GOVERNMENT ICT STANDARDS

ICT Governance Standard

ICTA. 5.003.2023

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

REVISION OF ICT STANDARDS

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

ICT AUTHORITY (ICTA)

Telposta Towers 12th floor. Kenyatta Avenue P.O. Box 27150-00200, Nairobi Kenya Tel.: +254 20 2089061
Web:http://www.icta.go.ke
Email:standards@ict.go.ke

DOCUMENT CONTROL

Document Name:	Government ICT Governance Standard
Prepared by:	Government ICT Governance Technical Committee
Edition:	Third Edition
Approved by:	Board of Directors
Date Approved:	3rd May 2023
Effective Date:	1st July 2023
Next Review Date:	After 3 years

CONTENT

FOREWORD

The ICT Authority has an express mandate to, among others, 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 specific mandate is to ensure coherence and unified approach to acquisition, deployment, management and operation of ICTs across the public service, including state agencies, in order to promote service integration, adaptability and cost savings through economies of scale in ICT investments.

In pursuit of the achievement of this mandate, the Authority established a standards committee that identified the critical standards domain areas and oversaw the standards development process. To this end, 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 context. The committee eventually adopted the Kenya Bureau of Standards (KEBS) format and procedure for standards development. In addition, through an MOU, KEBS has made an invaluable contribution to the development of ICT Authority standards.

The ICT 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 be carrying out quarterly audits in all the Ministries, Department, Agencies and Counties (MDACs) to determine their 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.

The ICT Authority management, cognizant of the central and core role that standards play in public service integration, fostering shared services and increasing value in ICT investments, takes great exception to the enforcement of this standard by all Government agencies. The Authority therefore implores agencies to prioritize the process of certification to this standard as a foundation of their ICT investments in order to create and enhance value.

Stanley Kamanguya, OGW
Chief Executive Officer

1.0 INTRODUCTION

Information Communication Technology has become an integral part of the economy all over the world. The ICT sector has recorded the highest rate of growth compared to other sectors. This has prompted governments to put more emphasis on e-government deployment and adoption while rendering government services to its citizens. The role of ICT has evolved from the traditional support function to ICT as an economic enabler and more recently, ICT is playing the role of economic growth accelerator. The Kenyan government has identified these roles of ICT through the Vision 2030 masterplan and in the ruling Kenya Kwanza government manifesto. The Kenya government intends to fast track the automation of over 6000 government services to be accessible to the citizens through unified one stop shop digital platforms. To make this dream a reality, the government is extending the internet reach to all the urban areas and through various interventions such as WIFI hotspots and last mile connectivity at the sub counties. County governments are not left behind either and are fast-tracking the integration of their government services. To guide in the adoption and utilization of ICT in the Kenyan economic landscape, the Government has put in place ICT frameworks and standards. The National digital master plan formulated in 2022, will be implemented over 10 years until 2032.These masterplans, guidelines and standards has enabled Kenya to achieve important successes in the areas of telecommunications, infrastructure development, human capital development and use of ICT in service delivery to citizens

The government developed ICT Standards to guide on the adoption and implementation of ICT projects in government entities in 2013. The standards have undergone two reviews in 2016 and 2019 respectively. This document manifests the 3rd review of the ICT standards and incorporates the standards to address the changes and dynamics that have taken place since the last review in 2019. These include the impacts of COVID19 and the key priority pillars in the new government that took office in August 2022.

Specifically, this document addresses the IT Governance as part of the wider Corporate Governance activity. ICT governance is a "framework for the leadership, organizational structures, and business processes, standards, and compliance to these standards, which ensure that the organization's IT supports and enables the achievement of its strategy and objectives."

1.1. Objectives

The Government intends to develop momentum in utilizing ICT as an economic growth accelerator through the implementation of these Governance standards.

The IT Governance standards shall guide the National Government (Ministries, State departments, Agencies) and the County governments to:

1. Guide the rollout of integrated government services.
2. Identify and mitigate ICT related risk.
3. Tap into ICT as an economic growth accelerator.
4. Consider the new relevant laws, regulations, policies and ensure their ICT strategies are aligned
5. Improve service delivery through effective and efficient use of ICT
6. Effectively manage ICT related risks
7. Optimize the value from ICT investments
8. Adopt and adhere to ICT ISO Standards.

1.2. Outcomes

The adoption and implementation of ICT governance standards across government is expected to achieve the following key result areas:

1. Adoption of ICT governance and risk management policies, laws and regulations in MDAs and Counties

- Adoption of Kenya Information and Communication Act
- Adoption and adherence to the Data Protection Act No.24 of ,2019.
- Adoption of Mwongozo guidelines on ICT governance
- Adoption and implementation of global standards on ICT governance such as COBIT, ISO
- Adoption of project governance frameworks such as Prince2 and PMP.
- Adoption of intergovernmental framework on managing cross cutting ICT projects

2. Transparency and accountability

- Improved transparency in the identification and management of ICT projects
- Focused decision-making in ICT operations and initiatives
- Accountability in the realization of set objectives and intended benefits

3. Prudent use of public finance on ICT investments

- Better understanding on Total Cost of ownership (TCO).
- Effective use of resources on ICT initiatives.
- Stakeholder engagement on all ICT initiatives.
- Provide ICT services in excluded and underserved areas to spur economic growth and development.

4. To create new opportunities and enhance partnership to unlock shared values in the ICT sector

- Streamline engagement, contracting, performance and oversight of e-government initiatives undertaken in partnership with third parties (PPP, G2G, Bilateral and Multilateral partners, Private Sector, NGOs, FBOs)
- Position ICT both as an economic enabler as well as economic growth accelerator
- Create an enabling legal framework to promote joint ventures in ICT projects.
- Promote Kenya as a Regional ICT Hub for software development and export

5. To guide the adoption of open ICT Interoperability Standards

- To pave the way for a smooth integration and sharing of data/information between various Government Information Systems and Applications held by various public sector entities possible.

6. To guide in the adoption and implementation of Open Government Data and service initiative.

- To promote transparency, accountability and value creation by making government data available to all.

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:

1. **Alignment -** Provide for strategic direction of IT and the alignment of IT and the business with respect to services and projects.
2. **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.
3. **Risk Management–** Ascertain that processes are in place to ensure that risks have been adequately managed. This includes assessment of the risk aspects of IT investments.
4. **Resource management –** Provide high-level direction for sourcing and use of IT resources. Oversee the aggregate funding of IT at enterprise level. Ensure there is an adequate IT capability and infrastructure to support current and expected future business requirements. Ensure competent human resource with desired ethical behaviors and norms.
5. **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 the government.

3.0 APPLICATION

This standard applies to:

- Central Government of Kenya
- County Governments
- Commissions and independent bodies
- State Corporations

4.0 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 Kenya Bureau of Standards.

- COBIT 5
- PRINCE2
- PMBOK®6
- ISO 10006:2018
- ITIL V4
- CISA Review Manual 27th edition
- Government Enterprise Architecture

5.0 TERMS AND DEFINITIONS

5.1. Accounting Officer - any person appointed by the Treasury and charged with the duty of accounting for any service in respect of which moneys have been appropriated by Parliament or any person to whom issues are made from the exchequer account.

5.2. Enterprise Architecture - Enterprise architecture (EA) is a conceptual blueprint that defines the structure and operation of ICT in 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).

5.3. 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.

5.4. 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.

6.0 ABBREVIATIONS

EA	Enterprise Architecture
WAN	Wide area Network
LAN	Local Area Network
SLA	Service Level Agreement
MCDA	Ministry, County and agency
ICTA	ICT Authority
ROI	Return on Investment
NEMA	National Environment Management Authority
CIO	Chief Information Officer
QOS	Quality of Service
COBIT	Control Objectives for IT
PMBOK	Project Management Book
SWOT	Strength Weakness Opportunity and Threat
CMMI	Capability Maturity Model Integration
COSO	Committee of Sponsoring Organizations
PPP	Public Private Partnership
GEA	Government Enterprise Architecture
CISO	Chief Information Security Officer
IT	Information Technology

7.0 SUBDOMAINS

The following are the sub-domains covered under the ICT Governance Standard

1. Enterprise Architecture

a. Business Architecture
b. Application architecture
c. Information / Data Architecture
d. Infrastructure Architecture
e. Security and Compliance
f. Project Management and Governance Architecture
g. Performance Architecture

2. ICT Governance

a. Independent ICT Function
b. ICT Governance Committees
c. ICT Organization
d. ICT Strategy
e. ICT Project Governance

3. ICT Service Management

a. ICT Service Strategy
b. Service Level Management
c. ICT Service Design
d. ICT Service Transition
e. ICT Service Continuous Improvement

8.0 ENTERPRISE ARCHITECTURE

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

b) MDAs and Counties 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.

8.1. Business Architecture

8.1.1. Business plans and objectives

a) MDAs and Counties shall adapt principles of their specific business architecture in line with the Government Enterprise Architecture.

b) MDAs and Counties shall have clearly defined ICT plans, objectives and metrics that support business goals.

c) MDAs and Counties shall have mechanisms for monitoring performance of ICT investments.

8.1.2. Business Process

a) MDAs and Counties shall have business processes designed and applied to focus on service to Citizens provided as a single interface through multiple access platforms.

b) MDAs and Counties will seek to optimize business processes and then use performance standards to define automation requirements.

8.2. Application Architecture

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

8.3. Information / Data Architecture

a) MDAs and Counties shall adopt appropriate analytical services for discovery interpretation of meaningful data patterns.

b) MDAs and Counties shall implement master data management to define and manage their critical data with integration and single point of reference.

8.4. Infrastructure Architecture

a) MDAs and Counties shall ensure the design, implementation and delivery of the infrastructure architecture shall adhere to the infrastructure architecture principles as guided by GEA. The principlesare: -

a. Ensuring technology diversity is contained

b. Technology components are able to interoperate and exchange information

b) The MDAs and Counties shall implement LAN/WAN, internet,computing, enterprise networks, storage and data center to support business operations in line with the GEA and Infrastructure Standards.

8.5. Security and Compliance

a) MDAs and Counties shall ensure the design, implementation and delivery of information security shall adhere to the information security architecture principles as guided in the GEA

b) MDAs and Counties shall establish information security governance structure as guided by appendix 1 b

8.6. Project Management and Governance Architecture

a) MDAs and Counties 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.

8.7. Performance Architecture

8.7.1. Capability Maturity Model Integration (CMMI)

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

8.7.2. Balanced Scorecard

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

9.0 Governance of ICT Function

9.1. Independent ICT Function

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

9.2. ICT Governance Committees

MDAs and Counties 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 1.

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 1.

9.3. ICT Organization

a) MDAs and Counties 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)

c) The head of the ICT function shall be registered with the ICT Authority as an ICT practitioner/ professional.

9.4. IT strategy

a) IT shall be a strategic objective in the overall strategic plan of the MDAs and Counties.

b) The MDAs and Counties shall prepare and maintain an ICT strategic plan with clear IT vision and mission that defines how the MDAs and Counties plans 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 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

9.5. ICT Project governance

a) All ICT projects within MDAs and Counties shall be classified under the following categories;

i. Departmental Project
ii. Institutional Project
iii. Inter-Agency Project
iv. Multi sectoral Project
v. Inter-governmental project

c) Every project shall have project sponsor (accounting officer, group or committee established to guide the project, Principle Project Champion)

d) MDAs and Counties shall establish a Project Management Office /Secretariat.

e) Projects shall be based on clear and compelling business case and have the documents as prescribed in Appendix 5

f) A project implementation committee shall be established to report to the project sponsor and shall be chaired by a project manager.

g) MDAs and Counties shall adopt and approve a project's implementation methodology based on globally accepted approaches such as PMBOK or Prince 2.

h) MDAs and Counties shall adopt software development methodologies that include waterfall, agile, SDLC and SCRUM as guided by the Systems and Applications standard

i) MDAs and Counties shall carry out their project management as guided in Appendix 4-16.

10. Government ICT Projects Implementation Standards and guidelines

10.1. Project Initiation

MDAs and Counties shall: -

i. Identify the specific business problem or opportunity.

ii. define project objectives in alignment to the institutional goals and objectives.

iii. Conduct a high-level risk assessment and define the mitigation measures for the project.

iv. Undertake:

a. initial scoping

b. definition of requirements

c. analysis of alternative solutions

d. calculation of cost estimates

e. identification of benefits and

f. identification of high-level timelines.

v. identify the project sponsor, key stakeholders and document their roles and responsibilities for implementation of the project.

vi. Conduct an assessment of potential organisational impact

vii. Identify source and means of funding for the project

viii. perform a feasibility study to determine the viability of an idea, in terms of legal, economic and technical aspects of the project

ix. Develop a Concept note, business case and submit for approval.

10.2. Project planning

MDAs and Counties shall: -

i. In agreement with all stakeholders (project teams, sponsors, vendors, and users) describe scope of the project so as to ensure that there is a clear understanding of their roles and expectations.

ii. Identify and define the project tasks in terms of priority, sequence and expected timelines for completion

iii. Develop a human resource plan for the project that will define the roles and responsibilities of the project team

iv. Formulate a risk management plan that will assist in the identification of the projects risks and their mitigation measures.

v. Develop a quality management plan that will include activities for quality assurance and control.

vi. Prepare the communication plan for the project that will describe how the milestones of the project will be communicated to all the relevant audiences. The plan shall also define how issues related to the project will be communicated and resolved.

vii. Develop a stakeholder management plan that will describe how they will be engaged throughout the project lifecycle.

viii. Formulate a change management plan for the project that will describe the process for requesting, logging, evaluating, and approving (or denying) changes requested during the project implementation.

ix. Define the project procurement plan in line with public procurement and disposal Act.

x. Describe the budget of the project and document as per the specific tasks and deliverables.

xi. Source for funding of resources required for the project execution

xii. Develop and submit a project plan to guide stakeholders, sponsors, and project team on all the phases of the project

10.3. Project execution

MDAs and Counties shall: -

i. Undertake the planned tasks as described in the plans in order to meet the objectives of the project.

ii. acquire, develop and manage the project team.

iii. communicate the progress of the project to all key stakeholders, sponsors and team members.

iv. conduct change management that might entail the appropriate request, review, approval and implementation of any proposed changes.

v. Perform quality assurance to ensure that quality metrics are kept in check throughout the project cycle.

vi. Document deliverables and milestones for all ICT projects

vii. Develop progress reports for all ICT projects

10.4. Project controlling and monitoring

MDAs and Counties shall:

i. Determine if the project is within budget, scope, and is meeting timelines and milestones.

ii. Continually track, review, adjust and report on the performance of the project.

iii. perform issue, risk, cost and quality management

iv. Perform quality checks of the delivered output to identify any preventive or corrective actions needed.

v. monitor the implementation of any approved changes or revision of schedule.

vi. Document information related to the project's output.

10.5. Project closing

MDAs and Counties shall:

i. Ensure there is a formal handover and signoff by stakeholders of all the project deliverables.

ii. Ensure that all the relevant project documentation is completed and signed by the appropriate stakeholders. This shall include closing out all the outstanding project related contracts and agreements with vendors.

iii. Make sure that on completion of the project, transfer of knowledge/ capacity building is done for users and ICT administrators. The support documentation shall also be prepared and handed over.

iv. finalize all project reports, store and archive them for future reference

v. Identify and document lessons learned from the project to serve as reference for future projects

vi. Develop the end project report.

11. ICT Service Management

11.1. ICT Service Strategy

a) MDAs and Counties shall develop an ICT service strategy to create new and improved services.

11.2. ICT Service management

a) MDAs and Counties 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) MDAs and Counties shall annually evaluate usage of the IT enabled services and customer satisfaction.

11.3. Service level management

a) MDAs and Counties shall develop and sign service level agreement (SLA) with service providers (internet, systems support, maintenance etc.) to ensure availability and reliability of IT enabled services.

b) The SLA shall define performance metrics for the service providers.

c) MDAs and Counties 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

11.3.1. Service desk

a) MDAs and Counties shall establish an IT service desk management system to handle all incident reports and requests from end users

b) The service desk shall have 1st level, 2nd level and 3rd level support

c) The service desk shall develop and document standard operation procedures for IT services

d) MDAs and Counties shall have a system to track customer complaints, compliments and resolution

11.3.2. IT Operations Control

a) MDAs and Counties 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) MDAs and Counties should manage fraud using COSO framework

c) MDAs and Counties should adopt IT service and governance framework such as COBIT for internal controls and management of IT

d) All MDAs and counties shall document ICT operations in standard operating procedures

11.3.3. 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

11.4. IT Service Design

11.4.1. Availability Management

a) MDAs and Counties shall develop and implement quarterly preventive maintenance plans for IT equipment

b) MDAs and Counties shall develop and maintain manuals on how to operate and maintain systems and equipment

c) MDAs and Counties shall develop a disaster recovery plan for all services

11.4.2. IT Infrastructure Capacity Management

a) MDAs and Counties 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) MDAs and Counties shall establish a framework for IT infrastructure improvement

c) MDAs and Counties shall set realistic targets for IT infrastructure improvement, prioritize gaps and propose achievable solutions

11.4.3. Information Security Management

a) MDAs and Counties shall establish an information security management framework as guided by the information security standard

b) The Information Security function shall be a unit within the ICT department.

11.4.4. Supplier management

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

11.5. IT Service transition

11.5.1. IT Service change management

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

11.5.2. Knowledge management

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

11.6. IT Continuous service improvement

11.6.1. Service and process performance review

a) MDAs and Counties shall conduct quarterly performance reviews of IT processes and IT enabled services in line with performance contracting guidelines. The review shall include suggestions for improvement. MCDA s shall seek guidance from ICT Authority

b) MDAs and Counties shall conduct benchmarking with the aim of identifying shortcoming and developing plans for improvement

c) MDAs and Counties shall, in collaboration with ICT Authority, conduct regular system audits for all systems to ensure compliance and conformity to the ICT standards.

12.0 LEGAL AND REGULATORY

12.1. Kenya laws on ICT

MDAs and Counties shall identify the specific laws and regulations affecting IT in their organizations and respond accordingly. The Kenya laws on ICT include:

a) Computer Misuse and Cybercrime Act 2018 -Information Security, Systems and Applications

b) Access to Information Act 2016- E-records, Systems and Applications

c) Kenya Information and Communications Act 2013- E- records and Data Management, Systems and applications

d) Data Protection Act 2019

e) Evidence Act 2014- E-records and Data Management

f) Legal Notice 183, 2013 (The Information and Communication Technology Authority Order 2013)- IT Governance, Information Security, Systems and Applications, E-records and Data Management

g) Public Archives and Documentation Service Act 2012- E-records and Data Management

h) Industrial Property Act 2001 and Copyright Act- End User Devices, Systems and applications, cloud computing, Information Security

i) Public Officers Ethics Act 2003- End user devices, IT Governance, Systems and Applications

j) NEMA guidelines on E-waste- End User Devices

k) Private Public Partnership Act 2013 – IT Governance

12.2. Roles and responsibilities

a) IT functions in MDAs and Counties shall seek legal advice as necessary internally or externally to better manage contracts

b) MDAs and Counties shall seek technical advice or service from competent third party as maybe required from ICT Authority.

13.0 ICT RISK MANAGEMENT

13.1. General

a) ICT risk management will be undertaken as guided in Appendix 11, 12 and 13

13.2. ICT Risk framework

a) MDAs and Counties shall develop a risk strategy

b) MDAs and Counties shall set acceptable levels of risk.

c) MDAs and Counties shall undertake 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 MDAs and Counties shall adopt any of the following mitigation measures: Reduce, Transfer, Accept and Mitigate risks.

14.0 SOURCING, RESOURCING AND FINANCING OF IT FUNCTIONS

14.1. General

a) To support IT Governance, MDAs and Counties shall establish structures to manage IT resources as per Appendix 4.

14.2. Sourcing of ICT equipment, products and services

a) MDAs and Counties shall source ICT resources while adhering to the GoK ICT standards. as per the guidelines below

i. MDAs and Counties 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.

a) 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.

14.3. Resourcing

a) MDAs and Counties 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 provision.

b) The MCDA should develop a risk assessment and management framework for the consultants, contractors and external suppliers.

c) MDAs and Counties 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) MDAs and Counties must use a consistent and evidence-based ICT resources strategic planning process.

e) MDAs and Counties 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 23 and the ICT human capacity standard

14.4. Financing

a) MDAs and Counties shall allocate funds for ICT activities through the annual budget. The ratio of ICT to 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.

14.5. Asset management

a) MDAs and Counties 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.

14.6. 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) MDAs and Counties 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

14.7. 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)

14.8. Innovation

a. MDAs and Counties shall establish a resource center for IT research and innovation

b. The resource center shall manage knowledge through databases and online resources to spur innovation

Appendix 1: IT GOVERNING COMMITTEES

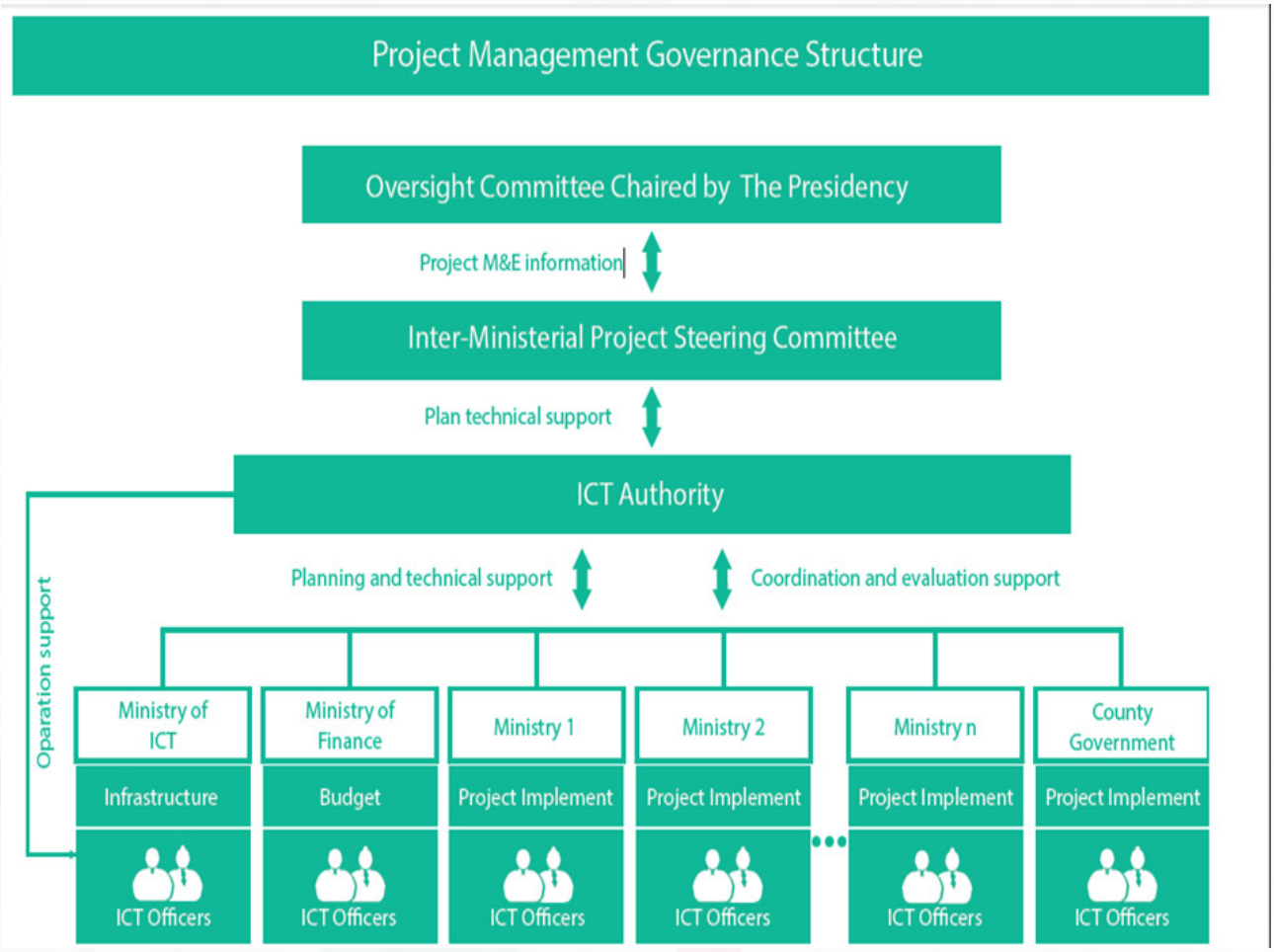
a) Committees

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

b) Sub-Committees

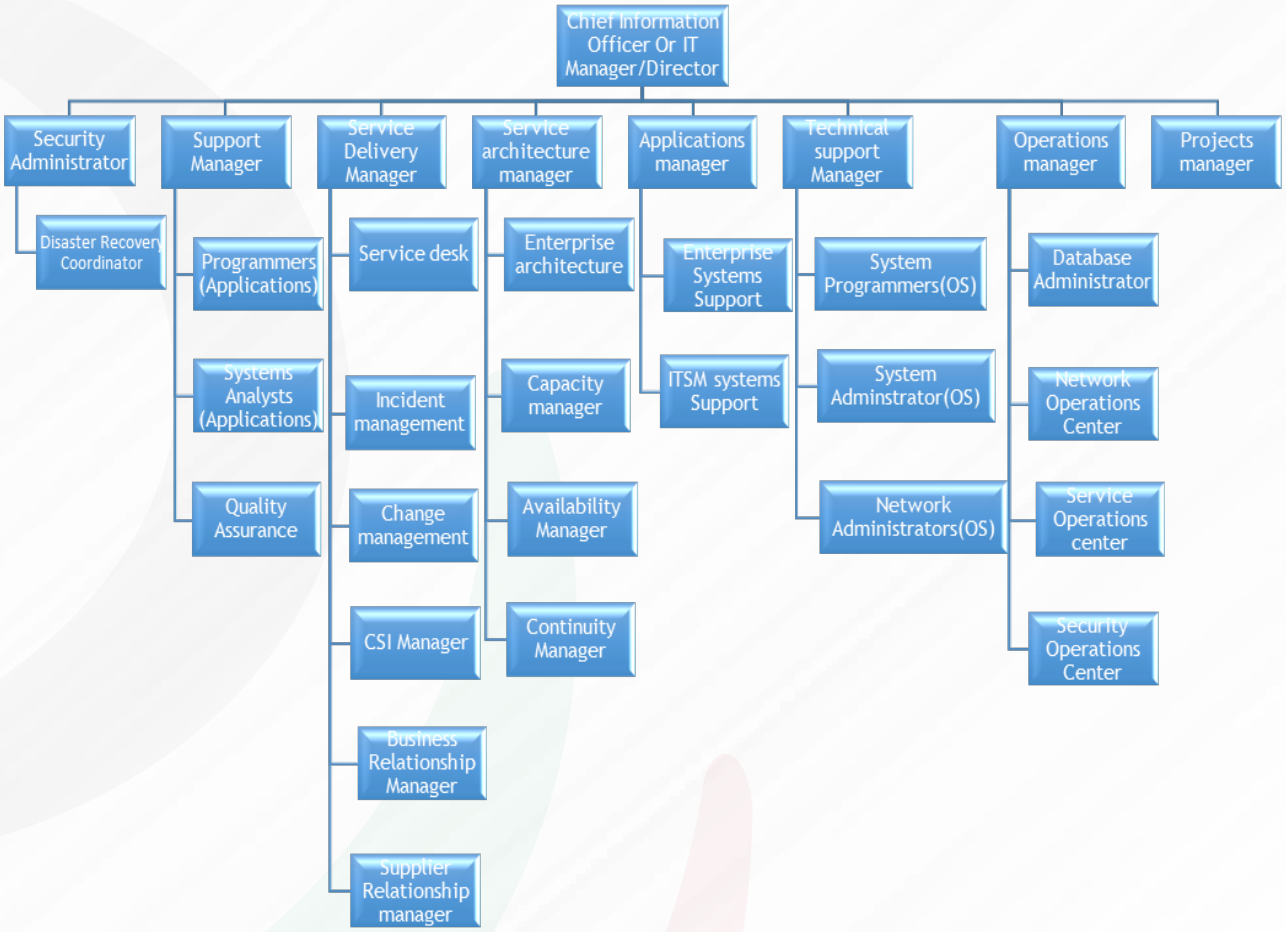
COMMITTEE	RESPONSIBILITIES	MEMBERSHIP
Information Security Sub-Committee	• Facilitates achieving consensus on priorities and trade-offs. • Serves as an effective communications channel and provides an ongoing basis for ensuring the alignment of the security program with business objectives. • The committee 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.	• C-level executive management and senior managers from IT, • Application owners, • Business process owners, • Operations, • HR, audit and • Legal
Project steering committee	– Reviews project progress regularly (e.g., semimonthly or monthly) and Holds emergency meetings when required. – 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. – Takes corrective action if necessary due to project progress and issues escalated to the committee.	• a senior representative from each business area • The project manager • The project sponsor who assumes the overall ownership and accountability of the project and chairs the steering committee.

APPENDIX 2: GOK PROJECT MANAGEMENT GOVERNANCE STRUCTURE

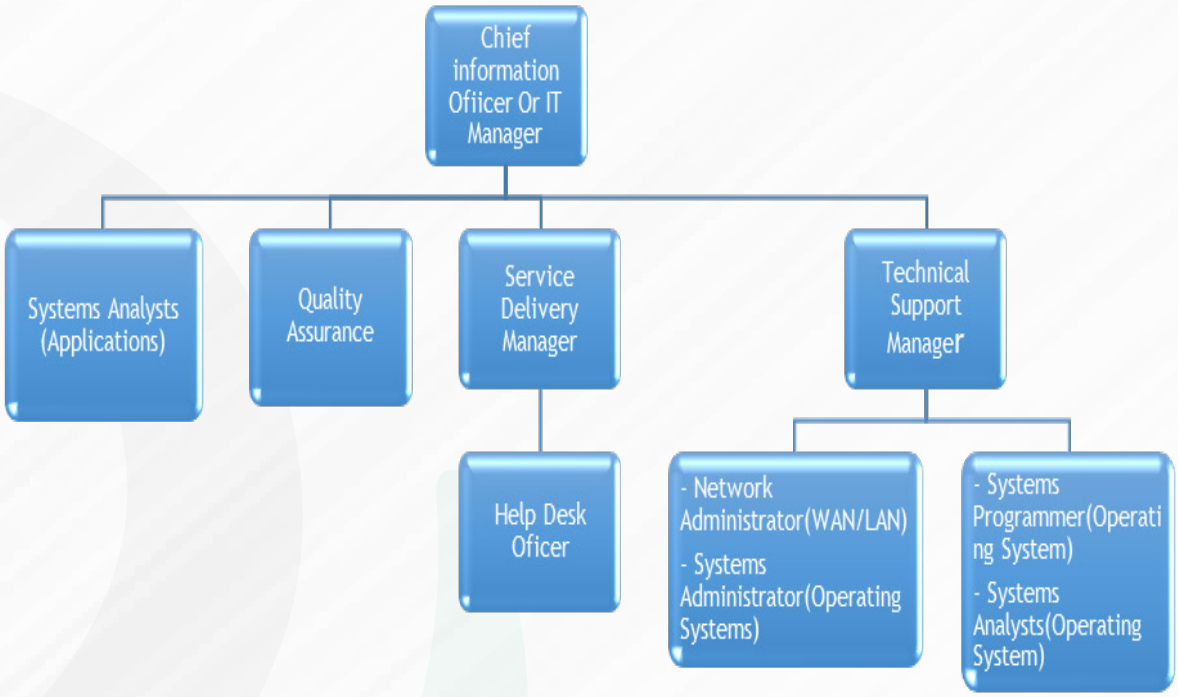


APPENDIX 3: ICT ORGANIZATION STRUCTURES

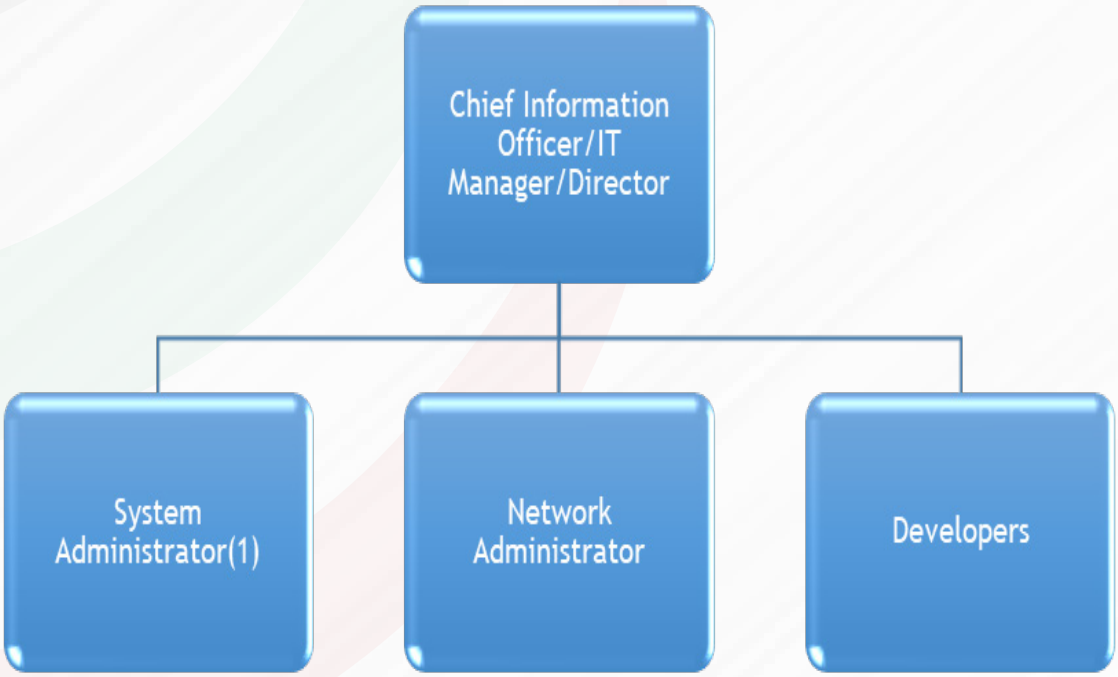
i. Large MCDA's



ii. Medium MCDA's



iii. Small MCDA's



APPENDIX 4: PROJECT GOVERNANCE ROLES

Project Role	Accountabilities, responsibilities and tasks
Corporate Client	- Has ultimate authority in large, complex or politically driven projects. - 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. - 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.
Project Sponsor	- 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	- Responsible and accountable for policy and resourcing decisions essential to the delivery of project Output and the attainment of project's Target Outcomes. - 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. - Responsible for ensuring appropriate management of the project components outlined in the endorsed Project Business Plan, which usually includes approving the initial Project Proposal or Business Case and then the Project Business Plan. - Responsible for assessing, approving or rejecting changes to the scope as documented in the Project Business Plan as the project progresses. - Responsible for monitoring progress (not just activity) and scrutinising the project's budget. - Ultimately accountable for ensuring appropriate risk management processes are applied, which may include responsibility for undertaking specific risk management activities. - Must also consider how (or if(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. - Should develop an agreed Terms of Reference for how the Steering Committee will operate. The composition of the Steering Committee may change as the project moves through its various phases or stages, to ensure the best expertise and experience are available when required. Not all projects require a Steering Committee. The need for a Steering Committee is dependent on the complexity and nature of the project and is determined by the Corporate Client and/or Project Sponsor. Accountable to: Corporate Client (where applicable) or Project Sponsor (Refer to Appendix 3 Steering Not Rowing: A Charter for Project Steering Committees and Their Members.)

Project Role	Accountabilities, responsibilities and tasks
Business Owner(s)	- Responsible for managing the project Outputs for utilisation by Project Customers. - Responsible for ongoing maintenance (including costs) of the project Outputs after the project closes. - 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. - 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. - 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. - May be required to contribute resources to the project to ensure the change management described in the Outcome Realisation Plan is implemented effectively. - 'Owns' the Project Outcome Realisation Plan, although the Project Manager may assist in its development. - 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. - May be required to contribute resources to the project to ensure that the Outputs are developed satisfactorily and 'fit for purpose'. - 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. - 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.

Project Role	Accountabilities, responsibilities and tasks
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
Project Observer	- 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. - Usually present at Steering Committee meetings or Project Team meetings to act as an information channel to the Agency/organisation they are representing. - The Observer's Agency may not necessarily be represented on the Steering Committee if they are not Business Owners. - Cannot participate in decision-making while attending meetings. - 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. - 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. Please note: The Project Sponsor and/or Steering Committee Chair should agree to the role of the Project Observer before that role is implemented.
Quality Consultants	- Work independently of the Project Team. - Often contracted from outside the Agency/organisation. - Maybe contracted to undertake formal Quality Review of the project as a whole in terms of structure, processes, and progress toward Outputs. - 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). (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

Project Role	Accountabilities, responsibilities and tasks
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	- Contracted by the Project Sponsor and/or Steering Committee to deliver the defined project Outputs as articulated in the approved Project Business Plan. - Works in partnership with and reports to the Project Director to implement the Project Business Plan. - 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. - Develops and maintains the Project Business Plan, Project Work/ Execution and Implementation Plan(s) and related schedules. - 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. - Reports to the Project Sponsor and/or Steering Committee at regular intervals. - 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.

Project Role	Accountabilities, responsibilities and tasks
	- Requires demonstrated high-level project management skills. A Project Manager cannot lead effectively unless they have credibility. For most projects, it means the Project Manager must have knowledge of how the Outputs will be created, and how the Target Outcomes will be realised from the utilisation of those Outputs as described in the Outcome Realisation Plan. 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	- Led by the Project Manager or Project Team Leader. - 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). - Usually includes representatives from the Business Unit(s) impacted by the project. - 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. The composition of the Team may change as the project moves through its various phases. Accountable to: Project Manager and/or Project Team Leader.
Project Team Leader	- Usually appointed in large and/or complex projects to work under the direction of the Project Manager. - May be a representative of a Business Unit impacted by the project. - 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). - Accountable to: Project Manager
Project Officer	- Responsible for completing tasks and activities required for delivering project Output, as determined by the Project Manager or Project Team Leader.

Project Role	Accountabilities, responsibilities and tasks
	- May also be directly involved in the development and quality assurance of specific Outputs. - Accountable to: Project Manager or Project Team Leader
Reference Groups	• Provide forums to achieve consensus among groups of stakeholders. • Do not do the work of Output production, but may ratify/endorse Output quality on behalf of the stakeholders they represent. • The group may already exist, have an indefinite life span or may continue for the life of the project. • Maybe a general reference group delegated by the Steering • Committee to monitor or modify the Project Business Plan for approval by the Steering Committee. • May consist of collection of people with like skills to address a particular set of issues. • May report to the Steering Committee or Project Manager, depending on who has appointed them and what they are requested to achieve. • 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. Accountable to: Project Sponsor and/or Steering Committee via the Project Manager or Project Director (where applicable)
Advisory Groups	• Forums of stakeholders, usually experts to provide specific advice or technical expertise to the project. • 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. • 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. • Able to advise the project of any emerging issues from a stakeholder perspective. • 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. • May report to the Steering Committee or Project Manager, depending on who has appointed them and what they are requested to achieve. • 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.

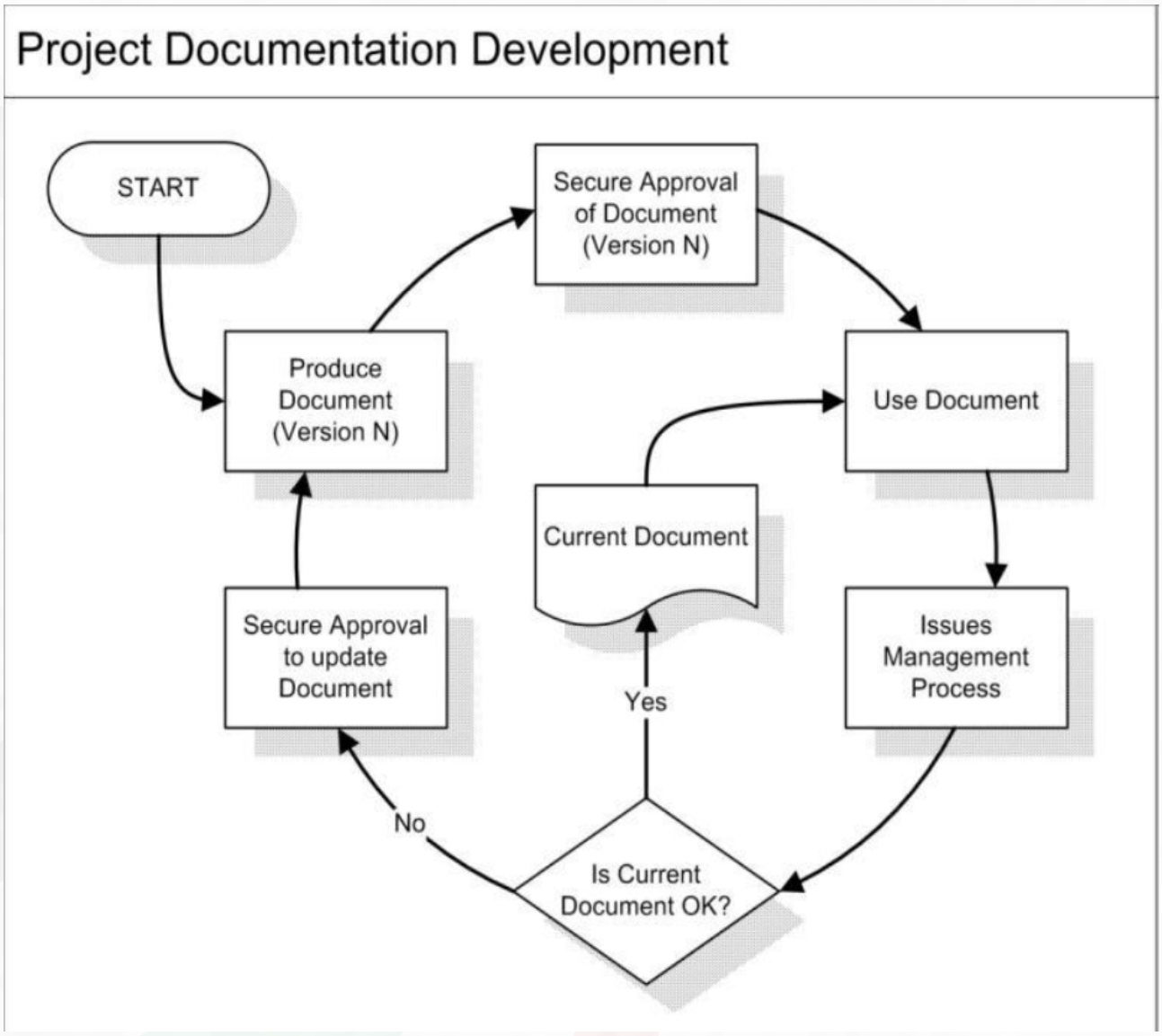
Project Role	Accountabilities, responsibilities and tasks
Working Groups	• Small specialist work groups, each dedicated to producing a well-defined Output within a specific timeframe, appointed by the Project Manager. • Report directly to the Project Manager. May also report to the Reference/Advisory Group on Output development progress. • Membership may be drawn from Reference or Advisory Groups, or the Business Unit(s) where Output implementation will occur. • May have no life beyond the delivery of that Output. • Probably involve one or more members of a Project Team to support activity. • 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. • 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. Accountable to: Project Manager or Project Director (where applicable)
Consultants	• 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. • Typically Project Consultants may include: - Information technology specialists who define and manage the technological aspects of the project - Representatives employed by stakeholders to ensure their interests are represented and managed - Legal advisers who assist in the development and review of the contractual documentation - Auditors who ensure compliance with internal and external audit requirements 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)

Project Role	Accountabilities, responsibilities and tasks
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 5: PROJECT MANAGEMENT DOCUMENTATION

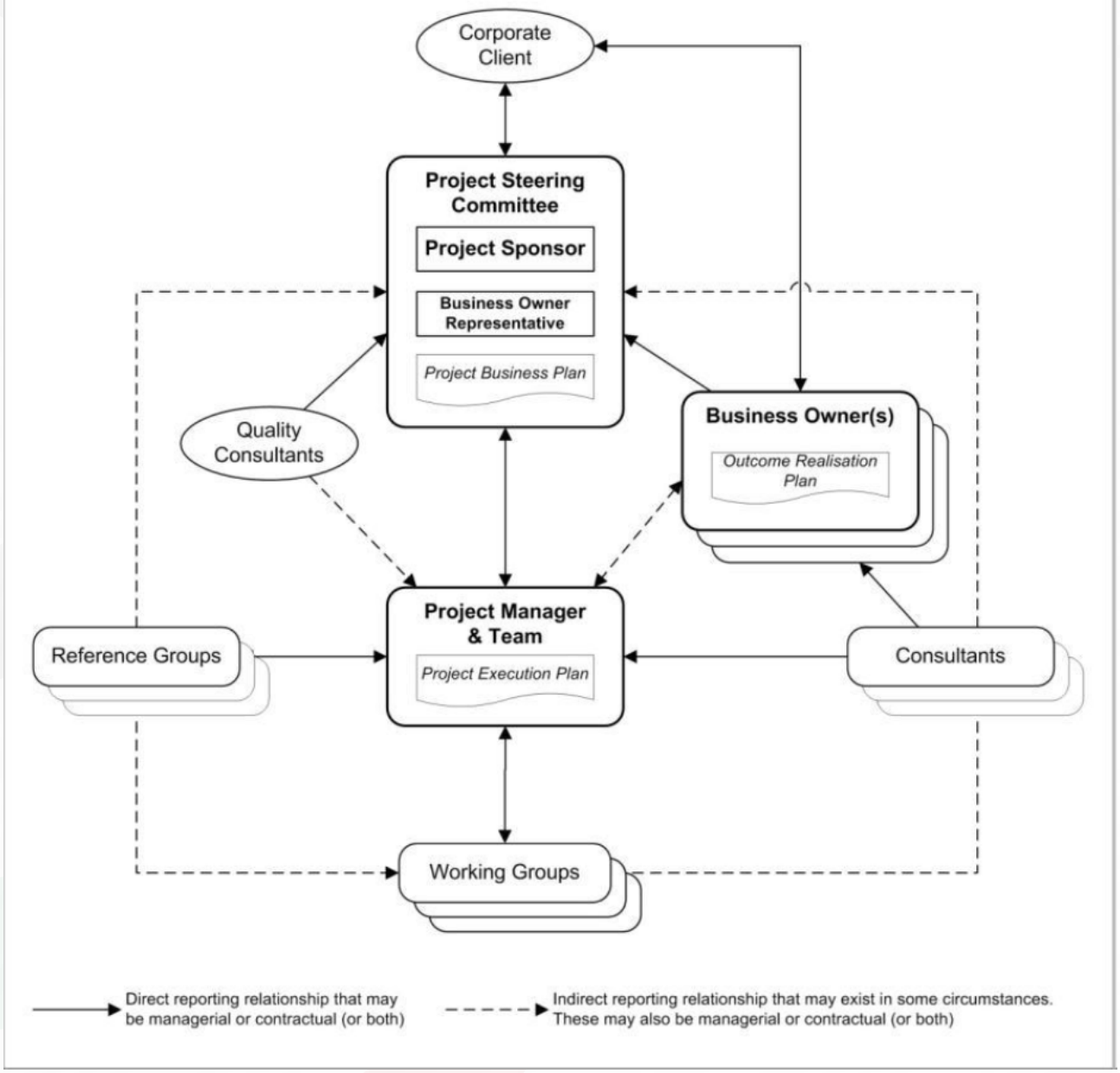
PHASE	KEY DOCUMENTS	OTHER DOCUMENTS	PROFORMAS
INITIATE	Project Proposal Feasibility Study Report Project Business Case	Business Needs Analysis Project Brief	
MANAGE	Project Business Plan Project Execution Plan Project Review and Evaluation Report Project Phase Review Report	Risk Management Plan Stakeholder 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	Handover Plan Project Output Management Plan	

APPENDIX 6: PROJECT DOCUMENTATION DEVELOPMENT



APPENDIX 7: A GENERIC PROJECT GOVERNANCE MODEL FOR LARGER, MORE COMPLEX PROJECTS

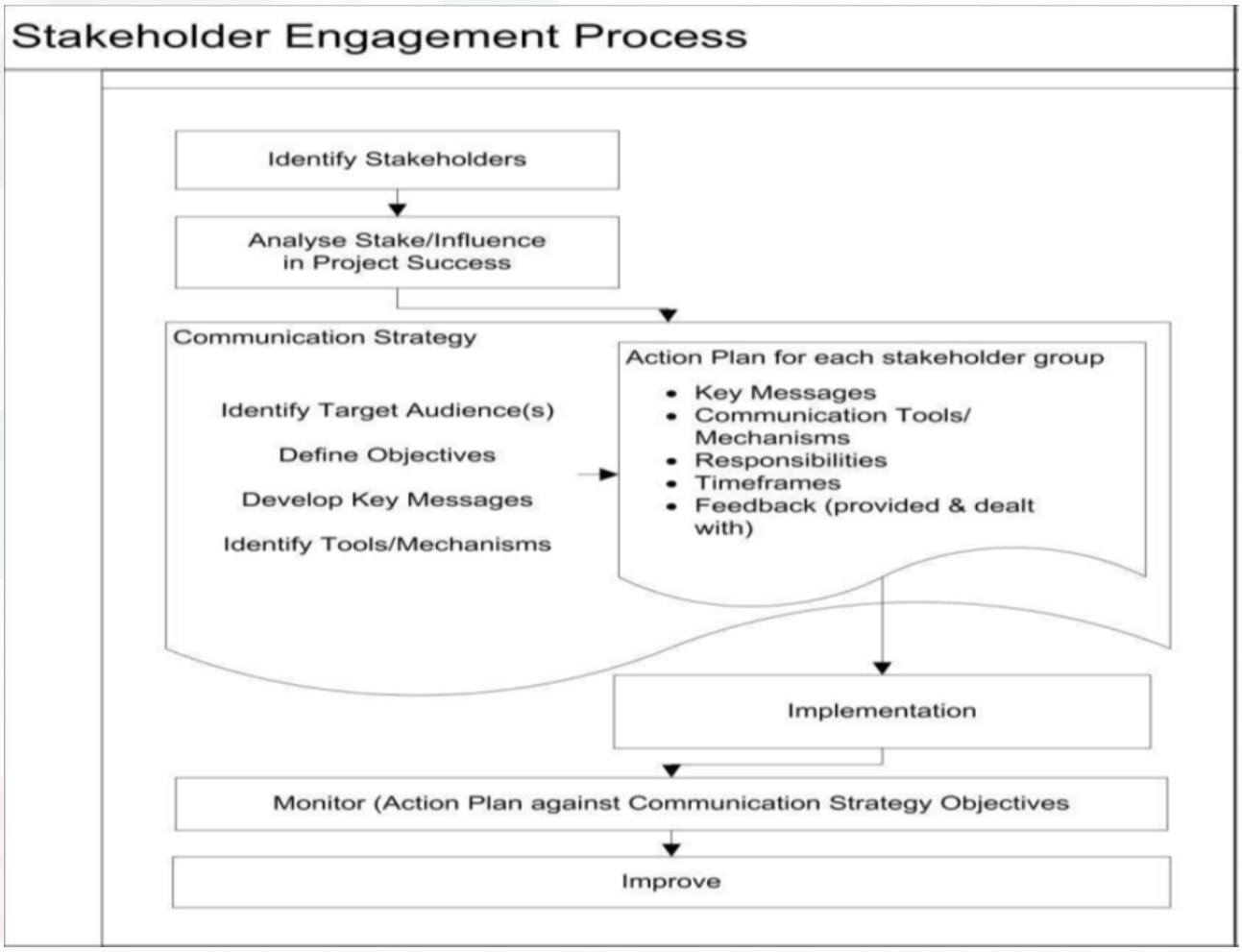
Generic Project Governance Model for larger and more complex projects



APPENDIX 8: SAMPLE OUTCOME REALIZATION DATA FOR THE PROJECT BUSINESS PLAN

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)	A description of the type of change that will indicate performance towards the achievement of the Target Outcomes	The actual	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?

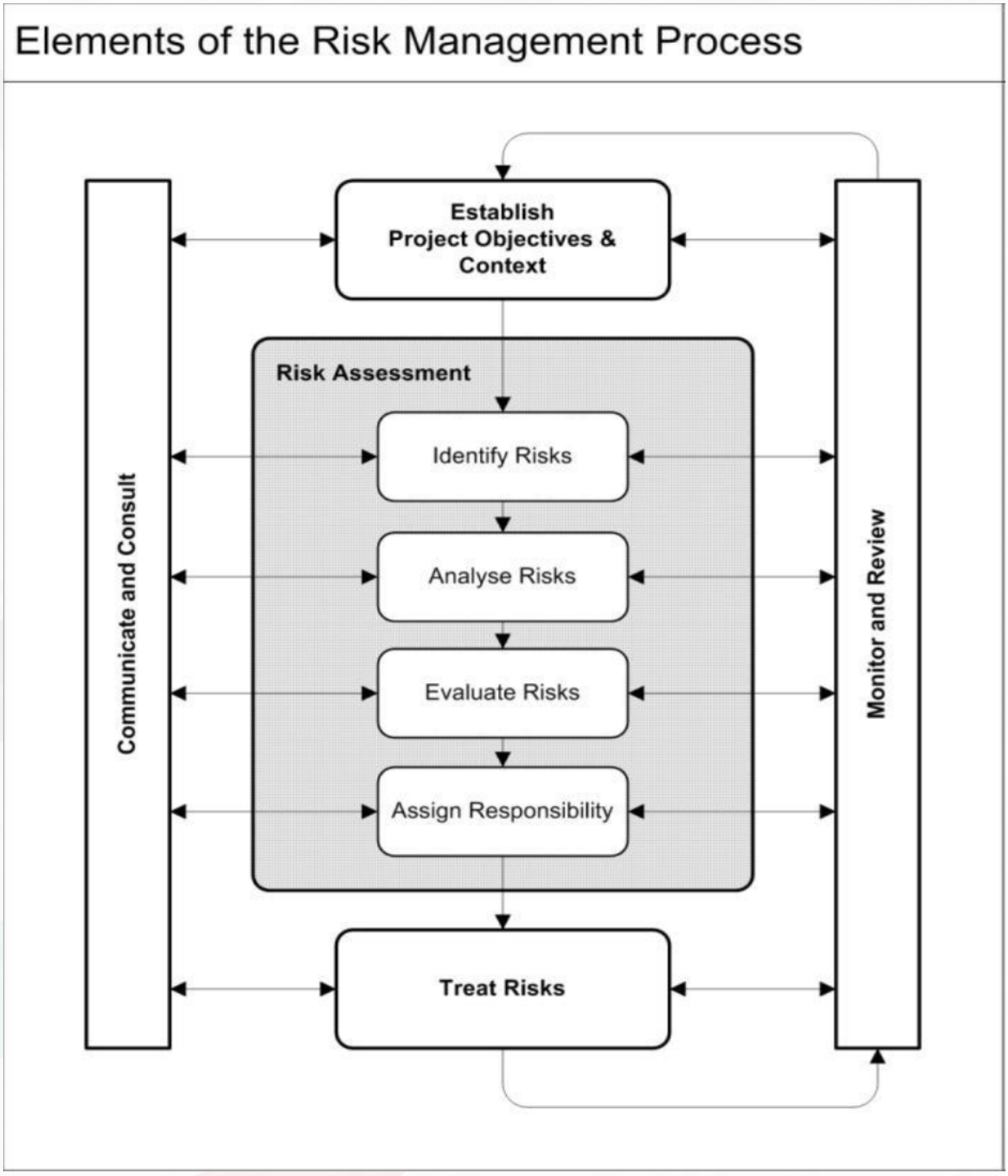
APPENDIX 9: STAKEHOLDER ENGAGEMENT PROCESS



APPENDIX 10: STAKEHOLDER COMMUNICATION CHANNELS

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

APPENDIX 11: ELEMENTS OF THE RISK MANAGEMENT PROCESS



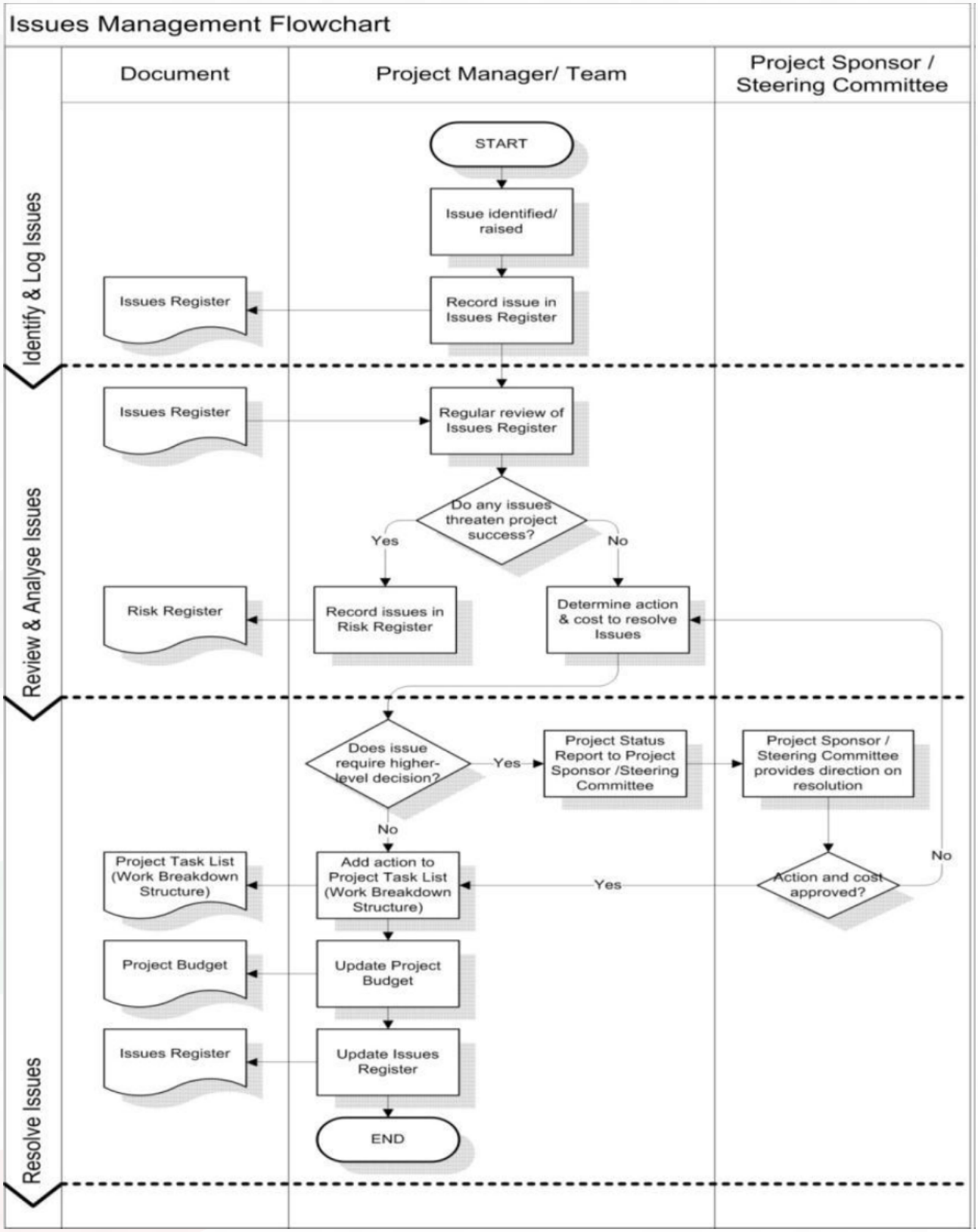
APPENDIX 12: RISK MATRIX FOR GRADING RISKS

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	C	Extreme
	Medium (May occur at some stage in project)	D	C	B	Extreme
	High (Probably will occur during project)	C	B	A	Extreme

APPENDIX 13: RECOMMENDED ACTIONS FOR GRADES OF RISK

Grade	Risk Mitigation Actions	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
B	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 unless grading increases over time.	Project Manager

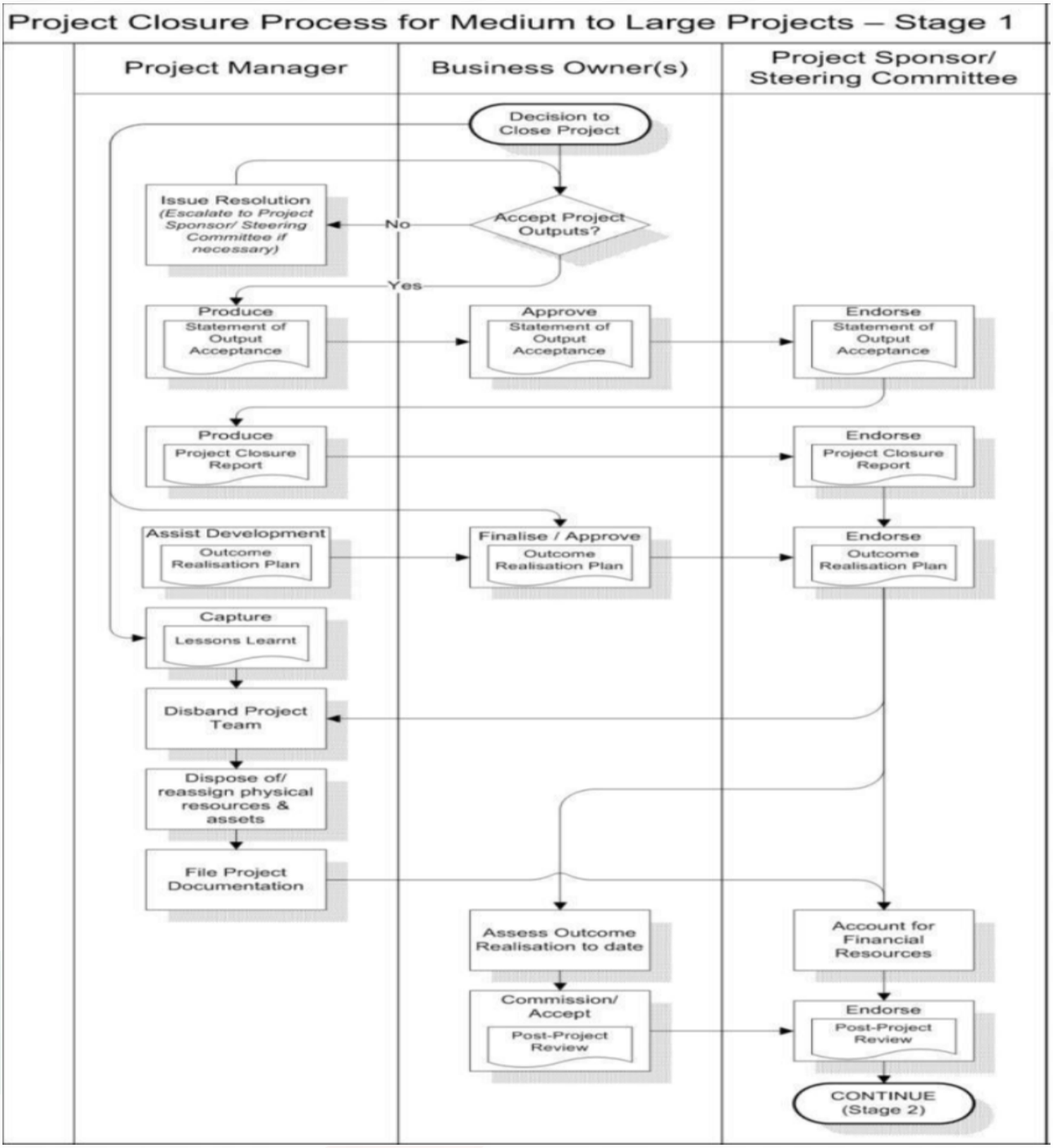
APPENDIX 14: ISSUE MANAGEMENT FLOWCHART



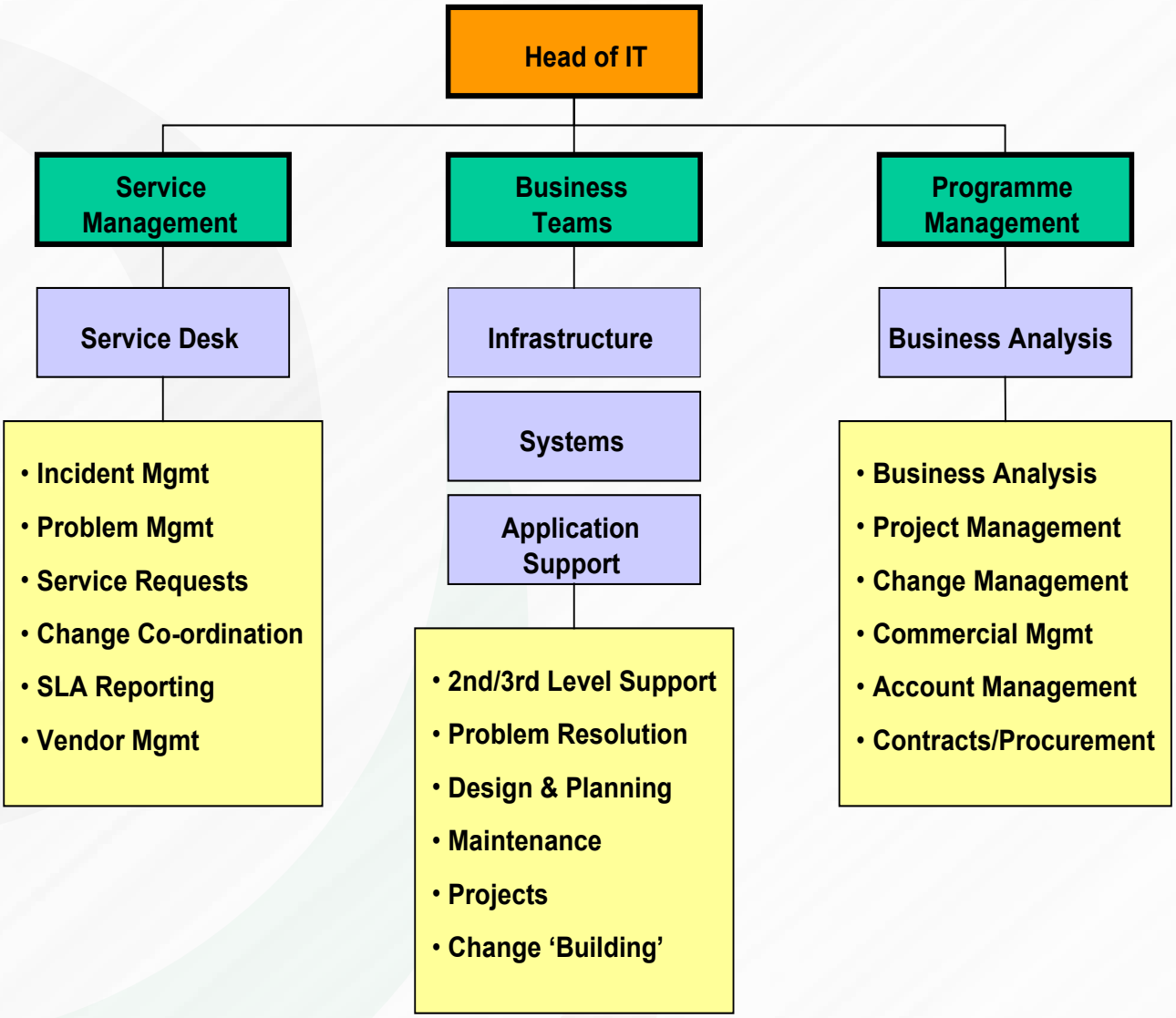
APPENDIX 15: SAMPLE PROJECT ISSUES REGISTER

Issue 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 reminder via email to the project	Open	
1.3	How to show links between PM documents	Project Team member	10/09/22	Medium Medium	Senior Project Officer	Matrix to be developed and published	Closed	30/11/22

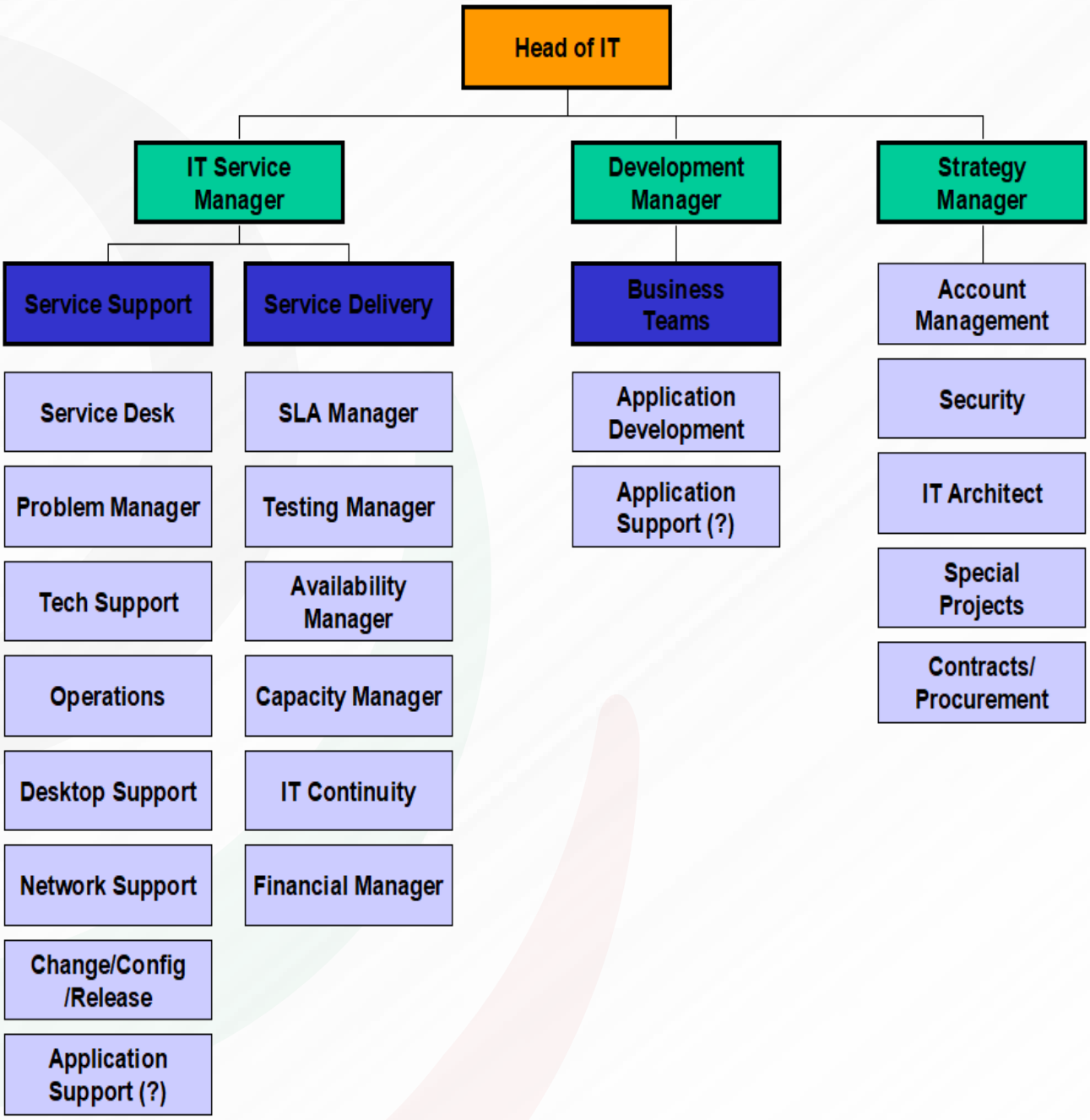
APPENDIX 16: PROJECT CLOSURE



APPENDIX 17: SAMPLE SERVICE MANAGEMENT STRUCTURE (ITIL) FOR SMALL ORGANIZATIONS



APPENDIX 18: SAMPLE SERVICE MANAGEMENT STRUCTURE (ITIL) FOR LARGE ORGANIZATIONS



APPENDIX 19: SERVICE DESK 1ST, LEVEL, 2ND LEVEL AND 3RD LEVEL SUPPORT DEFINITIONS

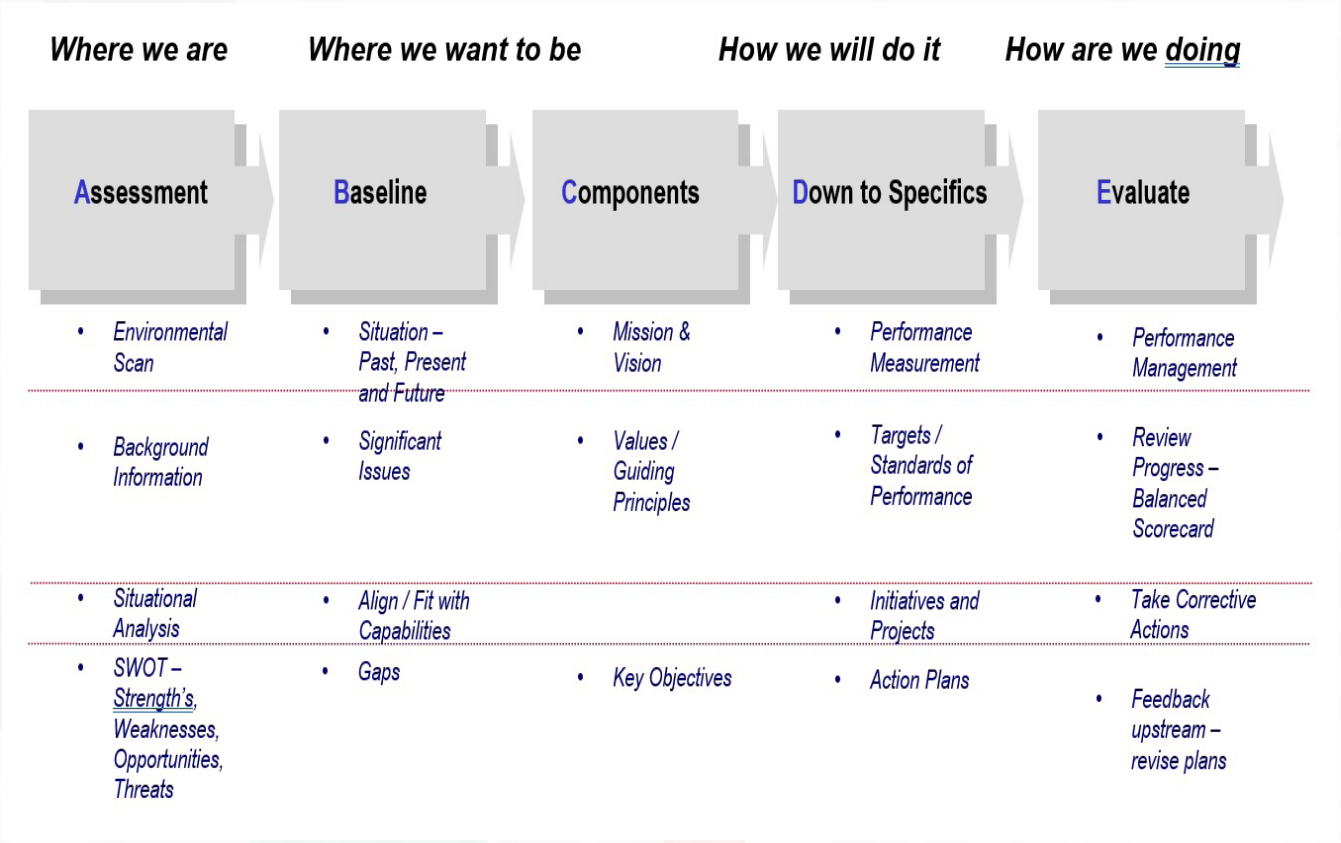
GENERAL DEFINTIONS	
First Level Support	• Dedicated and managed Support area/telephone access • Routine call and incident taking, logging and classification • Initial fast resolutions to Routine Incidents – e.g. password resets • Short term support to keep lines open and provide access to IT • Calls 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

APPENDIX 20: SAMPLE ICT STRATEGY FORMAT

ICT STRATEGY FORMAT & TEMPLATE

STRATEGIC PLAN FORMAT and TEMPLATE

Strategy Development Process



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

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

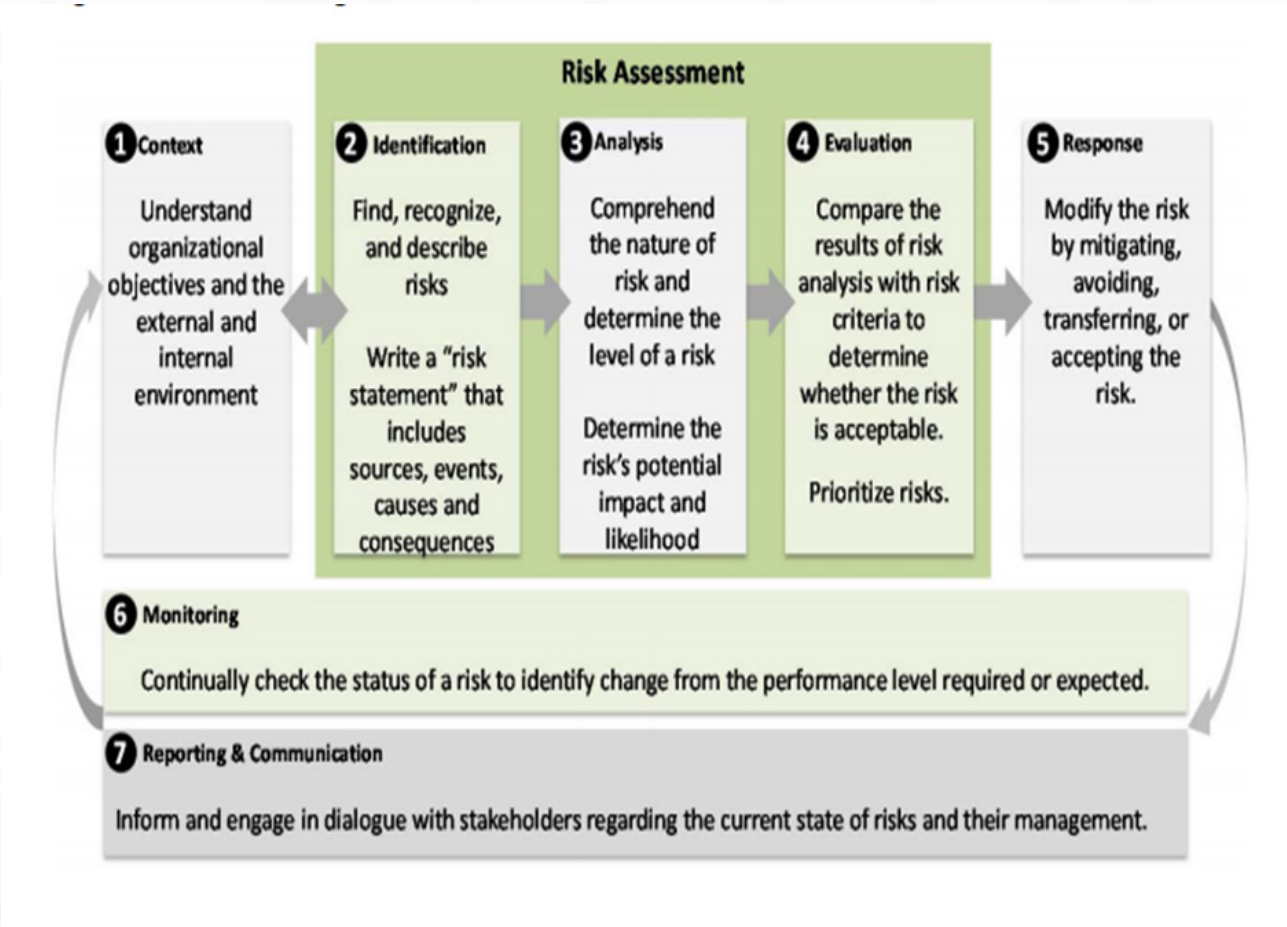
Facilities/ equipment

Summary: (include a 5 by 5-year timeline towards 2030

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

INVESTORS	PROVIDERS	CONTROLLERS
Define who is accountable • Obtain internal or external assurance as required that issues have been addressed and controls established • Monitor and evaluate compliance programmes and significant commercial contracts • Sign off specific compliance programmes • Provide approvals when required for significant legal or regulatory decisions	ongoing good control of legal and regulatory requirements • Exploit technology and tools where appropriate for ensuring compliance (e.g. asset registers) • Execution of compliance and contractual processes, and operation of elated controls • Provide compliance framework to ensure a sustainable "business as usual" approach to compliance • Provide evidence of 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 providers, and subcontractors are involved properly and integrated within the overall compliance approach	• Monitor the business and IT functions for performance in meeting legal and regulatory requirements and report back to management with advice regarding any shortcomings • Provide independent assurance to management that adequate controls are in place to deal with legal and regulatory requirements

APPENDIX 21: RISK MANAGEMENT PROCESS



APPENDIX 22: ACCREDITATION OF ICT SERVICE PROVIDERS

A. REGISTRATION

i. An application for registration as a contractor/supplier shall be made online through the accreditation portal https://accreditation.icta.go.ke/and user shall create their profile using the following information as well as attaching supporting documents:

a. Company documents
b. Company profile
c. Certified copies of the identity documents of the principal or principals of the firm;
d. Certificate of incorporation
e. Certificate of partnership, where applicable
f. Certified copies of the shareholders' certificates of the company;
g. In the case of a trust, a copy of trust deed
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. Business permit
j. KRA compliance certificate
k. Relevant compliance certificate
l. 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.
m. Staff qualification
n. CVs, IT related university certificate, project management certificate national id copies and KRA pin for all of all directors
o. CVs, IT related degree, professional certifications, certification in project management for all technical staff
p.Company experience in the area of specialization
q. LPOs, LSOs, and Contracts
r. Financial status
s. Certified bank statements and audited accounts for the past three (3) years;
t. For foreign contractor - Sufficient proof of financial capability of the contractor

ii. ICT suppliers shall also be required to adhere to the following code of conduct

a. Ensure government receives competent professional services.
b. Enhance the professional development of its staff.
c. Respect the confidentiality of any information given by government institutions
d. Enhance integrity in the delivery of products and services to government institutions
e. Comply with all government of Kenya laws and regulations.
f. Protect and respect third-party intellectual property and utilize it only after having properly secured rights to its use.

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

iv. The Authority shall make a decision on an application by a person or firm within five working days of receivingsuch 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.

v. A register of registered contractors shall be kept.

vi. 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.

vii. 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.

viii. 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.

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

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

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

xii. 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.

xiii. Application for renewal of the license shall be submitted online to the Authority at least thirty days before the expiry of such license.

xiv. In each year during which a contractor holds a license, thecontractor or, in the case of a firm or company; thepartner whopossesses technicalqualifications, skills or experience shall attend at least one Continuous Professional Development eventrecognized by the Authority and the Authority shallconsider the attendanceswhile determining anapplication to renew or upgrade the Contractor.

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

xvi. The Authority shall publish list of contractors with valid licenses.

SCHEDULE A. Enforcement

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

ii. The Authority may remove thename of the firm or a contractor from the register of contractors if the contractor has been debarred from participating in a procurementprocess underanylegislation or received written complaints from any government agency in regards to the contractors' performance;

iii. The registration of a contractor shall be suspende after investigations into his conduct have been concludedandit is establishedthat the contractor has engagedin misconduct.

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

v. The Authorityshallconductan inquiry in to the conduct or thecontractor before removing thename of the contractor from the register.

SCHEDULE B. Accreditation Scoring Criteria

REFERENCE	PARTICULARS	SPECIFIC ITEMS	SCORE MATRIX	MAXIMUM SCORE	AWARDED SCORE
A	General	Business registration and permit [7 marks]	Business permit	5 marks	
			Relevant compliance certificates (Government, Manufacturer) as per category	2 marks	
B	Technical Directors' Qualification and work experience.	Technical Director [4 marks]	Degree (at least BSc in Computer Science, IT or related)	1 marks	
	Experience		Work Experience in (3) similar assignments, 1 Mark per assignment	3 marks	

	Points	Registration / Renewal Fee (KES.)	
ICTA 1	85 – 100	30,000	
ICTA 2	75 – 84	25,000	
ICTA 3	65 – 74	20,000	
ICTA 4	55 – 64	15,000	
ICTA 5	45 – 54	12,000	
ICTA 6	35 – 44	10,000	
ICTA 7	25 – 34	5,000	

FOREIGN CONTRACTOR		
ICTA 1		75,000
ICTA 2		
ICTA 3		
ICTA 4		
ICTA 5		
ICTA 6		
ICTA 7		
ICTA 8		
TOTAL		

REFERENCE	PARTICULARS	SPECIFIC ITEMS	SCORE MATRIX	MAXIMUM SCORE	AWARDED SCORE
C	Staff qualification	Technical staff in specialized area [27 marks]	Technical project team – at least 5 persons (2 marks per staff) Scoring is based on the following. Degree (at least BSc Computer Science, /IT or related(2 marks per staff) Diploma in IT or related (1mk per staff)	10 marks	

REFERENCE	PARTICULARS	SPECIFIC ITEMS	SCORE MATRIX	MAXIMUM SCORE	AWARDED SCORE
C			Relevant professional certification (1 mark per staff)	5 marks	
			Work experience in 2 similar assignments per staff (maximum of 2 marks for each staff)	10 marks	
			Certification in project management (any staff)	2 marks	
D	Company experience	Details of projects undertaken in area of specialization (max 5 projects) [25 marks]	Demonstrable capacity at company level by providing evidence of 5 relevant projects carried out for the last 5 years, evidenced by copy of purchase order or contract and contact details, job completion certificates/ Client testimonials/ contracts (25 marks)	25 marks	

REFERENCE	PARTICULARS	SPECIFIC ITEMS	SCORE MATRIX	MAXIMUM SCORE	AWARDED SCORE
			5 marks for each projects carried out in Kenyan government institutions or 3 marks for each project carried out in private organizations		
		Largest projects in area of Specialization for the last 5 years [10 marks]	Project cost value (KES) Over 50m (10 marks) 5 – 50m (7 marks) 1 – 5m (4 marks) Below 1m (1 mark)	10 Marks	
E	Financial status	Turnover in KES [15 marks]	High turnover (Over 50m) (15 marks) Average turnover (5-50m) (10 marks) Low turnover (below 5m) (5 marks)	15 Marks	
		Cash flow in KES [12 marks]	• Over 50m (12 marks) • 5 – 50m (8 marks) • 1 – 5m (4 marks) • Below 1m (1 mark)	12 marks	
	TOTAL			**100 Marks**	

APPENDIX 23: 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:

a. 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.

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

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

d. Perform services only in areas of their competence

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

f. 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

a. Register and create your profile on the ICT professionals accreditation portal: https://professionals.icta.go.ke/
b. Check if you meet the criteria below for the registration category you wish to apply for, select the category and submit the application.

i. ICT Technician requirements

- Diploma certificate in ICT/Engineering related field from accredited institution of learning with proof of two years' experience practicing ICT;
- Copy of National ID/Passport.
- Application fee: Kshs. 600
- Annual subscription: Kshs.500

ii. ICT Graduate requirements

- Graduate certificate in ICT/Engineering related field from accredited institution of higher learning
- Copy of National ID/Passport.
- Application fee: Kshs. 1000
- Annual subscription: Kshs.1000

iii. ICT Practitioner requirements

- Proof to show that the applicant has been practicing ICT either through employment or private engagement for at least 2 years.
- Copy of National ID/Passport
- Application fee: Kshs. 5000
- Annual subscription: Kshs.1000

iv. ICT Professional Requirements

- Graduate certificate in ICT/Engineering related field from accredited institution ofHigher learning or A Copy of the Registration Certificate for either ICT Graduate/Practitioner from ICTA.
- Professional Certificate in the specific area from recognized institution by ICTA/government body
- Letters of reference from employer(s) covering the previous two years confirming professional integrity
- Statements of two referees detailing their knowledge of the applicant.
- Application fee: Kshs. 5000
- Annual subscription: Kshs.3000

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

Step 2: Assessment Evaluation

ICT Authority will conduct an evaluation of the application to make the decision on whether the application is successful or not. The applicant will be notified within 5 days of the application on the evaluation decision. The ICT Authority may contact individual's referees to ascertain the information filled in the applicant's application form.

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 24: GOVERNMENT ICT PROJECT GOVERNANCE STRUCTURES

A. National ICT Project Governance Structures

	Name of Committee.	Membership	Terms of Reference
1.	The ICT Oversight Committee	His Excellency the President –Chair Members Cabinet Secretary-; Ministry of LandHousing & 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	Champion Implementation of Key Projects 2. Monitor and Evaluation Projects and take necessary action for the success of the project. 3. Prepare and report Projects status to oversight Committee 4. Resolve inter-ministerial Project challenges. 5. Receive and review quarterly reports from Project Implementation and Monitoring Committee. Co-opt the ministry that own the key project(s)

	Name of Committee.	Membership	Terms of Reference
			Appointing Authority: H.E.The President Meetings: Quarterly

B. Ministries, Agencies and Counties

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 concepts and implementation plans Resolve project challenges to ensure smooth implementation Review and approve project 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
Project owner	The user of the system	
Chair of Technical committee	This is the person who is responsible for the implementation of the system. [Head of ICT]	

Project owner Project Management Office	Project Manager ICT Authority	

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

ICT Authority
Telposta Towers, 12th Floor, Kenyatta Ave
P.O. Box 27150 - 00100 Nairobi, Kenya
t: + 254-020-2211960/62
Email: info@ict.go.ke or communications@ict.go.ke or standards@ict.go.ke
Visit: www.icta.go.ke
Become a fan: www.facebook.com/ICTAuthorityKE
Follow us on twitter: @ICTAuthorityKE


ICT
Authority