes, and progress toward Outputs.</li> <li>Maybe contracted to undertake formal Quality Review of the quality of products or services (Outputs) being produced within a project in a technical field (eg law, IT, construction).</li> <li>(Refer to Appendix 4 A Charter for Project Management Quality Advisory Consultants and Appendix 5 A Charter for Project Management Quality Review Consultants.) Accountable to: Project Sponsor and/or Steering Committee</li> </ul>

Project Director	- Usually created to manage a large, complex
	or politically sensitive project or program of projects in partnership with one or several
	Project Manager(s).
	- Responsible for the implementation of the Project/Program Business Plan following its
	approval by the Steering Committee.
	- Directs and monitors project/program activity
	through quality management, detailed plans and schedules, and reports progress to the
	Steering Committee.
	- Provides expert and authoritative advice to
	various Ministers, Heads of Agency and
	senior representatives of the public and private sectors and key community
	stakeholders on a wide range of sensitive
	issues associated with the project/program.
	- Provides highest-level leadership by
	articulating the project/program vision, and negotiating and defining objectives
	and developing and nurturing highest-level
	relationships with stakeholders and end
	users, to facilitate the effective delivery of a major government initiative.
	, , ,

	Accountable to: Project Sponsor and/or Steering Committee
Project Manager	<ul> <li>Contracted by the Project Sponsor and/or Steering Committee to deliver the defined project Outputs as articulated in the approved Project Business Plan.</li> <li>Works in partnership with and reports to the Project Director to implement the Project Business Plan.</li> <li>Responsible for engaging the Project Sponsor, Business Owner(s) and/or Steering Committee in order to clarify the project Objectives, Outcomes, Target Outcomes, required Outputs and stakeholders within agreed time, cost and quality parameters.</li> <li>Develops and maintains the Project Business Plan, Project Work/Execution and Implementation Plan(s) and related schedules.</li> <li>Responsible for organising the project into one or more sub-projects, managing the day-to-day aspects of the project, resolving planning and implementation issues, and monitoring progress and budget.</li> <li>Reports to the Project Sponsor and/or Steering Committee at regular intervals.</li> <li>Manages (client/provider/stakeholder) expectations through formal specification and agreement of the project objective(s), Outcomes, Target Outcomes, Outputs, quality requirements, resources required, budget, schedule, project structure, roles, and responsibilities described in the Outcome Realisation Plan.</li> </ul>

	The Project Manager must be identified for all projects, no matter what the size or complexity. Accountable to: Project Director (where applicable), Project Sponsor and/or Steering Committee
Project Team	<ul> <li>Led by the Project Manager or Project Team Leader.</li> <li>Responsible for completing tasks and activities required for delivery of the project Outputs, as outlined in the Project Business Plan and elaborated in the Project Execution and/or Implementation Plan(s).</li> <li>Usually includes representatives from the Business Unit(s) impacted by the project.</li> <li>Must include the requisite skills for each phase of a project to ensure success. The skills should be explicitly identified as a part of the project planning process.</li> <li>The composition of the Team may change as the project moves through its various phases. Accountable to: Project Manager and/or Project Team Leader.</li> </ul>
Project Team Leader	<ul> <li>Usually appointed in large and/or complex projects to work under the direction of the Project Manager.</li> <li>May be a representative of a Business Unit impacted by the project.</li> <li>Responsible for completing the required tasks and activities as defined in the Project Execution and/or Implementation Plan(s) for delivering the project Output(s).</li> <li>Accountable to: Project Manager</li> </ul>

Project Officer	<ul> <li>Responsible for completing tasks and activities required for delivering project Output, as determined by the Project Manager or Project Team Leader.</li> <li>Most common responsibilities are related to project coordination (eg administration, including development and/or maintenance of project documentation, assisting with status reporting and follow-up), stakeholder liaison (eg secretarial support to the project reference group or project communications) and general administrative support activities (eg scheduling and meeting preparations).</li> <li>May also be directly involved in the development and quality assurance of specific Outputs.</li> </ul>
Reference Groups	<ul> <li>Provide forums to achieve consensus among groups of stakeholders.</li> <li>Do not do the work of Output production, but may ratify/endorse Output quality on behalf of the stakeholders they represent.</li> <li>The group may already exist, have an indefinite life span or may continue for the life of the project.</li> <li>Maybe a general reference group delegated by the Steering Committee to monitor or modify the Project Business Plan for approval by the Steering Committee.</li> <li>May consist of collection of people with like skills to address a particular set of issues.</li> <li>May report to the Steering Committee or Project Manager, depending on who has appointed them and what they are requested to achieve.</li> </ul>

	<ul> <li>Members provide an excellent channel to assist the project communicate information to and from their stakeholder group(s) who may be impacted by, or impact on, the project.</li> <li>Accountable to: Project Sponsor and/or Steering Committee via the Project Manager or Project Director (where applicable)</li> </ul>
Advisory Groups	<ul> <li>Forums of stakeholders, usually experts to provide specific advice or technical expertise to the project.</li> <li>Do not do the work of Output production, but may advise the Project Manager on Output quality ('fitness-for-purpose' (on behalf of the stakeholders they represent.</li> <li>Members provide an excellent channel to assist the project communicate information to and from their stakeholder group(s) who may be impacted by, or impact on, the project.</li> <li>Able to advise the project of any emerging issues from a stakeholder perspective.</li> <li>Members may also be willing to play an ongoing role in Output maintenance after the project has closed, to ensure the Outputs remain relevant and retain their practical utility.</li> <li>May report to the Steering Committee or Project Manager, depending on who has appointed them and what they are requested to achieve.</li> <li>The group may already exist, have an indefinite life span or may continue for the life of the project. An information technology advisory group is an example.</li> </ul>

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	Accountable to: Project Sponsor and/or Steering Committee via the Project Manager or Project Director (where applicable)
Working Groups	<ul> <li>Small specialist work groups, each dedicated to producing a well-defined Output within a specific timeframe, appointed by the Project Manager.</li> <li>Report directly to the Project Manager. May also report to the Reference/Advisory Group on Output development progress.</li> <li>Membership may be drawn from Reference or Advisory Groups, or the Business Unit(s) where Output implementation will occur.</li> <li>May have no life beyond the delivery of that Output.</li> <li>Probably involve one or more members of a Project Team to support activity.</li> <li>Members provide an excellent channel to assist the project communicate information to and from their stakeholder group(s) who may be impacted by, or impact on, the project.</li> <li>Members may also be willing to play an ongoing role in Output maintenance after the project has closed, to ensure the Outputs remain relevant and retain their practical utility.</li> </ul>
Consultants	<ul> <li>Are employed from outside the organisation to provide independent, high-level specialist expertise or professional advice unavailable from internal resources, to assist project decision-making.</li> <li>Typically Project Consultants may include:</li> <li>Information technology specialists who define and manage the technological aspects of the project</li> <li>Representatives employed by stakeholders to ensure their interests are represented and managed.</li> <li>Legal advisers who assist in the development and review of the contractual documentation.</li> <li>Auditors who ensure compliance with internal and external audit requirements thority is a State Corporation under the State Corporations Act 446 www.icta.go.ke</li> </ul>

	May report directly to the Chair of the Steering Committee (or perhaps the Chair of a general Reference Group). Please note: The Head of Agency or Deputy Secretary (or equivalent) must approve any decision to engage a consultant prior to the Agencyundertaking the appropriate procurement process. Accountable to: Project Sponsor and/or Steering Committee via the Project Manager or Project Director (where applicable)
Contractors	Are employed, external to the business area, to provide a specified service in relation to the development of project Outputs. Examples include developing guides and/or manuals, business application software, develop and deliver marketing programs, prepare and deliver training to staff in the business area. May be engaged to undertake work as part of the Project Team.

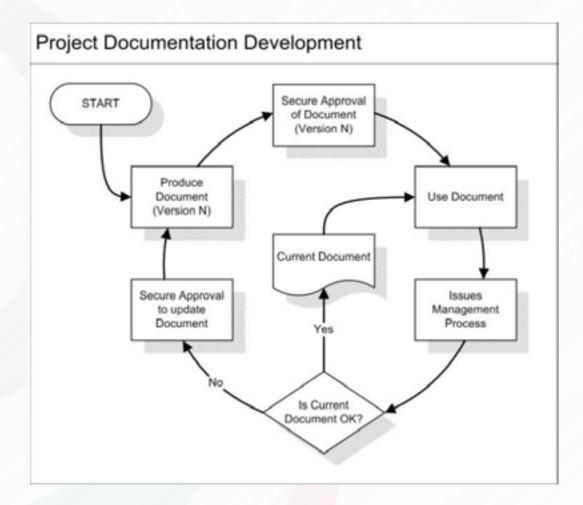
# Appendix 14: Project management documentation

PHASE	Key documents	Other documents	Proformas
INITIATE	Project Proposal Feasibility Study Report Project Business Case	Business Needs Analysis Project Brief	
MANAGE	Project Business Plan Project Execution Plan Project Review and Evaluation Report Project Phase Review Report	Risk Management Plan Stakeholder Engagement Plan Organizational Change Management (or Transition) Plan Implementation Plan Project Communication Strategy and Action Plan Marketing Strategy Training Strategy	Project Status Report Project Risk Register Project Issues Register
FINALISE	Outcome Realization Plan Project Closure Report Project Review and Closure Report	Han <mark>dov</mark> er Plan Project Output Management Plan	

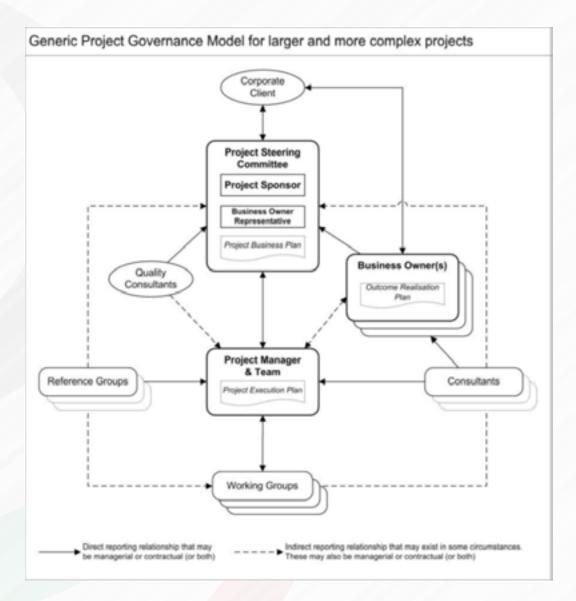
# Appendix 15: Project management stages and activities

Key Element	INITIATE	SET UP	MANAGE	FINALISE
1. Planning and scoping				
2. Governance				
3. Outcome Realization				
4. Stakeholder engagement				
5. Risk management				
6. Issues management				
7. Resource management				
8. Quality management				
9. Status reporting				
10. Project review and evaluation				
11. Project closure				

Appendix 16: Project documentation development



Appendix 17: A generic project governance model for larger, more complex projects

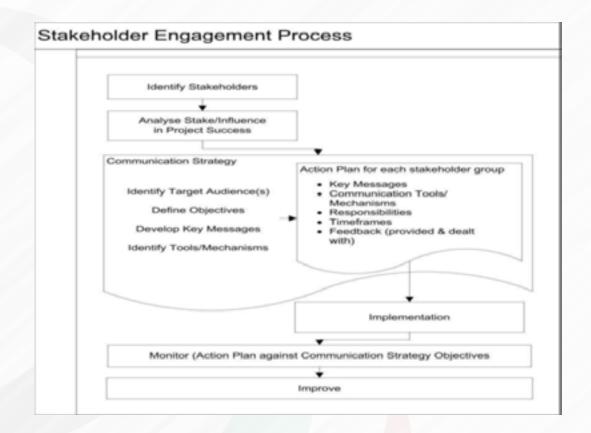


The ICT Authority is a State Corporation under the State Corporations Act 446 www.icta.go.ke

Target Outcome	Performance Indicator	Measure	Baseline	Target Level	Target Date	Accountability
The measurable benefits that are sought from undertaking a project (i.e what we want to achieve) measurable benefits that are sought from undertaking a project (i.e what we want to achieve)	A description of the type of change that will indicate performance towards the achievement of the Target Outcomes	The actual mechanism for measuring the level of the performance indicator	The current level of the performance indicator as at [date]	The targeted level of performance (i.e how success is defined	The date by when the target levels are to be	Who is accountable for the achievement of the targeted outcomes and reports on the progress towards the target?

# Appendix 18: Sample Outcome Realization data for the Project Business Plan

#### Appendix 19: Stakeholder engagement process

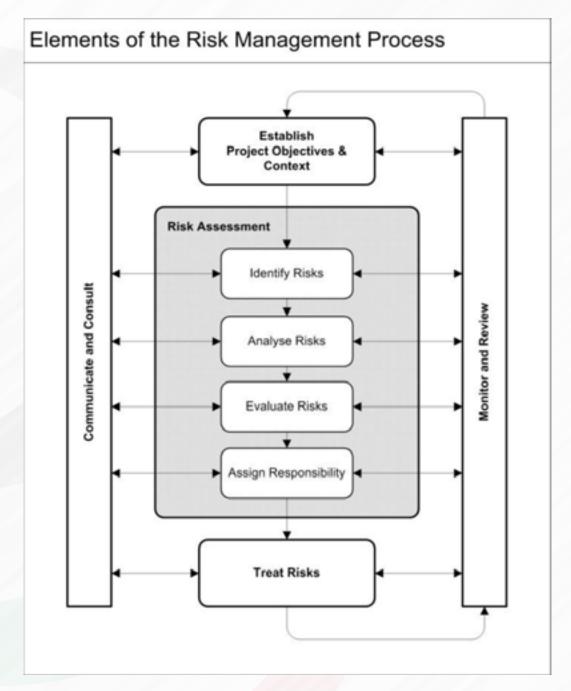


# Appendix 20: Stakeholder engagement process

[NB appendix 19 expounds on appendix 18]

Verbal	Electronic	Written	Visual
<ul> <li>Presentations/ briefing sessions (one-to-one, one- to-many)</li> <li>Telephone (one-to-one)/ Teleconferences (one-to-many)</li> <li>Forums</li> <li>Networking facilitation</li> <li>Staff meetings</li> <li>Seminars/ workshops</li> <li>Community meetings</li> <li>Launches</li> <li>Specific events</li> <li>Social gatherings</li> <li>Visitation programs</li> <li>Radio/television</li> </ul>	<ul> <li>Personal email to identified stakeholders (one to one, one to many)</li> <li>Broadcast email (one to many)</li> <li>Internet/intranet including online forums, fact sheets, newsletter, SharePoint – web sharing of ongoing project planning with internal and/or external stakeholders</li> <li>SMS messaging</li> <li>Weblog</li> <li>Facebook, Myspace, YouTube</li> <li>Twitter</li> <li>RSS Feed</li> <li>CD-ROM/DVDs</li> <li>Fax stream, faxback</li> </ul>	<ul> <li>Mailouts of important documentation (letter, memorandum, factsheet, FAQs)</li> <li>Newsletter</li> <li>Advertising – newspaper, magazine, web</li> <li>Pamphlets and brochures (consider shelf life issues)</li> <li>Information in agency newsletters etc</li> <li>Media release</li> <li>Ministerial</li> <li>Request for Tender (RFT)</li> <li>Contract</li> <li>Project planning documentation</li> </ul>	<ul> <li>Display – workplace, conference</li> <li>Transport advertising</li> <li>'Roadshow'</li> <li>'Parody' presentation – play, puppet show</li> <li>3D presentation</li> </ul>

## Appendix 21: Elements of the risk management process



# Appendix 22: Risk matrix for grading risks

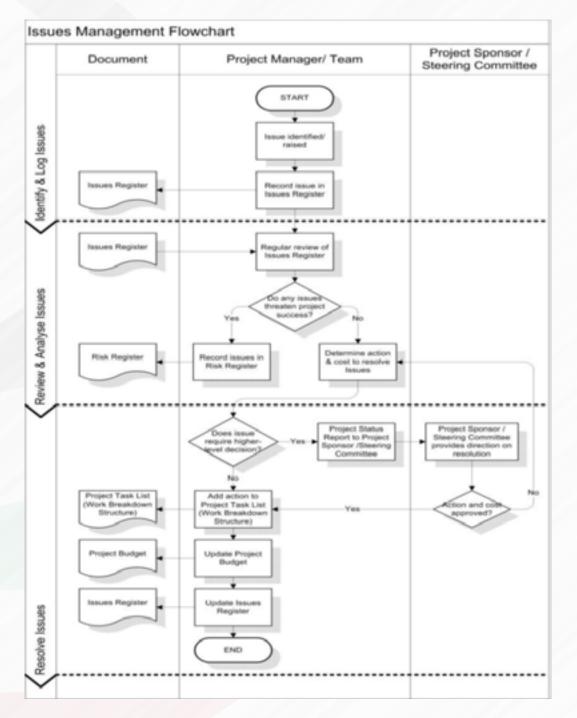
	Seriousness					
Likelihood		Low (Insignificant adverse impact, note only)	Medium (Reasonable adverse impact, needs monitoring)	High (Will have significant adverse impact)	Extreme	
	Low (Unlikely to occur during project)	N	D	С	Extreme	
	Medium (May occur at some stage in project)	D	С	В	Extreme	
	High (Probably will occur during project)	С	В	А	Extreme	

# Appendix 23: Recommended actions for grades of risk

Grade	<b>Risk Mitigation Actions</b>	Who
A & Extreme	Mitigation actions to reduce the likelihood and seriousness to be identified, costed and prioritized for implementation before the project commences or immediately as they arise during project execution.	Project Steering Committee and/or Project Sponsor
В	Mitigation actions to reduce the likelihood and seriousness to be identified costed and prioritized. Appropriate actions implemented during project execution,	Project Steering Committee and/or Project Manager
C	Mitigation actions to reduce the likelihood and seriousness to be identified and costed for possible action if funds permit.	Project Manager

D & N	To be noted; no action is needed Project Manager	
	unless grading increases over	
	time.	

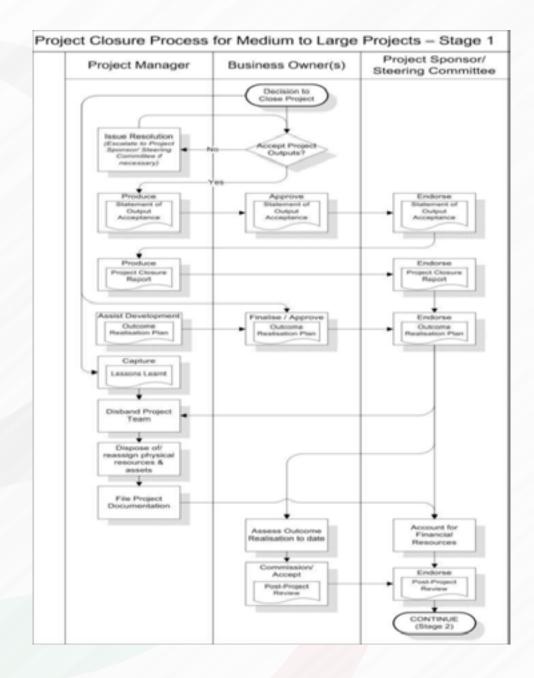
## Appendix 24: Issue management flowchart



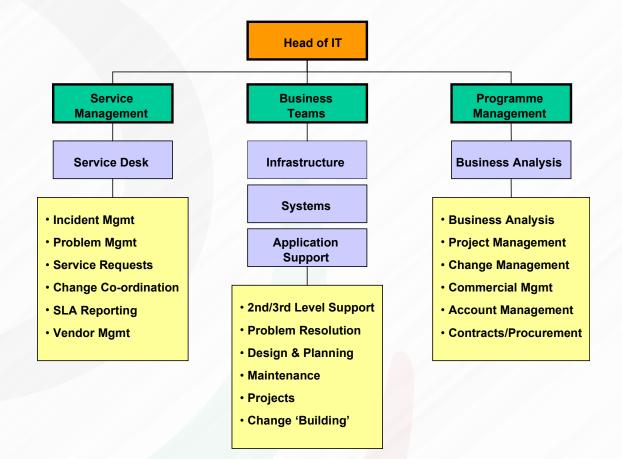
# Appendix 25: Sample Project Issues Register

lssue Number	Description	Raised By	Date	Priority	Responsible Officer	Actions & Progress Notes	Status	Date Resolved
1.1	Lack of agency	Working Group	1/09/22	High	Jane	Letter of invitation from Project Sponsor (i.e Director) to agencies which are not	Open	
2.1	Lack of registrants for next forum	Project Manager	1/11/22	High	Senior Project Officer	Send out	Open	
1.3	How to show links between PM	Project Team member	10/09/22	Medium	Senior Project Officer	Matrix to be	Closed	30/11/22

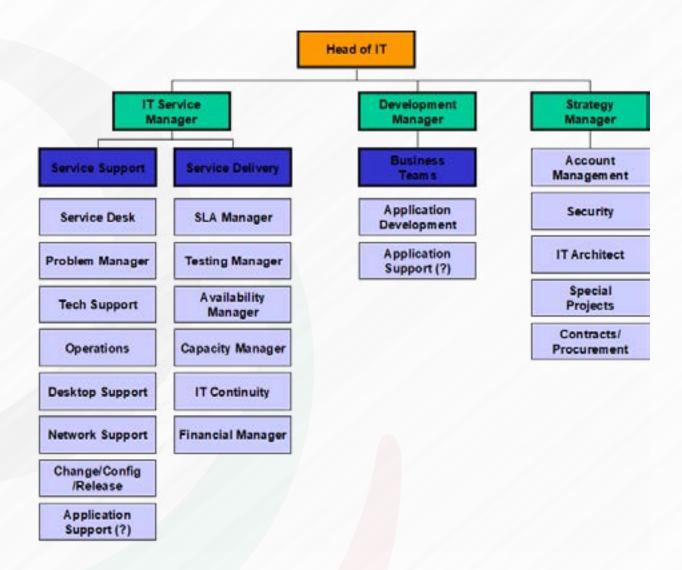
#### Appendix 26: Project closure



### Appendix 27: Sample Service Management structure (ITIL) for Small organizations



## Appendix 28: Sample Service Management structure (ITIL) for large organizations



## Appendix 29: Service desk 1st, level, 2nd level and 3rd level support definitions

## **GENERAL DEFINITONS**

## First Level Support

- Dedicated and managed Support area/telephone access
- Routine call and incident taking, logging and classification
- Initial fast resolutions to Routine Incidents e.g. password resets
- Short term support to keep lines open and provide access to IT
- Calls within target guidelines before escalation e.g. 5 10 minutes
- Generally at least 40% 50% of calls resolved

## Second Level Support

- Dedicated and managed Support area
- Longer resolution Incidents e.g. more than 5-10 minutes
- Incidents that require greater technical knowledge or system access
- Fast Response and Target resolution times support is highest priority
- Task to build Knowledgebase to ensure future response in Incident Management/1st Level
- Involvement in the technical analysis and resolution of underlying Problems
- Generally 40% 50% of calls resolved

## **Third Level Support**

- Long Term Problem resolution
- Incidents/Problems that require high level of technical knowledge or system access
- Task to build Knowledgebase to ensure future response in Incident Management/1st or 2nd Level
- Generally less than 10% of calls handled

How are we doing

## APPENDIX 30: SAMPLE ICT STRATEGY FORMAT

ICT STRATEGY FORMAT & TEMPLATE

## STRATEGIC PLAN FORMAT and TEMPLATE

Strategy Development Process

ICT STRATEGY FORMAT & TEMPLATE

Strategy Development Process

STRATEGIC PLAN FORMAT and TEMPLATE

How we will do it

Where we are	Where we want to be

Assessment	Baseline	Components	Down to Specifics	Evaluate
Environmental Scan	<ul> <li>Situation – Past, Present and Future</li> </ul>	Mission & Vision	Performance     Measurement	Performance     Management
Background     Information	Significant Issues	Values / Guiding     Principles	Targets / Standards of Performance	Review Progress – Balanced Scorecard
Situational Analysis	Align / Fit with Capabilities	Key Objectives	Initiatives and     Projects	Take Corrective Actions
<ul> <li>SWOT – Strength's, Weaknesses, Opportunities, Threats</li> </ul>	• Gape		Action Plans	<ul> <li>Feedback upstream         <ul> <li>revise plans</li> </ul> </li> </ul>

Note: All Strategic plan proposals should be accompanied with a 'Table of Contents' and should be in the order depicted below.

### **Executive Summary**

Give brief outline of the (Org/Dept).

### **Environmental Analysis**

**Internal Environment** 

[Internal Assessment: Organizational assets, resources, people, culture, systems, partnerships, suppliers, etc]

#### **External Environment**

[External Assessment: Marketplace, competitor's, social trends, technology, regulatory environment, economic cycles, etc]

#### Tools for comparison analysis

[It involves specifying the objective of the institution or project and identifying the internal and external factors that are favorable and unfavorable to achieving that objective.]

Examples:

SWOT Analysis; Six Forces Model; VRIO; PEST analysis; Porter's Four Corners Model

#### Benchmarking

[Benchmarking is the process of comparing one's business processes and performance metrics to industry bests and/or from other industries. Dimensions typically measured are quality, time, and cost. Improvements from learning mean doing things better, faster, and cheaper. Benchmarking involves management identifying the best institutions in their industry, or any other industry where similar processes exist, and comparing the results and processes of those studied (the "targets") to one's own results and processes to learn how well the targets perform and, more importantly, how they do it.]

#### **Best practices**

[A bestpractice is a technique, method, process, activity, incentive, or reward that is believed to be more effective at delivering a particular outcome than any other technique, method, process, etc. when applied to a particular condition or circumstance. The idea is that with proper processes, checks, and testing, a desired outcome can be delivered with fewer problems and unforeseen complications. Best practices can also be defined as the most efficient (least amount of effort) and effective (best results) way of accomplishing a task, based on repeatable procedures that have proven themselves over time for large numbers of people.]

## **Gap Analysis**

[Identify the gap between the optimized allocation and integration of the inputs, and the current level of allocation. This helps provide the institution with insight into areas which could be improved. The gap analysis process involves determining, 'where you are now' and 'where you want to be'.]

## **Strategic Plan**

The strategic plan should be communicated to all relevant individuals, including stakeholders and sponsors. It should include the following:

Vision

[What the org/dept wants to be; it should be compelling, vivid and concise, challenges everyone to reach for something significant – inspires a compelling future; it is time bound. An organization's Vision sets out its aspirations for the future. The Vision is the 'dream' of the future, a picture painted in words, which is intended to inspire people by appealing to the heart as well as the head.]

## Mission

[Our purpose of existence; should be brief and to the point; it provides context for major decisions and capable of infinite fulfillment; it is not time bound].

#### MISSION Formulation

Answer each of these questions.

What services and/ or products will the organization/department offer?

Who are the people who may use or benefit from this services or products?

What are the reasons for the organization/ department?

Why will the organization/ department exist?

Now combine all the answers into one statement of purpose.

## Values

[Values will guide every major decision making; it embodies the spirit of the org/ dept; revisit Vision and Mission statement.]

## **Strategic Objectives**

List specific actionable results needed to support the vision and the mission. Use the mnemonic SMART/ER  $\,$ 

- S Specific
- M Measurable
- A Attainable
- R Relevant
- T Time bound

And

- E Evaluate
- R Reevaluate

#### Initiatives

[These are actions that will lead to achievement of your objectives, often taking the form of projects or programs]

#### Measures (KPI(s), Timeline and Deliverables

[These are objective, quantifiable methods for measuring success. Indicators and monitors of success. It includes; performance measurement, initiatives and projects and action plans.]

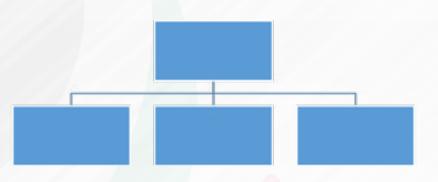
[Each Initiative has a supporting Action Plan(s) attached to it. Action Plans are geared toward operations, procedures, and processes They describe who does what, when it will be completed, and how the organization knows when steps are completed Like Initiatives; Action Plans require the monitoring of progress on Objectives, for which measures are needed]

### Quick wins

[These are improvement which is expected to provide a Return on Investment in a short period of time with relatively small cost and effort.]

#### **Organization Structure**

[Organizational structure allows the expressed allocation of responsibilities for different functions and processes to different entities such as the department, workgroup and individual. Please provide a diagram]



Resource

Personnel

Finance/ Budget

Facilities/ equipment

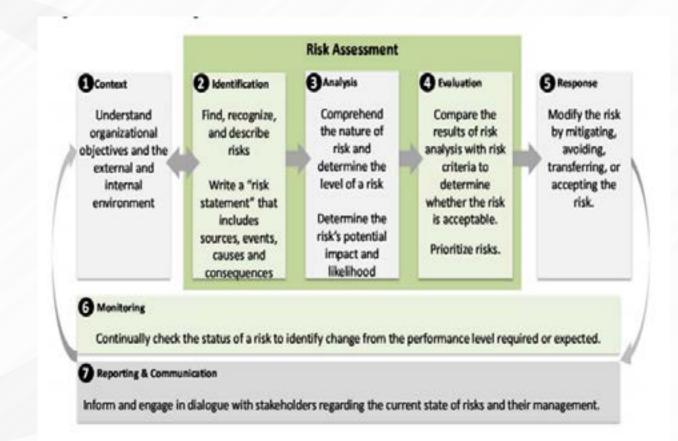
Summary (include a 5 by 5 year timeline towards 2030

## APPENDIX 31: Who needs to be involved in Legal contracts

Investors	Providers	Controllers
<ul> <li>The Board</li> <li>IT Council/Management Team</li> <li>Senior business unit managers e.g. key customers of IT services</li> <li>Business Partners</li> <li>External investors/ shareholders – as part of corporate governance</li> </ul>	<ul> <li>Project and change managers (IT and Business)</li> <li>Project and change managers (IT and Business)</li> <li>Programme managers</li> <li>Business managers and users</li> <li>Technical delivery and support teams</li> <li>Key players e.g. Business sponsors, Project champions</li> <li>Relationship managers and internal communications teams</li> <li>Suppliers (especially outsourced service providers)</li> <li>Contract and procurement management</li> <li>Peripheral players/ influencers/Policy owners e.g. HR, Facilities Management, Legal</li> </ul>	<ul> <li>Internal audit and external audit (due diligence)</li> <li>External regulators</li> <li>Corporate governance coordinator</li> <li>Risk managers</li> <li>Compliance – regulatory and internal</li> <li>Finance/Project Managers/IT and business managers – reviewers of benefits/ROI</li> <li>Post investment appraisal/ Post project review teams</li> </ul>
L	egal and regulatory Responsibilitie	s
<ul> <li>Understand requirements (what regulations are to be complied with)</li> <li>Set the mandate</li> <li>Set priorities and expectations</li> <li>Establish and ensure the expected degree of compliance</li> <li>Based on advice concerning risk and cost:</li> <li>Assess impact on business</li> </ul>	<ul> <li>Advise on IT related technical and commercial risks that could impact legal and regulatory requirements</li> <li>Provide proposals and business cases for legal and regulatory programmes, projects or action plans</li> </ul>	<ul> <li>Maintain awareness of current and emerging laws, and regulations affecting IT to assess their impact on the organization's business</li> <li>Develop an understanding of their impact on the organization and advise accordingly on "what is needed" - not necessarily "how"</li> </ul>

Understand requirements     Formulate solutions for     Monitor adequacy of controls
[what regulations are to be complied with]compliance or commercial contractsand compliance processesSet the mandate • Set priorities and expectations• Identify best practices for ongoing good control of legal and regulatory requirements expected degree of compliance • Based on advice concerning risk and cost: • Assess impact on business • Provide resource and funding to ensure issues are addressed and controls established • Monitor and evaluate compliance framework to ensure a suscainable "business as usual" approach to compliance and programmes • Provide approvals when required for significant legal or regulatory decisionsand compliance or commercial contactual processes, and operation of elated controls • Provide compliance framework to ensure a suscainable "business as usual" approach to compliance • Provide information relating to the cost of compliance and also cost of any incidents • Evaluate impact on business environment together with business units • Ensure vendors, service provide properly and integrated within the overall compliance approachand commercial contacts • Provide independent assurance to management that adequate controls are in place to deal with legal and regulatory requirements

### Appendix 32: Risk management process



## Appendix 33: Accreditation of ICT Service Providers

## A. REGISTRATION

i. An application for registration as a contractor/supplier shall be made in the prescribed form and shall be accompanied by-

- a. Duly signed Code of Conduct for ICT service providers (ICTA/STD/006)
- b. Certified copies of statutory documents and other relevant documents as are necessary to prove qualification for registration:
- c. The ICT service providers shall adhere to the following code of conduct Code of Conduct for ICT service providers:
- i. Ensure government receives competent professional services.
- ii. Enhance the professional development of its staff.
- iii. Respect the confidentiality of any information given by government institutions
- iv. Enhance integrity in the delivery of products and services to government institutions
- v. Comply with all government of Kenya laws and regulations.
- vi. Protect and respect third-party intellectual property and utilize it only after having properly secured rights to its use.
- d. Certified copies of the shareholders' certificates of the company;
- e. In the case of a trust, a copy of trust deed
- f. Audited financial statements of the person or firm for the period immediately preceding the application and/or recent certified bank statements.
- g. Certified copies of the identity documents of the principal or principals of the firm;
- h. In the case of a foreign contractor-proof of current registration status from their country of domicile or origin certified by a local commissioner oath. The registration of a foreign contractor shall be guided by the relevant government policies.
- i. Sufficient proof of financial capability of the contractor; (f). proof of registration with an association of contractors;
- j. Suppliers / Contractors shall provide tax compliance certificates

ii. Proof of employment of qualified persons by the contractor and in the case of an application relating to specialized software, a certified copy of the current license issued by the relevant statutory regulatory or Authority or organization.

iii. Proof of competent directors and technical staff as evidenced by IT related certificates, project management certificates, professional certificates, national IDs and KRA pin certificates.

iv. If an application in relation to this standard is made electronically, all supporting documents shall be attached.

v. Local purchase orders shall be provided as proof of projects undertaken in the area of specialization applied for.

vi. An application shall not be considered duly completed for purposes of this regulation, unless all documents are received by the Authority.

vii. The Authority shall make a decision on an application by a person or firm within thirty days of receiving such application including rejection if such person does not fully comply with requirements set by the Authority, and shall inform the applicant accordingly giving reasons for such rejection.

viii. An application form for registration may be made in English or Kiswahili.

ix. A register of registered contractors shall be kept.

x. A person who qualifies for registration in a specialized area shall be issued with a Certificate of Registration in the specialized area of ICT by the Authority.

xi. A person or firm shall submit an annual application for renewal of the certificate of registration to the Authority in the prescribed form accompanied by the prescribed fee (See schedule B) and the Authority shall process the application in accordance with the provisions of the standard.

xii. A person who is aggrieved by the decision of the Authority in relation to the category of registration may submit a written petition indicating the reasons of such grievance, sufficient to justify review or the assessment by Authority.

xiii. The Authority shall within thirty days of receiving a petition under notify the person of the Authority's decision on both applications.

xiv. Registration of contractors under CTA - I (See schedule B) category shall be open to both local and foreign contractors.

xv. Any registrations that fall between ICTA -2 to ICTA -8 as set out in the standard shall be restricted to local contractors only.

xvi. A contractor may make an application for upgrading to the Authority in a form to be prescribed by the Authority accompanied by the prescribed fee, and the Authority shall process the application in accordance with the provisions of the standard.

xvii. Application for renewal of the license shall be submitted to the Authority in writing at least thirty days before the expiry of such license.

xviii. In each year during which a contractor holds a license, the contractor or, in the case of a firm or company; the partner who possesses technical qualifications, skills or experience shall attend at least one Continuous Professional Development event recognized by the Authority and the Authority shall consider the attendances while determining an application to renew or upgrade the Contractor.

xix. During the vetting and verification of contractor's documents, the Authority/ representative may visit contractor's premise to ascertain the information provided.

xx. The Authority shall published list of contractors with valid licenses in their websites.

## SCHEDULE B. CLASSIFICATION OF WORKS

	Points	Registration Fee (Ksh.)	Annual Renewal Fee(Ksh.)
Local Contractor			
ICTA 1	85 – 100	30,000	10,000
ICTA 2	75 – 84	25,000	8,300
ICTA 3	65 – 74	20,000	6,600
ICTA 4	55 – 64	15,000	5,000
ICTA 5	45 – 54	12,000	4,000
ICTA 6	35 – 44	10,000	3,300
ICTA 7	25 – 34	5,000	1,600
ICTA 8	10- 24	2,500	830
Re-apply	Below 10		
Foreign Contractor			
ICTA 1		75,000	50,000
ICTA 2			
ICTA 3			
ICTA 4			
ICTA 5			
ICTA 6			
ICTA 7			
ICTA 8			
TOTAL			

## SCHEDULE B. CLASSIFICATION OF WORKS

i. There shall be payable to the Authority such fees for its services as the Authority may determine from time to time.

ii. The Authority may remove the name or a contractor from the register of contractors if the contractor has been debarred from participating in a procurement process under any legislation or received written complaints from any government agency in regards to the contractors' performance;

iii. The registration of a contractor shall be suspended after investigations into his conduct have been concluded and it is established that the contractor has engaged in misconduct.

iv. Fails to comply with the provisions in regard to the payment of the fees;

v. The Authority shall conduct an inquiry in to the conduct or the contractor before removing the name of the contractor from the register

# SCHEDULED. Mandatory Requirements for the various Sections

REFERENCE	PARTICULARS	SPECIFIC ITEMS	SCORE MATRIX	MAXIMUM SCORE	AWARDED SCORE
A	Directors' Qualification and work experience.	Technical Director [7 marks] Name:	• Degree (at least BSc in Computer Science, IT or related	2 marks	
			<ul> <li>Certification in Project Management</li> </ul>	2 marks	
			<ul> <li>Work experience in (3) similar assignments as team leader,1 mark per assignment</li> </ul>	3 marks	
		Other directors 5 marks Name:	<ul> <li>Work experience in (3) similar assignments as team leader,1 mark per assignment</li> </ul>	3 marks	
			<ul> <li>Certification in Project Management</li> </ul>	2 marks	

В	Staff qualification	Technical staff in specialized area [25 marks]	<ul> <li>ii) Project</li> <li>team – at least</li> <li>5 persons.</li> <li>(5 marks for</li> <li>each person)</li> <li>Scoring is</li> <li>based on the</li> <li>following.</li> <li>Degree (at least BSc Computer Science, /IT or related(2 marks per person)</li> </ul>	10 marks	
			Professional certification (1 mark per person)	5 marks	
			Work experience in 3 similar assignments (1 mark per person)	5 marks	
			Certification in project management (1 mark per person)	5 marks	

C	Financial status	Turnover [14 marks]	i) Turnover (KES) • High turnover (over 100m) (14 marks) • Average turnover (5-100m) (7 marks) • Low turnover (below 5m) (3.5 marks)	14 marks
		Largest projects in area of Specialization for the last 5 years [14 marks]	i) Project cost value (KES) • Over 100m (14 marks) • 75 – 100m (10.5) • 25 – 75m (7 marks) • 5 -25m (5 marks) • Below 5m (3 marks)	14 marks
		Cash flow [10 marks]	i) Cash flow (KES) • Over 100m (10 marks) • 75 – 100m (7.5 marks) • 25 – 75 (5 marks) • 5 -25 (3 marks) • Below 5 (1 mark)	10 marks
D	Office and service facilities	Adequate office space [5 marks]	Business permit	5 marks

E	Company experience	Details of development projects undertaken in area of specialization (max 4 projects)	Demonstrable capacity at company level by providing evidence of 4 relevant works carried out for the last 5 years, evidenced by copy of purchase order or contract and contact details, job completion certificates/ Client testimonials/ contracts. (16 marks) – 4 marks for each job carried out in Kenyan government institutions and - 2 marks for each job carried out in private organizations	16 Marks
			Relevant compliance certificates (Government, Manufacturer) as per category	4 Marks
	TOTAL	1///		100 Marks

## Appendix 34: Accreditation of ICT Professionals

## **1. REGISTRATION OF ICT PROFESSIONALS**

Applicant should be compliant with the standard on ICT Human Capital and workforce development, both ethically and in terms of professional qualifications in the area of expertise. ICT Authority shall issue a certificate of accreditation on compliance with the standard.

To commence the registration process, ICT Authority will register ICT Professionals according to four categories of registration. The professional registrations category includes the following:

- a. ICT Professional
- b. ICT Practitioner
- c. ICT Graduate
- d. ICT Technician

## 2. CODE OF PROFESSIONAL CONDUCT

Registered professionals and ICTA accreditation/certification holders shall:

1. Perform their duties with objectivity, due diligence and care, in accordance with professional IT standards and procedures for effective governance and management of Information and Communications Technologies.

2. Serve for public good in a lawful manner, while maintaining high standards of conduct and character.

3. Maintain the privacy and confidentiality of information obtained in the course of their activities.

4. Perform services only in areas of their competence

5. Inform appropriate parties of the results of work performed including the full disclosure of all significant facts

6. Support the professional education of stakeholders in enhancing their understanding of the governance and effective management of information and communications technology. Failure to comply with this Code of Professional Ethics can result in an investigation into a registered professional or accredited holder's conduct and, ultimately, in disciplinary measures including exclusion from the roll of IT professionals.

## **3. APPLICATION PROCESS**

### Step 1: Registration

Please visit the ICT Authority website www.icta.go.ke/standards/resources/ and check if you meet the criteria for the registration category you wish to apply for, fill in details on the form then submit to the ICT authority offices. Pay the registration fee as tabulated below;

	REGISTRATION FEES	ANNUAL FEES
ICT TECHNICIAN	600	500
ICT GRADUATE	1000	1000
ICT PRACTITIONER	2000	1000
ICT PROFESSIONAL	5000	3000

#### Table 1:- Registration of ICT professionals

In case of any difficulties or in need of more details please contact us via email standards@ict. go.ke

#### Step 2: Assessment Evaluation

ICT Authority will conduct an evaluation of your application to make the decision on whether your application is successful or not. You will be notified within 60 days of application on the application evaluation decision. The ICT Authority may contact individual's referees to ascertain the information filled in the applicant's application form.

## **REGISTRATION FORM**

PERSONAL INFORMATION				
Personal Details	Surname			
	Other Names			
	ID Number			
	Date of birth			
	Gender			
	Telephone			
	Email			
Home Address	Town/City			
	Address			
	Postal code			
	Country			
	Residence			
Details of Employer	Employer Name			
	Telephone			
	E-mail			
Details of Contact Person	Name			
	Telephone			
	E-mail			
MEMBERSHIP CATEGORY	Requirements	Select Category		
ICT Technician Form:(ICTA/STD/TECH/F001)	Application fee: Ksh. 600 Annual subscription: Kshs.500 Submit			

ICT Graduate Form: ICTA/STD/GRAD/F002	<ul> <li>A duly filled Registration Application form for ICT Technician (ICTA/STD/TECH/ F001) and signed Code of Conduct (ICTA/STD/PROF/ F005)</li> <li>Diploma certificate in ICT/ Engineering related field from accredited institution of learning; or Diploma certificate in any field from accredited institution of learning with proof of two years' experience practicing ICT;</li> <li>Copy of National ID/Passport.</li> <li>Fees as above.</li> </ul>	
ICT Practitioner Form:(ICTA/STD/PRACT/F003)	Application fee: Ksh. 1000 Annual subscription:Kshs.1000 Submit • A duly filled Registration Application form for ICT Technician (ICTA/STD/TECH/F002) and signed Code of Conduct (ICTA/ STD/PROF/F005) • Graduate certificate in ICT/ Engineering related field from accredited institution of higher learning • Copy of National ID/Passport. • Fees as above.	

	1	
ICT Professional	Application fee: Ksh. 5000	
FORM:(ICTA/STD/PROF/F004)	Annual subscription:	
	Kshs.3000	
	Submit	
	<ul> <li>A duly filled Registration</li> </ul>	
	Application form for ICT	
	Professional (ICTA/STD/PROF/	
	F004) and signed Code of	
	Conduct (ICTA/STD/PROF/	
	F005)	
	<ul> <li>Graduate certificate in ICT/</li> </ul>	
	Engineering related field from	
	accredited institution of	
	Higher learning or A Copy of	
	the Registration Certificate	
	for either ICT Graduate/	
	Practitioner from ICTA.	
	<ul> <li>Professional Certificate in the</li> </ul>	
	specific area from recognized	
	institution by ICTA/government	
	body	
	<ul> <li>Letters of reference from</li> </ul>	
	employer(s) covering the	
	previous two years confirming	
	professional integrity	
	Statements of two referees	
	detailing their knowl <mark>edg</mark> e of	
	the applicant.	
	• Fees as above.	

## 4. Continuous Professional Development (CPD)

CPD is defined as the undertaking of development activities that lead to the systematic maintenance, improvement and broadening of knowledge and skills, and the development of personal qualities necessary for the execution of professional and technical duties throughout a person's ICT professional career.

**CPD** Requirements

a) Certified Professionals (CP) must complete 90 CPD hours over a period of three years.
b) Members shall demonstrate commitment to professional development via written evidence of CPD activities.

c) Sources of CPD

• Attend conferences, seminars, training courses, presentations.

• Present papers at conferences and seminars, write articles for journals (Contributions to knowledge)

## Appendix 35: Government ICT Project Governance Structures

## A. National ICT Project Governance Structures

	Name of Commit.	Membership	Terms of Reference
1	The ICT Oversight Committee	His Excellency the President –Chair Members Cabinet Secretary-; Ministry of Land Housing & Urban Development Ministry of interior and Coordination Ministry of Education Science and Technology Ministry of ICT Ministry of Devolution and Planning Ministry of National Treasury Chief Executive Officer , ICT Authority-Secretary	Review and approve projects for initiation To provide oversight of flagship ICT Projects To receive and consider reports from inter- ministerial Steering Project Committee To resolve inter- ministerial Project challenges. Appointing Authority: H.E. The President Meeting : Bi-annual
2.	Inter-Ministerial Project Steering Committee	Principal Secretary Ministry of ICT – Chair Members Permanent Secretary -; Ministry of Lands, Housing and Urban development The National Treasury Ministry of interior and Coordination Ministry of Education Science & Technology Ministry of Devolution and Planning Chief Executive officer , ICTA – Secretary	<ul> <li>1.Champion Implementation of Key Projects</li> <li>2. Monitor and Evaluation Projects and take necessary action for the success of the project.</li> <li>3. Prepare and report Projects status to oversight Committee</li> <li>4. Resolve inter- ministerial Project challenges.</li> <li>5. Receive and review quarterly reports from Project Implementation and Monitoring Committee.</li> <li>6. Co-opt the ministry that own the key project(s) Appointing Authority: H.E.The President Meetings: Quarterly</li> </ul>

1.0 Project Implementation and Monitoring/Steering Committee			
Role	Person	Terms of Reference	
Project champion (Chair)	A top-ranking officer from the organ Ps for Ministry and CEO for Agencies	Initiate projects within Ministries, Agencies & Counties Review and approve project	
Project owner	The user of the system	concepts and implementation plans	
Chair of Technical committee	This is the person who is responsible for the implementation of the system. [Head of ICT]	Resolve project challenges to ensure smooth implementation Review and approve project	
Project Management Office	Project Manager ICT Authority	budget	
		Monitor and evaluate projects at implementation stage	
		Prepare and present quarterly progress report to inter- ministerial project Steering committee	
		Appoints Project implementing team[s]	
		Co-opt stakeholder's representatives or other members	
		Meetings: Regularly	
		Appointing Authority: Cabinet Secretary/Governor/CEO appropriately	

2.0 Project Technical Committee		
Role	Person	
Project owner and Chair	The user of the system	
Project manager (Secretary)	The person who is responsible for the execution of the project	
Beneficiaries representative	Stakeholder's representative(s)	
PMO Liaison officer	An officer from the ICTA PMO	
Consultant / Systems integrator	Representative(s) of any third party who is involved in the development of the project	
Standard Liaison officer	A Standard officer from ICTA	
Technical liaison	Selected technical expert(s) in line with the technical requirements of the project	

# Appendix 36 Audit for outsourced applications

MCDA has;		
a)	Defined a strategy on how acquisition will be conducted.	
b)	Prepared a request for the supply of a product or service that includes the requirements.	
c)	Communicated the request for the supply of a product or service to potential suppliers	
d)	Selected one or more suppliers.	
e)	Developed an agreement with the supplier that includes acceptance criteria.	
f)	Identified necessary changes to the agreement.	
g)	Evaluated the impact of changes on the agreement.	
h)	Negotiated the agreement with the supplier.	
i)	Updated the ag <mark>reement with</mark> the supplier, as necessary.	
j)	Assessed the execution of the agreement.	
k)	Provided data needed by the supplier and resolved issues in a timely manner.	
l)	Confirmed that the delivered product or service complies with the agreement.	
m)	Provided payment or other agreed consideration.	
n)	Accepted the product or service from the supplier, or other party, as directed by the agreement.	

# IT GOVERNANCE STANDARD WORKING GROUP

FRANCIS MWAURA- ICTA

JOSEPH KURIA- COMMISSION FOR REVENUE ALLOCATION

THOMAS ODHIAMBO- ICTA

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