



# **NATIONAL ENVIRONMENT TRUST FUND (NETFUND)**

## **INFORMATION AND COMMUNICATION TECHNOLOGY STRATEGY**

Version 1.0

2026

## FOREWORD

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Access to Information and communication technology (ICT) is crucial for socio-economic growth. ICT offers a powerful tool that, if deployed equitably, can ensure citizens are empowered and NETFUND can deliver services more efficiently and effectively by ensuring proper utilization of resources.

NETFUND's ICT Strategy 2026-2029 is aligned to the Kenya Vision 2030, National ICT Policy 2019, ICTA Standards, the Kenya Cybersecurity Strategy 2022, NETFUND's Strategic Plan 2023-2027, NETFUND's ICT Policy and other relevant policy documents. This Strategy will help to create an enabling policy, legal and regulatory environment and increase the productivity, efficiency and effectiveness of NETFUND's service delivery.

NETFUND will partner with stakeholders and partners within the public and private sector to implement the variety of the planned projects and activities.

I urge NETFUND's management, staff and stakeholders to be committed and to play their critical role to ensure successful implementation of this ICT Strategic Plan towards realization of the Fund's goals and objectives.

**Hon. David Mwaure Waihiga**

**Chair, NETFUND Board of Trustees**

## PREFACE AND ACKNOWLEDGEMENT

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The development of the ICT Strategy was initiated by the department of Corporate Communications & ICT after the development of the ICT policy. It is envisaged that the development of the Strategy will align to NETFUND's Strategic Plan and comply with the overall Government ICT Strategy. The ICT Strategy 2026-2029 is aligned to the Kenya Vision 2030, National ICT Policy 2019, ICTA Standards, the Cybersecurity Strategy 2022, NETFUND's Strategic Plan 2023-2027, NETFUND's ICT Policy and the National ICT Master Plan.

Its execution is expected to steer NETFUND further by building ICT capacity with a view of delivering NETFUND's mandate and ensure Kenya embarks on the journey towards a more sustainable and resilient future, working together to protect and preserve our natural world. The process was consultative and inclusive, allowing staff to think together and articulate objectives and strategies that would enable NETFUND to deliver its overall goals and objectives.

We therefore would like to thank all those staff who participated in the development of this ICT Strategy and who also contributed invaluable in diverse ways. NETFUND is committed to instituting appropriate interventions and mobilization of the necessary resources to facilitate the implementation of this Strategic Plan.

**Samson Toniok**

**Chief Executive Officer**

## ACRONYMS AND ABBREVIATIONS

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|          |                                                                        |
|----------|------------------------------------------------------------------------|
| ERP      | Enterprise Resource Planning                                           |
| GOK      | Government of Kenya                                                    |
| HR       | Human Resource                                                         |
| ICT      | Information & Communications Technology                                |
| ICTA     | Information Communications Technology Authority                        |
| IS       | Information Systems                                                    |
| IT       | Information Technology                                                 |
| ICTSP    | Information and Communications Technology Strategic Plan               |
| ISMS     | Information Security Management System                                 |
| KM       | Knowledge Management                                                   |
| LAN      | Local Area Network                                                     |
| MIS      | Management Information Systems                                         |
| NETFUND  | National Environment Trust Fund                                        |
| NOS      | Network Operating System                                               |
| P-PESTEL | Policy-Political Economic Social Technological Environmental and Legal |
| SLA      | Service Level Agreement                                                |
| WAN      | Wide Area Network                                                      |
| SWOT     | Strengths, Weaknesses, Opportunities and Threats                       |
| UPS      | Uninterrupted power supply                                             |
| HQ       | Headquarters                                                           |
| DLP      | Digital Learning Program                                               |
| IPPD     | Integrated Payroll and Personnel Database                              |
| NEMA     | National Environment Management Authority                              |
| IFMIS    | Integrated Financial Management and Information System                 |

## GLOSSARY OF TERMS

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**Malware** - Malicious software that have been designed to spy on which sites you are visiting without you knowing in order to target adverts towards you.

**Server** - A networked computer that is providing a specific service to other computers on the network.

**Authorized User** – person who has been given authority or official power to use, access operate ICT resources.

**Capacity Building** – the process of developing and strengthening the skills, instincts, abilities, processes and resources that an organization will need to operate effectively and adapt to fast-changing world.

**Collaboration** - working with other entities to achieve desired goals.

**Cybersecurity** – the body of technologies, processes and practices designed to protect networks, computers, programs and data from attack, damage or unauthorized access.

**Data Centre** - is a repository that houses computing facilities like servers, routers, switches and firewalls, as well as supporting components like backup equipment, fire suppression facilities and air conditioning.

**E-Government** - the use of information and communication technologies (ICTs) to improve service delivery of public sector organizations.

**E-Waste** - electronic products that have become unwanted, non-working or obsolete, and have essentially reached the end of their useful life.

**Hardware** - collection of physical parts of a computer system.

**Information System** – a combination of hardware, software, infrastructure and trained personnel organized to facilitate planning, control, coordination, and decision making in an organization.

**ICT Governance** - is a formal framework that provides a structure for organizations to ensure that ICT investments support business objectives.

**ICT Register** - An ICT asset register is a list of the ICT hardware and software owned by an organisation.

**Local Area Network** - Is a computer network that interconnects a group of computers and associated devices within a limited area.

**Ubiquitous** - Existing everywhere, or seeming to exist everywhere; used in phrases such as "ubiquitous computing" to designate something that seems to have become so popular it can be found anywhere and everywhere.

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## 1.0 THE INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) FUNCTION

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### 1.1 The Mandate of ICT Department

The ICT Department is charged with the role of providing ICT resources and support for NETFUND's programs, maintenance of ICT systems, developing and implementing appropriate ICT policies as well as formulation and implementation of NETFUND's ICT strategy in line with the Fund's vision and mission.

### 1.2 Functions of ICT Department

The department carries out the following functions to ensure NETFUND meets its objectives;

- 1) Management of information systems and services to support NETFUND's functions.
- 2) Delivery of quality ICT services to all NETFUND staff and stakeholders.
- 3) Provision of responsive and reliable ICT Infrastructure to support NETFUND's functions.
- 4) Monitoring the use of ICT services within NETFUND and ensuring adherence to the set ICT policy.
- 5) Management of outsourced ICT services and proactively limiting downtime of ICT services within NETFUND.
- 6) Resolving reported ICT issues within the set timelines and turn-around-times.
- 7) Developing and implementing appropriate ICT policies, procedures and standards.
- 8) Ensuring implementation of NETFUND's ICT strategy in line with its mandate.
- 9) Creation of awareness on emerging technologies and ICT issues to members of staff.

### 1.3 ICT VISION AND MISSION

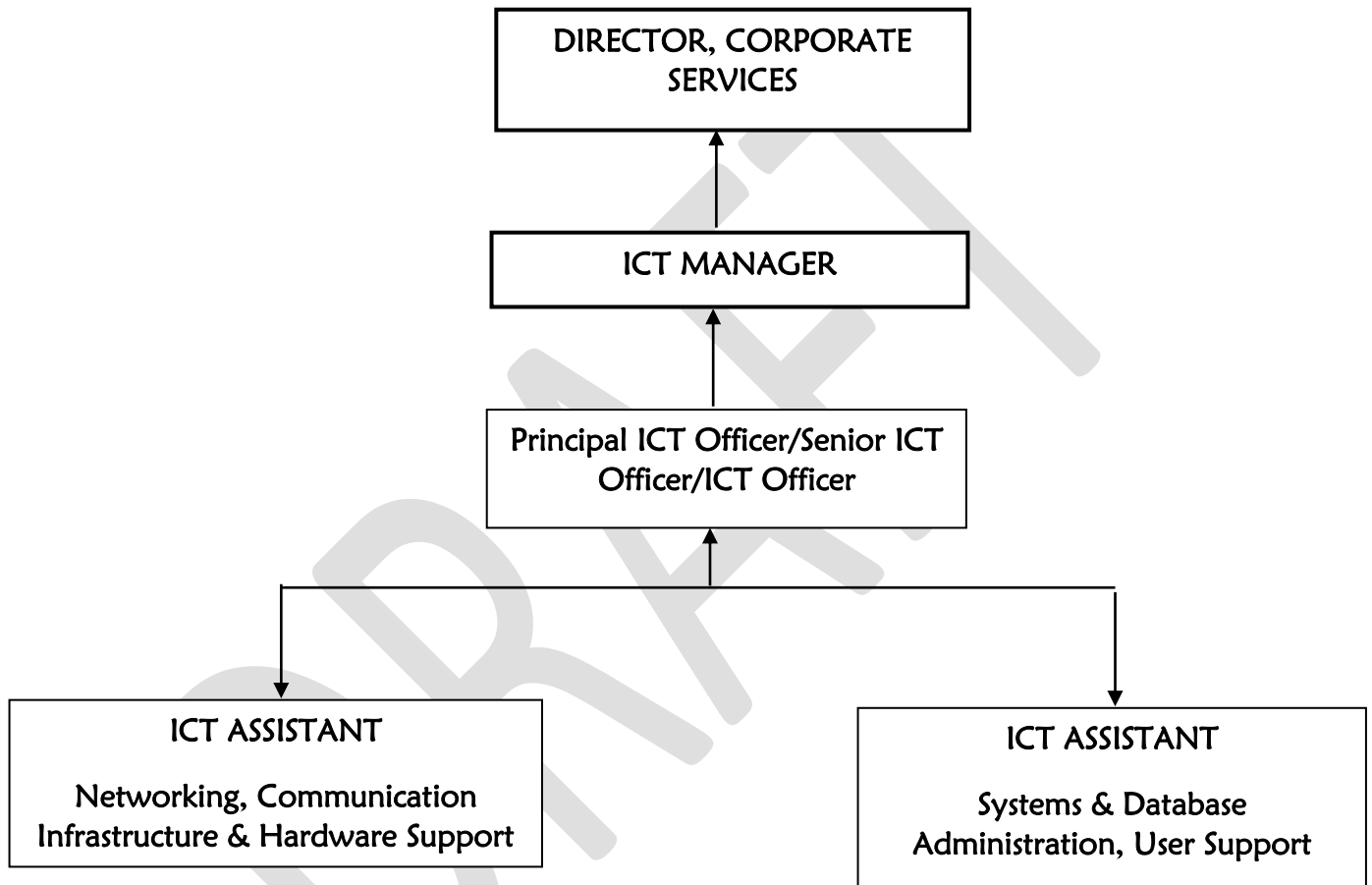
#### 1.3.1 Vision

Cutting edge ICT environment to enable sustainable financing for environmental governance and sustainable development in Kenya.

### 1.3.2 Mission

To develop, deploy and optimize the use of ICT to improve service delivery in executing NETFUND's mandate.

### 1.3.3 Proposed ICT Department Organogram



## ICT STRATEGY DEVELOPMENT PROCESS

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A collaborative approach was undertaken to identify the key and unique NETFUND's requirements and to ensure that the ICT strategy addresses these needs. A multi-faceted approach was used to develop this ICT Strategy which involved the following steps:

1. Situational analysis of NETFUND's ICT environment;
2. Review of key policy and regulatory documents;
3. Drafting of the ICT Strategy;
4. Review by the Management and NETFUND's key stakeholders
5. Approval by the Board of Trustees

## 2.0 SITUATIONAL ANALYSIS

### 2.1 Introduction

This Section endeavours to assess the environment in which the ICT function in NETFUND performs. The purpose is to identify and establish the potential opportunities that the department could leverage on for increased efficiency as well as the threats that could compromise value addition of the department. This scanning of both the internal and external environments is conducted through the various tools including the SWOT, PESTEL and stakeholders' analyses. The analyses are important in understanding the relevant current and possible future forces that could affect the ICT department.

### 2.2 Stakeholder Analysis

In executing this strategy, the department responsible for ICT will engage many stakeholders of varied influence, contribution, impact and priority. Full identification and correct classification of the stakeholders is critical to ensuring the right information, involvement and participation for buy-in, support and ownership of the strategy. This in turn ensures smooth and seamless engagement for successful implementation of the plan. Failure to identify and involve any stakeholders may render futile the whole strategy preparation and execution as they may have strong influence on the organization.

The table below shows the stakeholders and their impact on the ICT strategy

| Category of Stakeholders | Stakeholders                            | Influence/Relationship/Impact                                                                                                                                     |
|--------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NETFUND                  | Board of Trustees                       | Oversight, approve and ratify the strategy                                                                                                                        |
|                          | CEO                                     | Leadership and championship                                                                                                                                       |
|                          | Departmental Heads                      | ICT Service owners, Support automation processes and ICT policies enforcement within departments                                                                  |
|                          | ICT Staff                               | Support internal stakeholders<br><br>Monitor ICT Strategy implementation and execution                                                                            |
|                          | NETFUND staff                           | Support of ICT services development and optimization of use of systems and application; feedback on systems performance                                           |
| National Government      | The National treasury                   | Budgetary and financial support                                                                                                                                   |
|                          | Ministry of ICT                         | ICT legislation and regulation                                                                                                                                    |
|                          | ICT Authority                           | Support the department in ICT strategy, standards and policies formulation and development<br><br>Interfacial and liaison services to national ICT infrastructure |
| ICT Industry             | Internet Service Providers              | Provide internet services                                                                                                                                         |
|                          | Telephone service providers             | Telephony, value-added and application services                                                                                                                   |
|                          | Data services providers                 | Connectivity and hosting services                                                                                                                                 |
|                          | Technology integrators                  | Solution deployment and support service                                                                                                                           |
|                          | Technology manufacturers and developers | Technology trends and progression; market influences and implications                                                                                             |
| Clients                  | Public Enterprises                      | Interested parties to NETFUND information                                                                                                                         |

## 2.3 SWOT Analysis

A Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis of the ICT department reveals some infrastructural and resources strengths as well as inherent weaknesses. In addition, opportunities that the department could ride on in the course of executing this plan were identified for the purpose of leverage. Further, in order for the department to set up measures to mitigate possible threats in the operational environment, the strategy endeavours to identify these threats. In addition, a strategy for identifying potential risks as well as mitigation measures will be deployed as part of strategy implementation process. The table below provides the findings of the SWOT process.

| Strengths                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Weaknesses                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• Existence of a legal framework<ul style="list-style-type: none"><li>✓ Kenya constitution 2010 chapter 2 and 4</li><li>✓ Kenya information and communication Act of 2013</li><li>✓ Computer misuse and cybercrime act of 2018</li><li>✓ National ICT policy of 2019</li></ul></li><li>• NETFUND strategic plan recognizes ICT as a key component for service delivery</li><li>• Adherence ICTA standards</li><li>• ICT staff competency</li><li>• Basic technology infrastructure</li><li>• Adequate internet bandwidth</li><li>• Board and management support</li></ul> | <ul style="list-style-type: none"><li>• Legacy and inadequate ICT infrastructure</li><li>• Inadequate ICT capacity and training initiatives</li><li>• Inadequate ICT resources</li></ul> |

| Opportunities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Threats                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Increased collaboration with other institutions including ICT Authority.</li> <li>• National ICT Policy and Master plan</li> <li>• Robust ICT systems in the market</li> <li>• A vibrant ICT skill set in the market</li> <li>• Ubiquitous national ICT infrastructure</li> <li>• A liberalized competitive ICT sector</li> <li>• A supportive policy and legal framework</li> <li>• ICT leveraged in education</li> <li>• Increase affordability of ICT equipment, training and services</li> <li>• ICT embraced in the economy</li> <li>• A growing local software development industry</li> </ul> | <ul style="list-style-type: none"> <li>• Rapid change and obsolescence in technologies and costs</li> <li>• Cyber security breaches and Cybercrime</li> <li>• Unsustainable software licensing regime</li> <li>• Counterfeit software and hardware</li> <li>• Lack of a professional body to regulate and formalize the ICT industry</li> <li>• High ICT solution adoption costs</li> </ul> |

## 2.4 PESTEL Analysis

This ICT strategic plan will be implemented within particular constraints in the institutional and national scene that could both facilitate its success as well as impede achievement of the set goals and objectives.

The trends in the operating environment that could either be Policy, Political, Economic, Social, Technological, Environmental or Legal in nature that could have positive or adverse effects on successful implementation of the ICT strategy.

The table below identifies these trends and posits actions for building synergy or mitigations to address the issue or reduce its impact to the plan.

| ISSUE     | TRENDS                                                                                                                                                                                                                                                                                                                                                                   |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| POLICY    | <ul style="list-style-type: none"> <li>• Existence of National ICT policy and Digital Master plan</li> <li>• Existence of Acts on ICT including; Kenya Information and Communication Amendment Act 2013 and Computer misuse and Cyber Crime Act 2018.</li> <li>• Government policy on ICT Procurement</li> <li>• ICTA standards</li> <li>• NETFUND ICT policy</li> </ul> |
| POLITICAL | <ul style="list-style-type: none"> <li>• Government embracement of ICT</li> <li>• Commitment to the digital agenda</li> <li>• Government key initiatives including; Huduma Centres, Presidential Digital Talent Program, Digital Literacy Program, Integrated Financial Management Information Systems (IFMIS), National Payment Gateway etc.</li> </ul>                 |
| ECONOMIC  | <ul style="list-style-type: none"> <li>• Austerity measures that conflict institutional plan causing disruption of planned projects e.g. aggregated procurement of ICT goods and services.</li> <li>• Inadequate resource allocation</li> </ul>                                                                                                                          |
| SOCIAL    | <ul style="list-style-type: none"> <li>• Availability of Huduma Centres, e-citizen (National Payment Gateway), DLP (Laptops for schools), Online tax Payments (iTAX).</li> <li>• Initiatives that upscale use of ICT and increases reach and penetration.</li> </ul>                                                                                                     |

|              |                                                                                                                                                                                                                                                                                                                             |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TECHNOLOGY   | <ul style="list-style-type: none"> <li>Ubiquitous service technologies e.g. M-Banking, M-PESA, security Access Control, IPPD, affordable easy access to information.</li> <li>Ubiquity of ICT infrastructure</li> <li>Adoption and use of GIS</li> <li>A thriving mobile application market</li> </ul>                      |
| ENVIROMENTAL | <ul style="list-style-type: none"> <li>E-waste management guidelines by NEMA.</li> <li>Stakeholder awareness on environmental obligations</li> <li>Accumulation of e-waste as an environmental hazard</li> <li>Promotion of green technologies.</li> <li>Lack of proper regulations on importation of ICT goods.</li> </ul> |
| LEGAL        | <ul style="list-style-type: none"> <li>A number of ICT related legislations have been enacted</li> <li>Inadequate legal institutional framework</li> </ul>                                                                                                                                                                  |

## 2.5 Current Status of ICT Operations

Over time, NETFUND has made some considerable progress in regard to automation of various services. The table below highlights some of the areas covered alongside their implications:

| Area     | IMPLICATIONS TO NETFUND                                                                                                                                                                                                                 |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hardware | <ul style="list-style-type: none"> <li>Each staff has access to a desktop or laptop for effective delivery of their service mandate.</li> <li>There are servers that host Computing applications and Data Backup (Recovery).</li> </ul> |

|            |                                                                                                                                                                                                                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            |                                                                                                                                                                                                                                                                                                     |
| Print jobs | NETFUND has network printing and scan jobs. Network printing is the ability to send print jobs to a printer over the shared network, rather than connecting directly via USB. This allows multiple users to access the same printer from different devices, improving convenience and productivity. |
| Email      | NETFUND maintains an Outlook email system which is functional. Employees are able to relay official communication.                                                                                                                                                                                  |
| Website    | There is a functional website that is used as a channel of communication and collaboration.                                                                                                                                                                                                         |
| Backup     | There's a centralized mechanism for data backup and recovery.                                                                                                                                                                                                                                       |

## 2.6 Gap Analysis

Whereas the Fund has made significant trends in deploying and leveraging on ICT for service improvements and management of processes, there are still areas where there are inherent challenges. These include the following:

- i. Inadequate financial resources
- ii. Inadequate ICT personnel training on relevant emerging technologies.
- iii. Inadequate and obsolete technology infrastructure.

Further challenges are highlighted in the table below.

| ISSUE                                                                               | IMPLICATIONS TO NETFUND                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manual processes within departments                                                 | <ul style="list-style-type: none"> <li>• In-efficiencies and errors likely to arise due to ineffective manual interface during processing of financial transactions</li> <li>• Slow adoption of automated business processes.</li> </ul> |
| Lack of implementation of hardware retirement and replacement policy and guidelines | <ul style="list-style-type: none"> <li>• Inability to determine “End-of-Life” and continued use of outdated hardware equipment.</li> <li>• Runaway maintenance costs.</li> </ul>                                                         |

|                                   |                                                                                                                                                                                |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lack of Business Continuity Plan. | <ul style="list-style-type: none"> <li>Exposure to risk of system failures</li> </ul>                                                                                          |
| Inadequate System Documentation   | <ul style="list-style-type: none"> <li>Inability to fully utilize and exploit all the functionalities of the systems deployed.</li> <li>Lack of knowledge transfer.</li> </ul> |

### 2.7.1 Detailed Infrastructure Gap Analysis

The key challenge in the current infrastructure is the fact that the current hardware infrastructure is obsolete and has reached 'End of Life'. This is the date when a vendor stops delivering standard support services for a particular product. This includes technical support, hardware and software upgrades and support for new and known defects e.g. service packs and updates. This is a major risk to any organization's infrastructure.

Below are some of the repercussions of 'End of Life':

- I. No warranty on equipment
- II. Lack of technical support by the product vendors.
- III. Does not support current technologies e.g. storage and backup
- IV. Reliability and overall performance: old equipment are prone to failure

Table below gives a summary of the current infrastructure gaps at NETFUND:

| INFRASTRUCTURE | CONDITION                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LAN Cabling    | <ul style="list-style-type: none"> <li>Slow data transmission and switching</li> </ul>                                                                                                                                                                                                                                                                                                                                                        |
| Telephony      | <ul style="list-style-type: none"> <li>Analog i.e. POTS (Plain Old Telephone System)</li> <li>No collaboration tools e.g. teleconferencing capability</li> <li>Transmits less data at lower quality especially over long distances</li> <li>No phonebook or user identification</li> <li>No call mobility and flexibility</li> <li>No voicemail and voice messaging</li> <li>A lot of human interaction required for call handling</li> </ul> |
| Data Centre    | <ul style="list-style-type: none"> <li>Currently there's a server room serving as a data centre</li> </ul>                                                                                                                                                                                                                                                                                                                                    |

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                     | <ul style="list-style-type: none"> <li>• Prone to failure - single uplink, no redundancy and single powered servers (not hot pluggable)</li> <li>• No compartmentalized security (biometric access, CCTV)</li> <li>• No monitoring and reporting mechanism</li> <li>• No fire suppression system</li> <li>• Improper cabling and rack management</li> <li>• Minimal chance of recovery in case of disaster</li> </ul>                                                                                                                                    |
| Servers                             | <ul style="list-style-type: none"> <li>• No warranty on equipment and parts</li> <li>• Lack of an annual maintenance contract hence lack of technical support by the product vendors</li> <li>• A non-operational active directory implemented to work stations, therefore no centralized system control</li> <li>• Generally, requires a lot of system administration.</li> </ul>                                                                                                                                                                       |
| Storage                             | <ul style="list-style-type: none"> <li>• Dedicated storage equipment (8.2 TB) but not enough.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Communication/<br>Network Equipment | <ul style="list-style-type: none"> <li>• No bandwidth management capability</li> <li>• No warranty on equipment and parts</li> <li>• Lack of technical support by the product vendors (no service contract)</li> <li>• Does not support digital technologies e.g. VoIP, DR colocation</li> <li>• Reliability and overall performance: active devices are prone to failure</li> <li>• Optimization: not scalable, each server has own hard disks</li> <li>• No firmware updates</li> <li>• Generally, requires a lot of system administration.</li> </ul> |
| Email                               | <ul style="list-style-type: none"> <li>• Prone to downtime</li> <li>• Minimal usage by staff</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Information Security                | <ul style="list-style-type: none"> <li>• No firewall equipment</li> <li>• No disaster recovery plan</li> <li>• Active Directory for user access management but not in use</li> <li>• No document management system</li> </ul>                                                                                                                                                                                                                                                                                                                            |

|  |                                                                                                                                                                                                                                                               |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"><li>• No security monitoring and management solution</li><li>• No network access control and identity search</li><li>• No CCTV and Access Control system</li><li>• Inadequate system data retrieval and reporting</li></ul> |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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### 3.0 ICT STRATEGY

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This ICT Strategy will focus on supporting NETFUND's departments with efficient and effective provision of ICT solutions to improve service delivery. With a rapidly dynamic ICT environment and ever evolving mission and business needs, the Strategy is forward-looking, innovative approach that entrenches a bold vision in which ICT is an enabler of delivering NETFUND's goals and objectives. The strategy has a three-year implementation period (2026- 2029) and shall oversee transformation of internal support processes, improved service delivery as well as maintaining a sound technology infrastructure that ensures sustainability and business continuity.

To meet these objectives, the strategy will focus on the following five broad thematic areas:

Focus Area 1: ICT Governance

Focus Area 2: ICT Infrastructure

Focus Area 3: ICT Human Capacity

Focus Area 4: Systems and applications

Focus Area 5: ICT Security

Addressing these focus areas will successfully set the ICT Department at a pivotal position in efficient and cost-effective service delivery as well as sustain stakeholder engagement.

#### **FOCUS AREA 1: ICT GOVERNANCE**

This aims at integrating and institutionalization of ICT best practices in NETFUND to support realization of its mandate. This is driven by enhancing compliance with ICT standards, governance policies, procedures, laws and regulations in order to enhance efficiency, improve on ICT risk management and quality of service.

**Strategic Objective 1:** Entrance ICT governance in the Fund.

**Strategy 1:** Develop an ICT governance structure

**Key Activities:**

- i. Formation of an ICT steering committee.
- ii. Review of structure of the ICT department.
- iii. Establish an ICT standards committee.
- iv. Review of ICT strategy and policy.

**Strategy 2:** Enhance ICT risk management

**Key Activities:**

Align ICT risk management framework.

- i. Conduct ICT risk assessment on information systems, mitigate and report as appropriate.
- ii. Develop / Review and implement ICT policies and procedures.
- iii. Develop and disseminate Information Security Management System (ISMS)
- iv. Conduct staff training and awareness on ICT Risk Management

## **FOCUS AREA 2: ICT INFRASTRUCTURE**

Infrastructure is fundamental facilities and systems that support the flow and processing of information in an organization.

To provide efficient and effective services to the employees and clients in the Fund, there is need for setting up a robust, a resilient and scalable infrastructure which allows for good performance and continuous availability of business systems while protecting corporate data, and thus ensure continuity. To create this robust infrastructure for high level service delivery, the ICT Strategy will strive to meet the needs in the following three areas.

- a) Network
- b) Data Centre
- c) End user devices

**a) Network**

**Strategic Objective 1:** To maintain an available and reliable network infrastructure.

**Strategy 1:** Deploy a secure, cable, high performance LANs and WANs for the Fund's offices.

**Activities:**

- i. Document the physical and logical design of the institution.
- ii. Deploy LAN in the Fund's offices.
- iii. Establish WAN at the Fund.
- iv. Provide maintenance services for the LAN

**Strategy 2:** Enhance communication within NETFUND.

**Activities:**

- i. Implement a VOIP system
- ii. Install and configure IP phones

**Strategy 3:** Ensure optimal utilization of network resources.

**Activities:**

- i. Deploy a network management system (NMS).

**Strategic Objective 2:** Ensure fast secure and reliable internet connectivity.

**Strategy 1:** Enhance the internet bandwidth.

**Activities:**

- i. Procure additional 20mbps internet bandwidth.

**Strategic Objective 3:** To ensure secure network access and management.

**Strategy 1:** Centralize network security management at the Fund.

**Activities:**

- i. Deploy a unified network security management system.
- ii. Implement identity-based access to the network both wired and wireless
- iii. Implement service-based access to the network

## **b) Data Centre**

**Strategic Objective 1:** To ensure optimization of data processing, access, storage and management.

**Strategy 1:** Enhance data centre infrastructure.

### **Activities:**

- i. Assessment of the current data centre infrastructure.
- ii. Develop specifications for a cost-effective, scalable, and manageable data centre infrastructure.
- iii. Acquire and deploy a data centre infrastructure.
- iv. Develop Service Level Agreements.

## **c) End User Devices**

**Strategic Objective 1:** To enhance staff productivity and service delivery.

**Strategy 1:** To achieve a staff access device ratio of 1:1.

### **Activities:**

- i. Establish staff device ratio.
- ii. Acquire and assign end user devices.

**Strategy 2:** Enhance sharing of central services to optimize resource use

### **Activities**

- i. Deploy sharable printers and copiers.

**Strategy 3:** Ensure effective management and maintenance of ICT asset.

### **Activities**

- i. Maintain an ICT register.
- ii. Develop an ICT equipment maintenance schedule
- iii. Identify ICT equipment due for disposal and report to the disposal committee.

### **FOCUS AREA 3: ICT HUMAN CAPACITY**

For efficient and effective provision of ICT services, NETFUND staff and its stakeholders are required to be equipped with the necessary ICT skills and competencies. This includes developing general and specialized ICT skills for both ICT personnel and other staff albeit the availability of training opportunities.

**Strategic Objective 1:** To improve the efficiency and effectiveness of the ICT function by recruiting, developing and retaining quality ICT personnel.

**Strategy 1:** To build capacity of the ICT function by ensuring ICT adequately supports NETFUND's goals and objectives.

#### **Activities**

- i. Implement the organizational structure to incorporate key ICT personnel.
- ii. Identify ICT professional specialization required to support efficient and effective provision of ICT services at the Fund.

**Strategic Objective 2:** To enhance the ICT capacity through training of ICT personnel and other staff with a view of improving service delivery.

**Strategy 1:** To build adequate ICT capacity at the Fund.

#### **Activities**

- i. Develop up to date ICT training Programmes for ICT personnel.
- ii. Implement interventions identified by the training needs assessment.
- iii. Participation in ICT professional forums.

**Strategy 2:** To build adequate ICT capacity for the end users.

- i. Establish an ICT help desk system to improve ICT service provision,
- ii. Induct new staff on issues of ICT at the Fund and best practices,
- iii. Regularly develop ICT training Programme for end-users,
- iv. Conduct regular training for staff in line with the training Programme and projections.

- v. Conduct regular training for end users on deployed infrastructure and systems at the Fund.
- vi. Periodically conduct end user survey to establish challenges facing end users at the Fund and implement recommendations.

#### **FOCUS AREA 4: SYSTEMS AND APPLICATIONS**

Integrating management information systems, improves decision-making and operational efficiencies and better sharing of information both internally and externally.

This could be further facilitated by use of common communication and data management platform across the organization, thus reducing the cost of acquisition and maintenance of the internal communication and data management systems and facilities.

Central to this effort is developing information interoperability that decreases the complexity of sharing information with stakeholders and partners. This will be achieved through Enterprise Resource Planning, Integrated Electronic Document Management System and an integrated NETFUND website/ intranet.

**Strategic Objective 1:** Enhance availability and utilization of ICT systems to streamline NETFUND processes.

**Strategy 1:** Implement an enterprise solution to automate and integrate NETFUND processes to improve service delivery.

**Key Activities:**

- i. Operationalize the ERP system
- ii. Maintain a register of NETFUND software assets.

**Strategic Objective 2:** To enhance staff workflows and board collaboration

**Strategy 1:** Enhance Board collaboration and staff workflows.

**Key Activities:**

- i. Digitization of manual/paper documents.

- ii. Deployment of an electronic document management system.
- iii. Deploy an electronic board management system.
- iv. Deploy a cloud-based email service.

**Strategic Objective 3:** Enhance collaboration for effective communication.

**Strategy 1:** To establish an interactive web-portal

**Key Activities:**

- i. To integrate social media platforms
- ii. Rollout of Intranet/Web portal to increase staff engagement
- iii. Activate online feedback mechanisms with stakeholders
- iv. Integrate GIS with the web portal.

## **FOCUS AREA 5: ICT SECURITY**

Data and Information are assets that, like other important assets, are essential to NETFUND and its operations and consequently needs to be suitably protected in order to ensure information confidentiality, integrity and availability. This is especially important taking into consideration the increase in interconnectivity of departments and systems. As a result, NETFUND's information is now exposed to a growing number and a wider variety of threats, risks and vulnerabilities.

The following strategies will ensure appropriate controls are in place for the protection of information from a wide range of threats in order to ensure continuity in NETFUND operations, minimize risk, and maximize return on ICT investments.

**Strategic Objective 1:** Establish a secure ICT environment.

**Strategy 1:** Implement Information Security Management System.

**Key Activities:**

- i. Conduct information security training for all employees.
- ii. Develop and implement a risk management plan.
- iii. Establish information assets and secure them based on value, integrity, importance, confidentiality, accuracy and authenticity.

- iv. Deploy a unified threat management system

**Strategy 2:** Enhance physical security of the data centre

**Key Activities:**

- i. Conduct a security assessment survey
- ii. Deploy biometric access control
- iii. Reinforce physical security according to ICTA data centre standards.

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## 4.0 IMPLEMENTATION MATRIX

| Strategic Objective          | Strategies                          | Key Activities                                                                                                                                                               | Responsibility | Time Frame     | Expected Output                                                                                                                                          | Performance Indicator                                                                                                                                                    | Cost in Million |           |           |
|------------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------|-----------|
|                              |                                     |                                                                                                                                                                              |                |                |                                                                                                                                                          |                                                                                                                                                                          | 2026/2027       | 2027/2028 | 2028/2029 |
| Focus Area 1: ICT GOVERNANCE |                                     |                                                                                                                                                                              |                |                |                                                                                                                                                          |                                                                                                                                                                          |                 |           |           |
| Enhance ICT Governance       | Develop an ICT governance structure | Formation of an ICT steering committee<br><br>Review of structure of the ICT department<br><br>Establish an ICT standards committee<br><br>Review of ICT strategy and policy | ICT            | September 2026 | ICT steering committee in place<br><br>ICT organizational structure aligned to business processes of the Fund.<br><br>Up to date ICT strategy and policy | Appointment letters<br><br>Training programme<br><br>Awareness training reports of steering committee<br><br>Organogram showing staff establishment and job descriptions | 3.5             | 1.5       | 1.5       |

|  |                             |                                                                                                                                                                                                                                                                                                                                                                   |     |           |                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                       |   |   |   |
|--|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|
|  | Enhance ICT risk management | <p>Align ICT risk management framework.</p> <p>Conduct ICT risk assessment on information systems, mitigate and report as appropriate.</p> <p>Develop/Review and implement ICT policies and procedures.</p> <p>Develop and disseminate information security management system (ISMS).</p> <p>iv. Conduct staff training and awareness on ICT risk management.</p> | ICT | June 2026 | <p>ICT audit report</p> <p>ICT risk assessment report</p> <p>Updated ICT Procedures.</p> <p>Trained staff on ISMS implementation.</p> | <p>Number of ICT audits carried out</p> <p>Number of ICT risk assessment reports</p> <p>Number of approved ICT Policies for implementation.</p> <p>Approved ICT Procedures.</p> <p>Approved Information security policy.</p> <p>Number of staff trained on ISMS implementation.</p> <p>ICT risk registers.</p> <p>Number of staff trained on ICT risk Management.</p> | 5 | 5 | 5 |
|--|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|

| Focus Area 2: ICT INFRASTRUCTURE                             |                                                                             |                                                                                                                                                                                  |     |               |                                                                                                              |                                                                                                                                                   |    |   |   |
|--------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------------|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----|---|---|
| To maintain an available and reliable network infrastructure | Deploy secure, scalable, high-performance LANs and WANs for NETFUND office. | Document the physical and logical design of the institution.<br>Deploy LAN in HQ and regional offices<br>Establish a WAN at the Fund<br>Provide maintenance services for the LAN | ICT | June 2026     | Design of Network diagram for HQ and regional offices<br><br>Deployed LAN infrastructure<br><br>Deployed WAN | Network diagram<br><br>LAN Maintenance Contract; Bandwidth within the LAN<br><br>WAN maintenance contract; Regional offices integrated in the LAN | 29 | 5 | 5 |
|                                                              | Enhance communication within the Fund.                                      | Implement a VOIP system<br>Install and configure IP phones                                                                                                                       | ICT | June 2026     | Functional IP Telephony                                                                                      | Contract<br><br>VOIP system deployed<br><br>Number of IP phones configured                                                                        | 6  | 6 | 3 |
|                                                              | Ensure optimal utilization of network resources.                            | Deploy a network management system (NMS).                                                                                                                                        | ICT | June 2026     | Functional Network Management System (NMS)                                                                   | Network management System<br><br>System deployment report                                                                                         | -  | 5 | 1 |
| Ensure fast, secure and reliable internet connectivity.      | Enhance the internet bandwidth.                                             | . Procure additional 20mbps of internet bandwidth.                                                                                                                               | ICT | December 2026 | Improved internet bandwidth                                                                                  | Internet speeds<br><br>Service Level Agreement with the service provider                                                                          | 2  | 2 | 2 |

| End User Devices                                   |                                                               |                                                                          |     |            |                                                     |                                                              |   |   |   |
|----------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------|-----|------------|-----------------------------------------------------|--------------------------------------------------------------|---|---|---|
| To enhance staff productivity and service delivery | To achieve a staff access device ratio of 1:1                 | Establish staff device ratio.<br><br>Acquire and assign end user devices | ICT | Continuous | ICT inventory<br><br>Improved staff to device ratio | Number of staff with devices<br>List of assigned ICT devices | 3 | 2 | 2 |
|                                                    | Enhance sharing of central services to optimize resource use. | Deploy sharable Printers and Copiers                                     | ICT | Continuous | Shared copiers and printers                         | Number of shared printers and copiers                        | 3 | 1 | 1 |

|                                 |                                                                   |                                                                                                                                                                                    |     |            |                                                                                                                     |                                                                                                                          |   |   |   |
|---------------------------------|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---|---|---|
|                                 | <p>Ensure effective management and maintenance of ICT assets.</p> | <p>Maintain an ICT assets register.</p> <p>Develop an ICT equipment maintenance schedule.</p> <p>Identify ICT equipment due for disposal and report to the disposal committee.</p> | ICT | Continuous | <p>ICT Asset registers.</p> <p>ICT Equipment maintenance schedule.</p> <p>Technical ICT devices disposal report</p> | <p>ICT assets register.</p> <p>Preventive Maintenance Schedule</p> <p>Number of ICT devices identified for disposal.</p> | 1 | 1 | 1 |
| Focus Area 3 ICT Human Capacity |                                                                   |                                                                                                                                                                                    |     |            |                                                                                                                     |                                                                                                                          |   |   |   |

|                                                                                                                                |                                                                                                           |                                                                                                                                                                                                    |     |            |                                                                                               |                                                                                                                                                                                  |     |     |     |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|
| To improve the efficiency and effectiveness of the ICT function by recruiting, developing and retaining quality ICT personnel. | To build capacity of the ICT function by ensuring ICT adequately supports NETFUND's goals and objectives. | Implement the organization structure to incorporate key ICT personnel. Identify ICT professional specialization required to support efficient and effective provision of ICT services at the Fund. | ICT | June 2026  | ICT establishment<br><br>Optimal ICT staffing<br><br>Total establishment of revised structure | Recruitment committee.<br><br>Number of ICT staff recruited.                                                                                                                     | 5.7 | 5.9 | 6.2 |
| To enhance the ICT capacity through training of ICT personnel and other staff with a view of improving service delivery.       | To build adequate ICT capacity at the Fund.                                                               | Develop up to date ICT training needs assessment for ICT personnel. Implement interventions identified by the training needs assessment<br>Participation in ICT professional forums.               |     | Continuous | ICT staff trained                                                                             | Skills gap report.<br>Training needs assessment report<br><br>Number of ICT staff trained<br><br>Number of Professional forums attended<br>Number of ICT staff who have attended |     |     |     |

|  |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |            |                   |                          |   |   |   |
|--|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------|-------------------|--------------------------|---|---|---|
|  | To build adequate ICT capacity for the end users | Establish an ICT help desk system to improve ICT service provision, Induct new staff on issues of ICT at the Fund and best practices, Regularly develop ICT training Programme for end-users, Conduct regular training for staff in line with the training Programme and projections. Conduct regular training for end users on deployed infrastructure and systems at the Fund. Periodically conduct end user survey to establish challenges facing end users at NETFUND and implement recommendations | ICT | June 2026  |                   | Functional ICT Help Desk | 5 | 5 | 5 |
|  |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     | Continuous |                   | Number of staff inducted |   |   |   |
|  |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |            |                   | Number of ICT trainings  | 3 | 3 | 3 |
|  |                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     | Continuous | End users trained | Number staff trained     |   |   |   |

| Focus Area 4: Systems and Applications                                               |                                                                                                           |                                                                                                                                                                                  |                          |                                     |                                                                                                                             |                                                                                                                                                                                            |     |   |   |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|---|
| Enhance availability and utilization of ICT systems to streamline NETFUND processes. | Implement an enterprise solution to automate and integrate NETFUND processes to improve service delivery. | Operationalise the ERP system.<br><br>Maintain a register of NETFUND software assets.                                                                                            | ICT                      | September 2026<br><br>Continuous    | Functional ERP system<br><br>NETFUND Software asset register                                                                | Project charter<br><br>3 operationalised ERP modules<br><br>Number of staff trained on ERP<br><br>Contract<br><br>SLA<br><br>List of ICT Software assets<br><br>Number of updated software | 5   | 5 | 1 |
| To enhance board collaboration and staff workflows                                   | Enhance Board meeting management and staff collaboration for effective communication .                    | Digitization of manual/paper documents. Deployment of an electronic document management system. Deploy an electronic board management system. Deploy a cloud-based email service | ICT<br>ICT<br>ICT<br>ICT | September 2026<br><br>December 2026 | Database of digitized documents<br>A functional EDMS.<br><br>A functional E-Board system.<br><br>A functional Email service | number of documents digitized<br><br>functional EDMS<br><br>functional E-board management system<br><br>functional cloud-based email service<br><br>100% adoption level                    | 2.5 | 4 | 4 |

|                                                     |                                        |                                                                                                                                                                                                                    |                                                                     |                                                                |                                                                                                                                   |                                                                                                                           |   |     |     |
|-----------------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---|-----|-----|
| Enhance collaboration for effective communication . | To establish an interactive web-portal | i. To integrate social media platforms<br>ii. Rollout of Intranet/Web portal to increase staff engagement<br>iii. Activate online feedback mechanisms with stakeholders.<br>iv. Integrate GIS with the web portal. | ICT<br><br><br><br><br><br>Ecosystems assessment planning and audit | Continuous<br><br>June 2026<br><br>June 2026<br><br>March 2027 | Integrated website with social media platform.<br><br>Functional intranet<br><br>A functional CRM system.<br><br>Interactive Maps | Number of integrated social media platforms<br><br>Functional Intranet<br><br>Functional CRM system<br><br>Real-time data | 6 | 1.5 | 1.5 |
|-----------------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---|-----|-----|

| Focus Area 5: ICT SECURITY          |                                                   |                                                                                                                                                                                                                                                                                                         |     |                                                               |                                                                                                                                                                                                |                                                                                                                       |   |   |   |
|-------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---|---|---|
| Establish a secure ICT environment. | Implement Information Security Management System. | i. Conduct information security training for all employees<br>ii. Develop and implement a risk management plan.<br>iii. Establish information assets and secure them based on value, integrity, importance, confidentiality, accuracy and authenticity<br>iv. Deploy a unified threat management system | ICT | Continuous<br><br>June 2026<br>June 2026<br><br>December 2025 | Trained staff<br><br>Increased level of user awareness on security controls<br><br>Risk register in place<br>Developed Risk management plan<br><br>Functional unified Threat management system | Reduction in number of security breaches<br><br>Risk register<br><br>UTM specifications<br>Contract<br>Functional UTM | 3 | 7 | 3 |
|                                     | Enhance physical security                         | i. Conduct a Security assessment<br>ii. Deploy biometric access control<br>iii. Reinforce physical security according to ICTA data centre standard                                                                                                                                                      | ICT | June 2026<br><br>March 2027<br><br>June 2027                  | Security survey undertaken<br><br>Deployed Biometric access control system in premises<br>A secure data centre                                                                                 | Security survey report<br><br>Deployed Biometric access control system<br>Compliance to ICTA data centre standard     | 1 | 8 | 1 |

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## 5.0 ICT RISK ANALYSIS

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To enable effective Governance, ICT risks should always be expressed in the business context rather than in the technical language favoured by ICT risk experts. Business risks are affected by the business environment (management style, culture, and risk appetite, industry sector factors such as competition, reputation, national and international regulations). ICT risks can be similarly affected.

Risk analysis of an ICT risk is based on the combination of impact (what effect the risk would have on the organization if it occurred) and likelihood (the probability of the risk occurring). Because of the complexity and fast changing nature of ICT, education and awareness is essential to ensure risks are recognized – not just at the top management level but at all levels throughout the organization. A dedicated ICT risk management mechanism needs to be established or for external advice to be obtained on a regular basis to ensure that ICT risks are monitored and all the stakeholders are kept informed.

An ICT risk register will be maintained to ensure that a thorough review of all ICT related risks takes place on a periodic basis and for providing assurance to management that ICT risks are being addressed. Currently our Internal Audit gives an assurance on risk management within NETFUND. The risks anticipated during the implementation of this strategy are listed in the table below.

| RISK                                                                               | IMPACT                                                                                            | RISK RATING | RISK TREATMENT                           |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------|------------------------------------------|
| Malware                                                                            | Identity theft, exfiltration/theft of sensitive information, data corruption, ICT service outages | High        | Antivirus, security awareness, backups   |
| New information security or privacy obligations introduced by laws and regulations | Non-compliance penalties                                                                          | Low         | Alertness for new compliance obligations |

| <b>RISK</b>                                         | <b>IMPACT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>RISK RATING</b> | <b>RISK TREATMENT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Natural disasters (e.g. earthquakes)                | Devastation of the immediate area, some environmental damage                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Low                | Business continuity plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| ICT logical and physical access breaches            | <p>Weak ICT access (physical and logical) controls will result to unauthorised access to ICT systems and information. This may result to:</p> <ol style="list-style-type: none"> <li>1. Sensitive and confidential information being accessed by unauthorised persons</li> <li>2. Viruses, hackers and other security breach factors may use ICT servers and computers to undertake their own operations resulting to the same not being available to system users. This leads to unacceptable system downtime</li> </ol> | High               | <p>Defining the physical and logical access restrictions/controls for each classification in terms of who and when can access the ICT resources;</p> <p>Management strategies on viruses, hacking and other security breaches;</p> <p>Assessing the current logical and physical access permissions and compare with the ICT policy. Implement remedial action to close any gaps identified;</p> <p>Sensitize Board, Management and Staff on physical security policy;</p> <p>ICT annual Training Plan/Calendar should include training of ICT Personnel on ICT Security Risks and Controls and emerging issues on the same;</p> <p>Installation of a firewall (Unified Threat Management) system.</p> |
| Inability to fully implement the ICT strategic plan | The ICT Unit activities not supporting the achievement of NETFUND strategic                                                                                                                                                                                                                                                                                                                                                                                                                                               | High               | Management to review and provide adequate resources to the ICT Unit so as to implement its                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

| RISK                                  | IMPACT                                                                                                                                                                                                                                                                                                                                                                           | RISK RATING | RISK TREATMENT                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       | <p>objectives;</p> <p>ICT systems implemented by NETFUND not supporting achievement of strategic and operational objectives;</p> <p>ICT systems having a low return on investments;</p> <p>The ICT Unit delaying the implementation of automation strategies required to ensure NETFUND is more efficient, effective and economical in the use of its resources.</p>             |             | <p>Strategic Plan and GoK agenda on automation of public entities;</p> <p>The Board to review and adopted the management recommendations.</p>                                                                                                                                                                                                        |
| Lack of a test environment            | <p>System changes being implemented without testing the integrity of the changes made. This may result to slow processing time or complete system failure due to system bugs or program incompatibility;</p> <p>Testing being done in the live/processing environment resulting to actual data being used as test data resulting to the integrity of data being compromised.</p> | Medium      | <p>Establish a test environment. This may be in a form of a test server;</p> <p>All new applications and changes in the current applications should be tested in the test environment and the test results signed off by the system users and ICT Unit (and vendor where the system implementation or change is being undertaken by the vendor).</p> |
| Lack of adequate resources to support | Inadequate resources (hardware, software                                                                                                                                                                                                                                                                                                                                         | Medium      | ICT system support and maintenance should be a                                                                                                                                                                                                                                                                                                       |

| RISK                                                             | IMPACT                                                                                                                                                                                                                                                                                                                                                                                                                 | RISK RATING | RISK TREATMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| and maintain NETFUND systems                                     | <p>and skills) to support NETFUND ICT systems will result to a lower than acceptable uptime. This would result to functions reverting to manual processes which may result to errors, ineffective and inefficient operations;</p> <p>Slow or no processing of transactions as staff wait for the system to be operational resulting in low customer satisfaction levels which may provide opportunities for fraud.</p> |             | <p>key criterion in the selection of vendors to supply and/or install ICT systems at NETFUND;</p> <p>Comprehensive service level agreements with suppliers of ICT systems (hardware and software);</p> <p>Implementation of ICT systems at NETFUND should include technical training of ICT personnel to ensure they have the required competencies to support such systems;</p> <p>ICT Training Plan/Calendar should include training of ICT Personnel on emerging areas on NETFUND systems;</p> <p>Establishing an annual ICT maintenance schedule;</p> |
| Staff capability to cope with changes in the technology.         | Increased turnaround time in resolving issues; Unresolved user requests                                                                                                                                                                                                                                                                                                                                                | Medium      | Staff training on new technologies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Lack of inter-departmental cohesion in sharing of ICT resources. | High operational and maintenance cost in operating equipment;                                                                                                                                                                                                                                                                                                                                                          | High        | Enhance teamwork and inter-departmental co-ordination and harmony                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Lack of a clear policy framework on ICT operational issues.      | Poor governance structure in resolving ICT related issues.                                                                                                                                                                                                                                                                                                                                                             | High        | Develop clear operational processes and procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Inadequate financial resources allocated to                      | Delayed project implementation;                                                                                                                                                                                                                                                                                                                                                                                        | High        | Put in place financial measurers for allocating                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| RISK          | IMPACT                | RISK RATING | RISK TREATMENT                                                              |
|---------------|-----------------------|-------------|-----------------------------------------------------------------------------|
| ICT function. | Poor service delivery |             | sufficient funding for ICT;<br><br>Design resource mobilization strategies. |

## 6.0 MONITORING AND EVALUATION

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Monitoring, Evaluation and Reporting helps all stakeholders executing the ICT strategy to assess its implementation and in the event of any deviation, to ensure appropriate and timely action is taken. The manager, Corporate Communications & ICT department and associated stakeholders shall carry out quarterly self-assessment of performance and provide proofs of compliance. In addition, the planning department will assist the manager Corporate Communications & ICT unit and the stakeholders in the role of monitoring and evaluation.

### 6.1 Setting Performance Targets

At the beginning of the year, ICT unit will set their performance targets, together with set timelines as part of their annual work plans.

### 6.2 Monitoring Performance

Monitoring involves establishing indicators; setting up systems to collect information relating to these indicators as shown in the implementation matrix above; collecting and recording the information; analysing the information; and using the information to inform day-to-day operations. The key reasons for monitoring can be summarized as follows:

- i. To establish if performance targets have been met;
- ii. To act as an early warning system and detect potential difficulties and help to address them during implementation; and
- iii. To provide feedback to the next phase of implementation, reduce the cost and/or increase the efficiency of post evaluation studies.

The strategy will be implemented through the ICT unit performance contract. The ICT unit and planning department will monitor the implementation of the strategy on a

monthly basis while the top management will monitor the implementation of the strategy on a quarterly and annual basis.

### 6.3 Performance Evaluation

Performance evaluation shall be carried out quarterly and annually in all the strategic initiatives. The agreed performance indicators and targets at all levels will be used for benchmarking of this evaluation. The outcome of the annual evaluation will form a basis for the following year's plan.

### 6.4 Communication and Reporting

The manager, Corporate Communications & ICT, will provide a quarterly report to the CEO on major issues and developments in relation to the ICT strategy and specific ICT projects and issues.

The manager, Corporate Communications & ICT, will oversee the sensitization and dissemination of the ICT strategy to all stakeholders.

### Reference Documents

| Document Name                    | Version             | Author  |
|----------------------------------|---------------------|---------|
| NETFUND Strategic Plan 2023-2027 | 4 <sup>th</sup> gen | NETFUND |
| NETFUND ICT Policy               | 1.0                 | NETFUND |
| ICT governance standard          | 1.0                 | ICTA    |
| ICTA Data Centre Standard        | 1.0                 | ICTA    |