REPUBLIC OF ZAMBIA

NATIONAL ELECTRONIC GOVERNMENT PLAN

2023 - 2026

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FOREWORD

The Government of the Republic of Zambia has embraced digital transformation for efficient and effective public service delivery. Digital technologies have revolutionised service provision in both the public and private sector. Zambia has not been left out in this revolution which is transforming national economies and the global economy at large. The 2020 Digital Economy Diagnostic Report for Zambia highlights that developing countries could collectively save an estimate of $220 billion to $330 billion of their annual Gross Domestic Product (GDP) and enhance efficiency and seal revenue leakages through the adoption of government digital systems.

Therefore, Government has in this National Electronic Government Plan (NeGP) provided strategic focus towards transforming the public sector through the adoption and application of digital technologies. This will ultimately contribute to the overall national digital transformation agenda of transforming Zambia into a Digital Economy as espoused in the Eighth National Development Plan (8NDP). The NeGP will play a pivotal role in improving performance of national digital economy indicators. It lays out among others, strategies for improving the National Cyber Security Index (NCSI), e-Government Development Index (EGDI) and Open Government Data Index (OGDI). Zambia's advancements in the digital transformation agenda so far have translated into the country improving its ranking on the Electronic Government Development Index (EGDI) from 148 to 131 out of 193 countries assessed in 2020 and 2022 respectively.

Further, the e-Government agenda espoused in this Plan embraces full digitalisation of vital Government systems, processes, procedures, and services. These will include internal systems and processes herein referred to as Government to Government (G2G), delivery of Government services to the business community and general citizenry herein referred to as Government to Business (G2B) and Government to Citizens (G2C) respectively. Driving the public sector digital transformation agenda will require close collaboration with multiple stakeholders ranging from public bodies, the business community, private sector, civil society, bilateral and multilateral cooperating partners, and the general citizenry. The Plan outlines seven (7) e-Government strategic focus areas namely: Government digital infrastructure; platforms and services; digital skills and change management; innovation and entrepreneurship; information security; standards and compliance; as well as policy and regulatory frameworks.

Infrastructure development will lay a foundation for public sector digital transformation. Therefore, priority has been given towards investment in key digital infrastructure. This will largely constitute the national digital identification (Digital ID), electronic signatures, Government Wide Area Network (GWAN) and cloud computing data centre infrastructure. Further, investment in digital skills and change management will enhance national technical capacities and competencies, and increased consumption of e-Government services. This will be reinforced through the promotion of Government digital entrepreneurship and innovation for enhanced adoption of locally developed e-Government solutions.

Therefore, I look forward to the participation and commitment of all stakeholders towards implementation of the National Electronic Government Plan.

Patrick K. Kangwa

SECRETARY TO THE CABINET

ACKNOWLEDGEMENT

I wish to take this opportunity to pay special tribute to His Excellency the President of the Republic of Zambia, Mr. Hakainde Hichilema, for the issuance of a Commencement Order for the operationalisation of the Electronic Government Act No. 41 of 2021. The Act establishes and mandates the Electronic Government Division (EGD) to develop and implement the National Electronic Government Plan (NeGP).

The NeGP is a framework for attaining the integration phase of the e-Government Master Plan 2030. This National Electronic Government Plan has been formulated through a multi-stakeholder process. Therefore, the EGD wishes to acknowledge the technical support received from Public bodies. In particular, the unwavering support rendered by the Ministry of Finance and National Planning (MoFNP) and Ministry of Technology and Science (MoTS) during the formulation of the plan is duly recognised and appreciated.

Further recognition is given to Cabinet Office, in particular, the Office of the Secretary to Cabinet and Policy Analysis and Coordination Division (PAC) for the policy and technical guidance provided during formulation of the Plan.

Furthermore, the Division acknowledges the invaluable contribution and support rendered by Cooperating Partners (CPs) in the formulation of this Plan.

Therefore, I am optimistic that the collaboration realised during the formulation of this Plan will be sustained during implementation. I am also confident that continued multi-stakeholder collaboration during implementation will significantly contribute to the realisation of Government's aspirations towards efficient service delivery through a digitally transformed public service.

Percy Chinyama
National Coordinator
ELECTRONIC GOVERNMENT DIVISION

TABLE OF CONTENTS

GLOSSARY OF TERMS

Artificial Intelligence	The ability of a computer or computer-controlled robot to perform tasks commonly associated with intelligent beings.
Blockchain	A digital database containing information that can simultaneously be used and shared within a large decentralised, publicly accessible network.
Change Management	A systematic approach in dealing with the transition or transformation of an organisation's goals, processes, or technologies.
Data	An electronic representation of information in any form.
Digital Entrepreneurship	Entrepreneurial opportunities being created and pursued using technological platforms and other information communication equipment.
Digital Governance	A system that helps to establish lines of accountability, roles, and decision-making authority for the digital presence of an organisation.
Digital Infrastructure	Digital technologies providing the foundation for an organisation's information technology and operations.
Digital Innovation	The practice of implementing modern digital technology to solve business problems by optimising processes, improving customer experiences, and delivering new business models.
Digital Literacy	An individual's ability to find, evaluate, and communicate information through typing and other media on various digital platforms.
Digital Skills	A range of abilities to use digital devices, communication applications and networks to access and manage information.
Digital Transformation	Integration of digital technology into all areas of a business, fundamentally changing how you operate and deliver value to customers.
Electronic Government Development Index	An Electronic Government Development benchmarking tool based on a comprehensive survey of the online presence of all 193 United Nations Member States.
8NDP	A five-year National Development Plan that expresses the developments of the Zambian people from 2022 to 2026.

Electronic Signature	A Sound, symbol, process or other data created or adopted by a person with the intent to sign a data message.
Electronic Transaction	An exchange, transfer or processing of digital information or data.
Enterprise Architecture	A conceptual blueprint that defines the structure and operations of an organisation.
e-Waste	Discarded electrical or electronic equipment.
Interoperability	The ability of computer systems or software to exchange and make use of information.
Marginalised Groups	Vulnerable population or people that experience discrimination or exclusion to the use of ICTs.
Open Government	A culture of governance based on innovative and sustainable public policies and practices inspired by the principles of transparency, accountability and participation that fosters democracy and inclusive growth.
Open Internet	A fundamental network neutrality concept in which information across the World Wide Web (WWW) is equally free and available without variables that depend on the financial motives of Internet Service Providers (ISPs).
Paperless Government	A Government that has minimal paper-based processes and mainly relies on digitalised processes for its operations.
Public Bodies	The Government, any ministry or department of the Government, the National Assembly, the Judicature, a local authority, parastatal, Commission or other body appointed by the government or established by or under any law except a professional association or body and public bodies shall be construed accordingly.
Public Key Infrastructure	A framework for creating a secure method for exchanging information based on public key cryptography.
Zamportal	An Online platform for accessing services provided by the Government of Zambia.

ACRONYMS

APP	Computer Applications
EGD	Electronic Government Division
EGDI	Electronic Government Development Index
ESB	Enterprise Service Bus
FISP	Farmer Input Support Program
GDP	Gross Domestic Product
G2B	Government to Business
G2C	Government to Citizens
G2G	Government to Government
GSB	Government Service Bus
GWAN	Government Wide Area Network
ICT	Information and Communication Technology
IFMIS	Integrated Financial Management Information System
INRIS	Integrated National Registration Integrated System
ISMS	Information Security Management System
ISP	Internet Service Provider
IT	Information Technology
M&E	Monitoring and Evaluation
MoTS	Ministry of Technology and Science
MoFNP	Ministry of Finance and National Planning
MNO'S	Mobile Network Operators
NDP	National Development Plan
NEGP	National Electronic Government Plan
PAC	Policy Analysis and Coordination
PKI	Public Key Infrastructure
PMEC	Payroll Management and Establishment Control System
PSMD	Public Service Management Division
SADC	Southern African Development Community
SME	Small to Medium Enterprises
TWG	Technical Working Group
UN	United Nations
WWW	World Wide Web
ZIAMIS	Zambia Integrated Agriculture Management Information System
ZICTA	Zambia Information and Communication Technology Authority
ZIMS	Zambia Immigration Management System
ZISPIS	Zambia Integrated Social Protection Information System
8NDP	Eighth National Development Plan
ZmCIRT	Zambia Computer Incident Response Team

1. INTRODUCTION

Public sector digital technologies constitute a key component of Zambia's overall socio-economic transformation agenda. This is evidenced by the continued inclusion of Information and Communication Technology (ICTs) programmes in national development plans, government policy and strategic frameworks. The Vision 2030 sets out the overall agenda of transforming Zambia into a "prosperous middle-income country by the year 2030". Attainment of the vision is laid out in more detail in Zambia's five-year National Development Plans. ICTs have been recognised as enablers of socio-economic development in both the National Vision 2030, national policies and development plans.

Therefore, mainstreaming ICTs in government programming has been prioritised for full public sector digital transformation. Consequently, Government has enacted the Electronic Government Act, No. 41 of 2021, which provides for the establishment of the Electronic Government Division as the main entity for driving public sector digital transformation. The Act further provides for the Division to develop and coordinate the implementation of a National Electronic Government Plan (NeGP), which shall include the following:

i. Strategies and projects for reducing paper documents in public bodies;
ii. Strategies and projects for the management of administrative information resources by public bodies;
iii. Harmonisation requirements for implementation of the strategies and projects;
iv. Projects for installing an information and communications network among public bodies and securing safety;
v. Medium and long-term project plans; and
vi. Other e-Government projects related to the implementation and operation of e-government.

The Act further obligates public bodies to digitalise their business processes for efficient and effective public service delivery. Further, public bodies are required to design end-to-end digital systems through a consultative process with sector specific stakeholders that combine disciplines across organisational boundaries and deliver services in an agile way.

This NeGP highlights Zambia's e-Government strategic focus, development priorities and implementation strategies for the period 2023 to 2026. The Plan builds upon initiatives provided in the 2018 to 2030 National Electronic Government Master Plan, which set the foundational platform for key digital infrastructure and priority information systems development and integration.

Additionally, the NeGP seeks to achieve digital transformation through harmonisation, integration and mainstreaming of provision of electronic services in the public sector. The Plan draws from the successes of previous initiatives by increasing ICT connectivity infrastructure and enhancing the integration of systems and services in the Public Service. Government will,

during the implementation of this Plan, expand the Government Wide Area Network (GWAN) to cover all 12,450 educational facilities, 3,687 health facilities, over 1,200 agricultural, livestock and fisheries camps, 1,000 meteorological stations, 880 police stations, 42 border controls including the 116 district administrative centres and local authorities. The Plan further places emphasis on improving and optimising existing ICT infrastructure to support accelerated social and economic development and attaining the modernisation of public service delivery. The success of the Plan will be highly dependent on the capacity of public bodies to secure resources and tools that will enable them to respond adequately to the needs of their stakeholders at scale, and with pace, while retaining quality and trust in the delivery of public services.

This National Electronic Government Plan (NeGP) has five (5) chapters. Chapter One provides the introduction and is followed by the situation analysis on e-government presented in Chapter Two. The strategic direction, objectives and strategies as well as implementation framework have been outlined in Chapters Three, Four and Five, respectively. Lastly, the Implementation Framework Matrix for the Plan has been incorporated with planned activities, targets, cost estimates and accountable institutions.

2. SITUATION ANALYSIS

2.1. Public Sector Digital Transformation in Zambia

Zambia is experiencing digital transformation accelerated by the adoption of new and emerging technologies such as mobile telecommunications, cloud computing technologies, advancements in data analytics, artificial intelligence and blockchain technologies. These technologies have maximised the potential to accelerate the country's development path.

Government recognises these technological developments for their enormous potential to speed up progress towards the attainment of Sustainable Development Goals (SGDs) and the Eighth National Development Plan (8NDP) objectives. Government also considers technology as an enabler for access and delivery of public services.

In developing this Plan, Government undertook an assessment of the current state of Government digital services, Government digital infrastructure, human capital, information security, Government digital innovation, Government digital policy and legal frameworks supportive to Zambia's transformation towards a digital economy.

The assessment found that Zambia had made positive strides in advancing the digital transformation agenda. It was further noted that investments had been made in the development and deployment of Government digital infrastructure and services. However, minimal investments were made towards the development and enhancement of digital skills, platforms, innovations and adoption of emerging technologies, all of which are crucial in the provision and access to electronic Government services.

As of December, 2022, Zambia had 1,578 gazetted services, out of which 280 services were provided online by 26 public institutions. These services were integrated on the Zamportal. An additional 19 public institutions were offering unintegrated e-services. This accounted for a total of 45 out of 516 gazetted public institutions offering electronic Government services. Furthermore, only 263 sites out of 15,600 targeted sites were connected to the GWAN.

Table 1 below highlights Zambia's public sector digitalisation performance on various indicators.

Table 1: Government Digital Performance Assessment for Zambia

S/N	INDICATOR	NATIONAL TARGET	BASELINE	BASELINE YEAR
1.	Number of e-Government services on the Zamportal	1,578	280	2022
2.	Number of public institutions providing services on the Zamportal	516	45	2022
3.	Number of sites connected to the GWAN -	15,600	263	2022
4.	National Cyber Security Index	100	68.8	2021
5.	Internet Penetration Rate	80 percent	56.8 percent	2021
6.	Telecommunication Infrastructure index	1	0.34	2021
7.	Smart Phone Penetration	80 percent	29.6 percent	2021
8.	UN E-Government Development Index	1	0.5022	2022
9.	UN E-participation Index	1	0.3750	2022
10	UN Open Government Data Index	1	0.5493	2022
11	UNCTAD 2018 B2C e-Commerce Index	100	27	2018

2.2. Government Digital Infrastructure

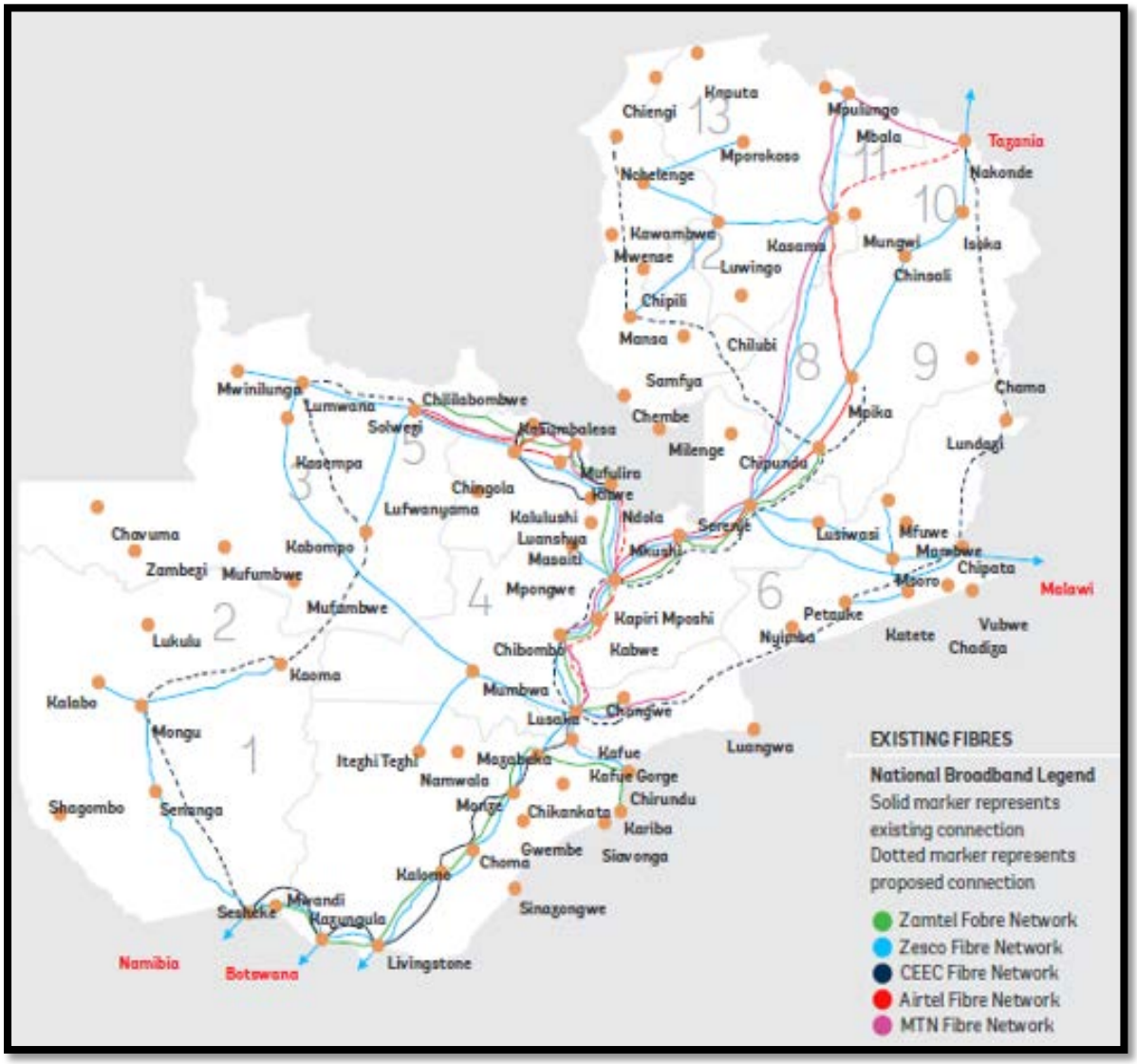
Government digital infrastructure consists of connectivity, internet exchange points, data centres, national digital identity infrastructure, Government electronic service platforms, and other Critical Information Infrastructure (CII). The Government digital infrastructure facilitates for the interaction and accessibility of electronic services for people, businesses, and Governments.

At national level, the ICT sector has experienced significant growth owing to liberalisation of the industry. Accordingly, competition has resulted in an increase in mobile geographical coverage, which stands at 69.9 percent as demonstrated by the Zambia Information Communication Technology Authority (ZICTA) ICT Gap Analysis Survey Report of 2022. The Report further revealed that mobile broadband coverage remains low at 53 percent and 42 percent of the population under 4G and 3G coverage, respectively.

Further, efforts to expand internet coverage and access in the country include the establishment of a combined total of 12,000 kilometres of optic fibre network implemented by Zamtel and FibreCom. These efforts have extensively increased middle and last mile connectivity.

Figure 1 below shows the coverage of the optic fibre network across the country.

Figure 1: Map of Fibre and Broadband Coverage in Zambia



Source: FibreCom (2021)

This infrastructure provides the Government with the opportunity to enhance connectivity to the public sector. Therefore, Government has prioritised the deployment of various infrastructure to support the provision of Government digital services. In particular, priority has been given towards the deployment of the GWAN. Expansion of the GWAN is earmarked to connect more sites, covering mostly District administrative centres, local authorities, and border control points. However, as at December 2022, only a total of 263 of the targeted 15,600 national sites had been connected to the GWAN, leaving a huge infrastructure deficit required for the provision of digital services. Table 2 below shows the number of sites connected to the GWAN.

Table 2: Segmentation of Government Wide Area Network coverage

S/N	INDICATOR	NATIONAL TARGET	CURRENT (2022)
1.	No. of Sites connected to GWAN	15,600	263
2.	No. of Public Institutions connected to GWAN	516	45
3.	No. of Schools connected to GWAN	10,731	10
4.	No. of Colleges and Universities connected to GWAN	2,069	10
5.	No. of Health Facilities to GWAN	3,700	12
6.	No. of Provincial Administration Offices connected to GWAN	10	10
7.	No. of District Administration Offices connected to GWAN	116	10
8.	No. of Local Authorities connected to GWAN	116	2
9.	No. of Agricultural Camps connected to GWAN	540	-
10.	No. of Gazetted Border Control Points connected to GWAN	38	-
11.	No. of Police Stations and Police Posts connected to GWAN	442	27
12.	No. of Courts connected to GWAN	430	58

By December 2022, Zambia had a total of 3,457 communication towers, which laid the foundation for rapid expansion of mobile broadband. The 2022 ZICTA Gap analysis further revealed a deficit of 998 towers, which were required to ensure connectivity in unserved and underserved areas. Most telecommunications towers were connected to the national fibre network providing the backhaul capacity. There has been, however, a disparity in 2G, 3G, 4G and 5G coverage. This is largely indicative of mobile network operators (MNOs) not investing adequately in mobile broadband, which is attributable to low demand, especially in rural areas. Low demand is largely attributed to low digital literacy and limited capacity to afford mobile broadband. Further considerations include terrain and physical accessibility as determinants in the deployment of mobile services towers which negatively impact access to Government services in remote areas.

Government has deployed Tier 1 through to Tier 3 data centres countrywide. The data centres aim at integrating systems to form the base of digital infrastructure by building redundancy for critical government systems. It is anticipated that Government will derive dividends through the implementation of the Government cloud on the data centre infrastructure. This will enable significant change to Government's operating model and by extension, the cost of delivering Government digital services. The deployment of cloud services at the Tier 3 National Data Centre will enable Government institutions to host various services in accordance with data protection laws. However, there is a need to create partnerships with cloud solution providers to enable cost effective platforms for service delivery.

Government has been collaborating with stakeholders, in exploring avenues for adopting alternative technologies such as satellite, v-sat and spectrum as tools to bridge the digital divide in the urban and the rural areas. Satellite-based technologies will provide opportunities for Government to improve spatial data analysis and satellite communications. Alternative technologies will further facilitate accelerated deployment of connectivity infrastructure, especially last mile connectivity for access to electronic government services. To this effect,

ten (10) sites have been designated for the deployment of satellite-based internet in all provinces.

Several challenges impacting the deployment of Government digital infrastructure have been identified. These include the cost of deploying digital infrastructure, limited digital infrastructure in rural areas, uncoordinated Government digital infrastructure designs, systems operations and maintenance, limited energy sources, high cost of internet, low household internet access especially in rural areas and limited access to digital devices.

2.3. Electronic Government Services

Government has continued investing in public sector digital platforms driven by the desire to achieve greater efficiency, transparency, and accountability. The World Bank Digital Economy Diagnostic Report (2020) reaffirms that using Government digital services could save an estimated 0.9 to 1.1 percent of Gross Domestic Product (GDP) for Zambia. The dividend would come from introducing digital systems that increase efficiency in delivering public services and the extent to which Government uses data to make evidence-based decisions and policy development.

Government recognises that digital platforms provide new channels for service delivery, public engagement, and feedback, and increase efficiency. As Zambia's digital economy continues to grow, digital platforms will play a crucial role in improving operational and economic efficiency, while simultaneously boosting service quality and accountability. As the rollout of basic Government digital services progresses steadily, the availability of more advanced public services that make use of innovative digital technologies, such as artificial intelligence, big data, robotics and blockchain, still requires significant investments.

Additionally, Government has deployed numerous digital platforms that have been designed to ease public service delivery. These platforms provide citizens' access to over 250 Government services that have been integrated to the Zamportal. The Zamportal is a single window digital platform that facilitates centralised provision of public services to the citizens through integration of public service management information systems. This has increased Government efficiency and revenue collection, as evidenced by over One Billion Five Hundred Million Kwacha (ZMW 1.5 billion) as non-tax revenue collected through the Zamportal by December, 2022.

Public institutions have also continued to develop and deploy digital platforms and management information systems for enhanced public service delivery. Some of the systems developed include the:

i. Health Management Information Systems (HMIS) for the provision of electronic health-related services;

ii. Integrated National Registration Information System (INRIS), which provides for the issuance of national digital identification and facilitates for improved Know-Your-Customer (e-KYC);
iii. Zambia Integrated Agriculture Management Information System (ZIAMIS) for the provision of farmer support services;
iv. Zambia Immigration Management System (ZIMS) for the provision of immigration-related services on the digital platform;
v. Zambia Integrated Land Administration System (ZILAS) for improved land management;
vi. Integrated Financial Management Information System (IFMIS) for centralised financial management;
vii. Payroll Management and Establishment Control System (PMEC) for effective payroll management;
viii. Electronic Government Procurement System (e-GP) for use of ICT in the procurement of public goods, works and services;
ix. Tax Online for Domestic Tax Payments for the electronic administration and management of taxes; and
x. Zambia Social Protection Information System (ZSPIS) for administration of Social Cash Transfer.

Government has, therefore, prioritised the development of digital platforms to enhance citizen participation. However, on account of limited digital skills and high cost of digital devices, access and usage of digital platforms remains a challenge for the majority of the citizenry. The 2018 ZICTA survey on access and usage of ICTs revealed that only 6.8 percent of individuals across the country aged above ten years knew how to use a computer. On the other hand, only 14.3 percent of the adult population had access to a computer and were established internet users. The survey also disclosed that only 29.6 percent of mobile phone owners in the country had smartphones.

The United Nations Electronic Government Development Index (EGDI) and most Government digital frameworks emphasise using technology to drive citizen engagement and open data programs to build trust and provide the platform for innovation throughout society. However, Zambia's EGDI ranking is impacted significantly as digital frameworks are still being developed within the Government.

The use of digital citizen engagement and feedback platforms in Zambia is still emerging. There is the need to develop and strengthen citizen feedback mechanisms to effectively capture citizens' feedback on specific Government services, as well as enable digital participation where the citizen's views are required. This Plan, therefore, presents an opportunity to strengthen feedback mechanisms and improve Zambia's ranking on the global Electronic Participation Index (EPI). Additionally, digital financial services in the Public Service have streamlined digital technologies to increase accessibility and usage of financial products and services. Hence, Government is stepping up the role of digital financial services through

increased usage of electronic payments for increased financial inclusion and access to formal financial services.

However, progress has been hampered by inadequate legislation and policy, framework required to sufficiently address open data, or the right to information in Zambia. Further challenges related to the provision of Government digital services include:

i. fragmented digital platforms landscape;
ii. partial interoperability;
iii. low access and utilisation of internet services;
iv. low digital literacy and skills;
v. resistance to change brought about by digital initiatives in the public service;
vi. lack of trust in services provided online;
vii. downtimes related to power outages;
viii. internet connectivity and systems failure;
ix. inadequate capacity to support newly developed systems; and
x. dominance of manual and paper-based policies, regulatory frameworks, processes, and systems.

2.4. Capacity Building and Change Management

The Eighth National Development Plan (8NDP) outlines the importance of developing digital skills in achieving the dividends of digital transformation and the need to invest in digital skills enhancement. Technological change impacts organisational arrangements of the public sector workforce and the skills required by public services. Government, in collaboration with the private sector and higher learning institutions, have partnered in providing both technical and financial support to enhance ICT skills for public workers and communities. The country has undertaken various initiatives in collaboration with key stakeholders in building digital capacities among citizens. Initiatives undertaken include:

i. National Capacity Building Programme in e-Services;
ii. Fast Track Digital Skills and Literacy Programme for teachers;
iii. Digital Skills and Literacy Programme for girls in Secondary School;
iv. CISCO Academy Programme aimed at enhancing digital skills of Master Trainers for teachers;
v. Innovative Programme led by ZICTA;
vi. Digital Skills Training Programme for public servants;
vii. Digital Skill and Literacy Programme for women and youth; and
viii. The Digital Literacy Programme for the general citizenry.

Despite these strides, several challenges related to capacity building and change management have been identified. These include:

i. inadequate technical skills to embrace new and emerging technologies such as blockchain, cyber security, artificial intelligence, robotics, big data analytics and machine learning;
ii. high turnover of human capital with specialised ICT skills in the public sector exacerbated by inadequate human resources to support digital transformation;
iii. inadequate availability of ICT tools;
iv. resistance to change in adopting new technologies due to lack of confidence to use new ICT tools effectively; and
v. lack of awareness and understanding on the benefits of ICT and how it could improve service delivery of various Government processes.

2.5. Digital Information Security

Government recognises ICTs as key enablers of inclusive social and economic development. Therefore, this calls for a secure ICT environment that guarantees safety of users and consumers of Government digital services against risks associated with the use of digital platforms. The Government constituted the Zambia Computer Incident Response Team (ZmCIRT), which is responsible for preventing, handling, and mitigating security and data protection incidents. The ZmCIRT provides public bodies, businesses, and citizens information on responding to all cybersecurity related incidences in Zambia.

The policy and legal framework governing information security has therefore been enhanced through the launch of the National Cyber Security Policy of 2021 and enactment of the Electronic Communications and Transactions Act No. 4 of 2021, Cyber Security and Cybercrimes Act No. 2 of 2021, Data Protection Act No. 3 of 2021 and Electronic Government Act, No. 41 of 2021. The enactment of legislation has provided for measures to secure electronic information systems and associated sanctions for perpetrators of offences on the digital platforms. Security measures provided include the establishment of disaster recovery sites, strengthening incidence response mechanisms, implementation of the biometric access to ICT resources, issuance of the security standards aligned with ISO/IEC 27001 as means of creating safe and sustainable environment as well as securing Government information and services.

Despite these efforts, information related to the cybersecurity ecosystem in Zambia is still emerging and of great concern to Government. The major areas of concern include the high cost of investing in information systems security, the silo approach of implementing ICT systems posing a security risk, legacy systems still used by Government usually incompatible with emerging security practices and absence of a Government-wide Computer Incident Response Team (CIRT) as well as inadequate disaster recovery sites.

2.6. Government Digital Entrepreneurship and Innovation

Government initiatives related to the digital transformation agenda define a path towards development of innovative, practical, secure, and resilient Government digital solutions. In recent years, Government has been promoting initiatives centred at youth development and job

creation.In actualising these initiatives, Government has adopted a multi-sectoral approach by promoting innovation and entrepreneurship through the creation of innovation hubs. The innovation hubs are designed to facilitate incubation of ICT start-ups aimed at building capacity for the youths to drive the digital transformation agenda. Further, the innovation hubs are intended to facilitate for research and development on emerging technologies by providing a Government Regulatory Sandbox through which digital innovations could be developed and tested safely. The innovation hubs initiative is aimed at youth empowerment and job creation through development of digital systems that could be recommended for implementation and commercialisation.

Government has also prioritised the establishment of Digital Transformation Centres (DTCs) for skills development and support for citizens to access Government digital services in order to bridge the digital divide. By December, 2022, Government had established two (2) DTCs in Mongu and Kitwe districts respectively as pilot projects.

However, Government digital entrepreneurship and innovation has been facing challenges largely associated with limited financing towards start-ups, infrastructure such as digital innovation and incubation hubs, coordination, and capacity for commercialisation of innovation. There are few innovation hubs concentrated around Lusaka and largely run by the private sector and the civil society. As a result, several ideas especially from the youths are not exploited for development of local solutions.

2.7. Electronic Government Standards and Compliance

Government established the Electronic Government Division, to coordinate the development of digital solutions as a cost-effective means for digital transformation. Since its establishment in 2015, the Division has developed standards and guidelines that guide and support the application of ICT in the public sector. Some of the policies, standards and guidelines developed include, ICT Acceptable Use Guidelines and Procedures, Project Management Framework, e-Government Interoperability Standards, Information Security Standards, Business Continuity Plan and Disaster Recovery Guidelines and Network Management Standards.

Despite these efforts, public bodies continued to develop and acquire information systems without complying to the set standards and guidelines. Some public bodies have deployed platforms without quality assurance while others have procured systems that face integration challenges.

The continued uncoordinated approach to e-Government has led to, fragmented Government digital infrastructure design, systems, operation and maintenance, fragmented digital platforms landscape, partial interoperability, and limited support, among other challenges. Further, the silo approach of implementing ICT systems poses a security risk. Legacy systems still used by Government are usually incompatible with emerging security practices.

2.8. Government Digital Policy and Legal Framework

Government has embarked on review of the ICT policy and legal framework among other reforms supportive to the national digital transformation agenda. This includes review of the National ICT Policy, launch of the National Cyber Security Policy in 2021 and enactment of the Electronic Government Act No. 41 of 2021, Electronic Communications and Transactions Act No. 4 of 2021, Cyber Security and Cybercrimes Act No. 2 of 2021 and the Data Protection Act No. 3 of 2021. Further, the Government has developed regulations, standards, and guidelines for the public service for purposes of harmonising the implementation of ICTs.

Despite some notable achievements in the implementation of legal, policy and regulatory frameworks, some challenges have been experienced which include translating policy and legal framework objectives into tangible projects and programmes, prolonged and untimely review and repealing of legislation to match the rapid changes in the ICT Sector, and inadequate coordination among institutions mandated to spearhead ICT policy and legal reforms leading to duplication of roles.

2.9. Government Digital Leadership and Governance

Government requires a governance model that provides comprehensive coordination for the implementation of all ICT initiatives within the public sector. This calls for defined responsibilities across all Government institutions in implementing projects and programmes.

In Government, ICT initiatives are hindered by weak governance structure and silo approach in executing institutional mandates. ICT initiatives at institutional level are strategic and should have representation at senior management level in all public bodies. The different responsibilities across the public sector require a horizontally networked approach to build a coherent use of digital technologies across policy areas and levels of Government. Currently, the National Coordinator, Electronic Government Division, through the Heads of ICTs is mandated to coordinate and implement ICTs, in public bodies as mandated by the Electronic Government Act No. 41 of 2021. However, ICT functions have been domiciled in Planning, Human Resources or Finance departments. This negatively affects the implementation of ICTs initiatives.

Using data in the Public Service can substantially impact the public sector’s ability to make decisions based on evidence and lead to improved service design and delivery as well as policy outcomes thereby enhancing overall public sector performance. Government recognises data as a strategic asset but has not yet developed capacities to exploit data analytics, to better understand societal needs, embed data throughout the policy cycle, and design data governance arrangements to ensure the responsible and coherent use of data to benefit the citizen. These efforts require infrastructure for data collection, processing, sharing, storage, and disposal. Government has laid the foundation for developing data protection legislation to create the safeguards as the country increasingly seeks to develop the capability to collect and analyse data.

To enhance data driven decision making, significant investments are being made to develop an All-of-government enterprise architecture that include the Data Governance Framework. The Framework will facilitate the emergence of data management standards and improve interoperability of information systems. Government is moving towards a ‘once-only’ principle of collecting and retaining citizen data facilitated by interoperability across government systems. Once achieved, this would mean the average citizen would not be requested for their information multiple times when engaging with different Government institutions in accessing services.

3. STRATEGIC DIRECTION

This Plan has been developed taking into consideration the initiatives that have been outlined in the Eighth National Development Plan (8NDP). Government recognises that ICTs have the potential of making public bodies more responsive to citizens and businesses in providing timely service delivery for sustainable development, improving competitiveness, spur economic activities and job creation.

The selected strategic initiatives have been identified through the assessment of the current state of digital Government, the UN framework for Government digital readiness, and insights from global benchmark analysis that highlights the gaps this plan will address.

Vision

"Secure provision of quality and universally accessible digital services to citizens".

Guiding Principles

The principles guiding the development of the NeGP include:

i. **Patriotism:** Putting the interest of the Country first beyond self;

ii. **Inclusiveness:** Ensuring ICT systems and services are accessible to all citizens;

iii. **Transparency:** Creating an environment where information is readily available and disseminated to all stakeholders, providing access to relevant data, ensuring that decision-making procedures are clear and understandable;

iv. **Accountability**: Ensuring that civil servants and Public Bodies act responsibly, recognizing the impact of their decisions on the citizens and taking steps to rectify any shortcomings or mistakes;

v. **Citizen-Centric Approach:** Prioritising citizen needs, ensuring accessibility and user-friendliness and seeking feedback for continuous improvement;

vi. **Security and Privacy:** Implementing robust cybersecurity measures, protecting citizen data and complying with regulations and standards; and

vii. **Sustainable Development:** Ensuring the design and implementation of ICT infrastructure and systems that are environmentally friendly.

4. OBJECTIVES AND STRATEGIES

The Plan has seven (7) strategic themes with corresponding objectives, strategies, activities and outcomes to achieve the vision statement. The strategic themes are:

i. Government digital infrastructure;
ii. Government digital services;
iii. Capacity Building and Change Management;
iv. Digital Information Security;
v. Government digital Entrepreneurship and Innovation;
vi. Standards and Compliance; and
vii. Government digital Policy and Legal Framework.

Thematic Area 1: Government digital infrastructure

Objective: To improve digital infrastructure development, administration, and management in the public sector.

Outcome: Connected Government for improved public service delivery.

Strategies:

i. Develop and improve the development of digital infrastructure;
ii. Facilitate the management of public sector generated e-waste and promote Green ICT's; and
iii. Facilitate the establishment of SMART cities and SMART transport corridors.

Thematic Area 2: Government Digital Services

Objective: To improve provision and utilisation of e-Government Services.

Outcome: Improved access to e-Government services.

Strategies:

i. Develop and strengthen platforms for e-Government Services;
ii. Enhance national identity infrastructure and systems;
iii. Develop and enhance Integrated Management Information Systems;
iv. Improve availability of end user devices in public bodies; and
v. Promote access to e-Government services for the marginalised groups.

Thematic Area 3: Capacity Building and Change Management

Objective: To build capacities of citizens in digital skills.

Outcome: Improved Human Capital and Digitally Informed Citizenry.

Strategies:

i. Enhance digital skills and literacy within public service;
ii. Enhance digital skills and literacy within the citizens; and
iii. Develop and implement electronic Government change management initiatives.

Thematic Area 4: Digital Information Security

Objectives: To strengthen public service digital information security.

Outcome: Secured public service digital information.

Strategies:

i. Strengthen Information Security Management Systems (ISMS);
ii. Enhance security of Government digital infrastructure; and
iii. Enhance ICT security awareness for Public Sector employees and the general citizenry.

Thematic Area 5: Public sector digital innovation and entrepreneurship.

Objective: To promote digital innovation and entrepreneurship in the public sector.

Outcome: Enhanced digital innovation and entrepreneurship in the public sector.

Strategies:

i. Strengthen public sector digital innovation;
ii. Support ICT Research and Development (R&D) in the public sector; and
iii. Facilitate commercialisation of public sector digital innovations.

Thematic Area 6: Electronic Government Standards and Compliance

Objective: To standardise public sector digital platforms and services.

Outcome: Improved quality of services and systems interoperability.
Strategies:

i. Develop and review public sector e-Government policies, standards, and guidelines;

ii. Strengthen enforcement of standards and guidelines in the deployment of ICT infrastructure, platforms, and services in the public sector; and
iii. Enhance public and private sector collaboration on the adoption of industry best practices in the deployment of digital platforms and services.

Thematic Area 7: Governance, Policy and Legal Framework

Objectives: To improve the policy and legislative framework governing ICTs in the public sector.

Outcome: Conducive ICT sector policy and regulatory environment.

Strategies:

i. Strengthen Government digital policy and regulatory framework;
ii. Streamline ICT functions in ministries, public bodies, and sub national structures;
iii. Enhance local, regional, and international collaboration on digital governance in the public sector; and
iv. Enhance monitoring and evaluation.

5. IMPLEMENTATION FRAMEWORK

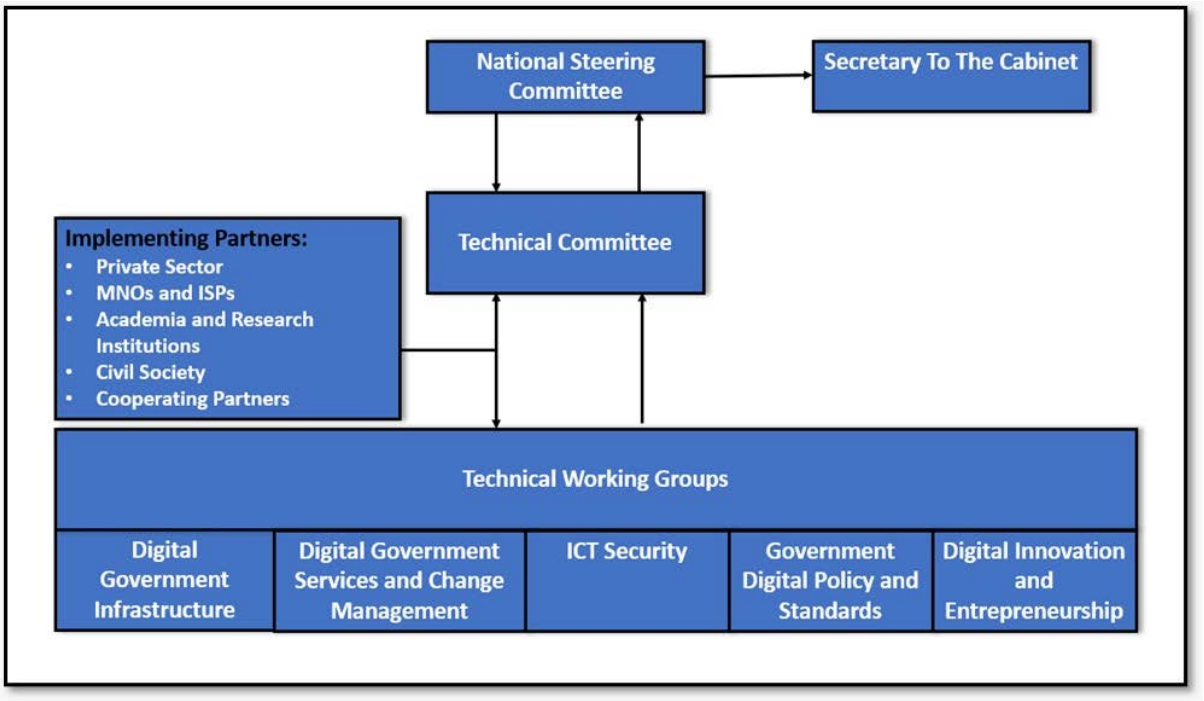
5.1. Institutional Arrangements

The implementation of this plan shall be guided by the institutional arrangements outlined below.

5.1.1 National Steering Committee

There shall be a National Steering Committee which will be chaired by the Secretary to the Cabinet. The Electronic Government Division will be the secretariat. The Committee will have strategic ownership of the NeGP. The Committee will ensure that the NeGP is adequately resourced in both financial and human capital terms to deliver on the ambitions of the Digital Transformation Agenda as outlined in the 8NDP and key policy pronouncements. The Committee will comprise Permanent Secretaries from Public Bodies. It will also have representation from Cooperating and Development Partners supporting Digital Transformation in Government. The Committee will meet at least twice a year to review and monitor the progress made on the implementation of the NeGP. The committee will have sub structures as shown in figure 2.

Figure 2: NeGP Governance structure



a) Technical Committee

The Secretary to Cabinet shall appoint the chairperson and members of the Technical Committee from selected Heads of ICTs departments in the public sector. The role of the committee is to receive and prepare reports on initiatives being implemented to drive the Government digital transformation agenda. The committee shall meet quarterly to prepare consolidated progress reports on initiatives, projects and implementation of the NeGP. Reports

from these meetings are submitted to the National Coordinator, e-Government Division as per the e-Government Act No. 41 of 2021.

b) Technical Working Groups (TWGs)

The Technical committee shall be supported by the following TWGs:

i. e-Government Systems and Infrastructure;
ii. Government digital Services and Change Managements;
iii. ICT security;
iv. Government digital Policy and Standards; and
v. Innovation and Entrepreneurship.

The TWGs shall prepare progress reports on the NeGP thematic areas for submission to the Technical Committee. Membership of the TWGs shall be drawn from various public bodies accountable to each thematic area.

5.1.2 Institutional Roles and Responsibilities

Electronic Government Division:	Shall coordinate the overall implementation of the Plan;
Cabinet Office:	Shall facilitate the approval of e-Government policies and organisation structures;
Ministry of Technology and Science:	Shall provide policy oversight on implementation of ICTs;
Government Public bodies:	Shall support implementation of the plan in line with their gazette mandates;
Private Sector:	Shall participate in the implementation of digital infrastructure and services;
Internet Service Providers:	Shall provide quality fixed and mobile internet services to Public Bodies and the general citizenry;
Co-operating Partners:	Shall provide technical and financial support towards the implementation of the plan;
Civil Society:	Shall advocate for the equitable deployment and utilisation of e-Government services;

Regulators:	Shall ensure adherence to set standards and regulations;
Professional Bodies:	Shall ensure adherence to the code of conduct by all professionals;
Financial Institutions:	Shall contribute towards enhancement of digital financial inclusion and literacy;
Training Institutions and Academia:	Shall provide digital literacy and skills programs and undertake ICT research and development;
Local and Traditional Leadership:	Shall participate in the implementation of digital skills and literacy programmes;
Local Authorities:	Shall participate in the development and deployment of digital platforms and services; and
Citizens:	Shall provide feedback on the quality of e-Government Services and participate in the development of local content.

5.2. Legal Framework

This section presents the various pieces of legislation which will facilitate the smooth implementation of the Plan.

The Electronic Government Act No.41 of 2021:	Provides for coordination and implementation of enhanced management and promotion of electronic Government processes and services;
Cyber Security and Cyber Crimes Act No.2 of 2021:	Provides for cyber security and protection against cybercrimes in the Republic of Zambia;
Data Protection Act No.3 of 2021:	Provides for regulation of collection use, transmission and protection of personal data and establishes the Office of the Data Protection Commissioner and provides for its functions;
ICTAZ Act No.7 of 2018:	Provides for the registration of Information and Communications Technology professionals and regulates their professional conduct in the interest of the information and Communications technology sector;

ICT Act No.15 of 2009:	Provides for the regulation of the Information and Communication Technologies in the country;
The Penal Code Cap 87:	It is a comprehensive compilation of laws and regulations that govern the criminal justice system;
National Registration Act Cap 126 of the Laws of Zambia:	Provides for the registration of persons and any matters related to. It is key to the implementation of the national digital identification system;
Environment Management Act No. 12 of 2022:	Provides for the integrated environment protection and conservation of the environment and the sustainable management and use of natural resources; and
Postal Services Act No. 22 of 2009:	Regulates the provision of postal and courier services into, out of and within Zambia.

5.3. Financing and Resource Mobilisation

The implementation of this Plan requires a sustainable financing mechanism. Therefore, both domestic and external financing mechanisms shall be employed in the implementation of the Plan. The Plan shall largely be dependent on domestic financing through annual national budgetary allocations. Government through the Ministry of Finance and National Planning shall ensure adequate funds are made available in each fiscal year. In order to fast track the development of digital infrastructure and deployment of digital services, Government will enhance collaboration with the private sector.

Further, Government shall promote Public Private Partnerships (PPPs) as an alternative financing mechanism for the delivery of Government digital infrastructure and services. Grants, concessional loans and technical assistance from both bilateral and multilateral cooperating partners shall constitute part of the funding mechanism for the implementation of this Plan.

5.4. Monitoring and Evaluation

A Monitoring and Evaluation (M&E) framework for the National Electronic Government Plan shall be developed to ensure that the overall vision, objectives, strategies, and activities are effectively implemented as highlighted in the implementation matrix annexure. Accurate information on the supply and usage of electronic Government services will provide a basis for measuring whether the strategies are achieving the set objectives.

Regular monitoring of programmes, projects and activities will be undertaken to ensure that targets, costs, benefits, and outcomes of the intended interventions are measured, and programs are well managed. Annual Progress Reports will be prepared to gauge progress towards the attainment of targets. In order to track progress on plan implementation, quarterly reports shall be prepared. This process of performance monitoring will assist in aligning sector performance towards the attainment of national objectives outlined in the National Development Plans. Government in collaboration with stakeholders will monitor and review progress in the implementation of this Plan.

Furthermore, a post implementation evaluation will be conducted to assess the extent of attainment of objective and outcomes of this Plan.

ANNEXURE: NEGP IMPLEMENTATION MATRIX 2023-2026

THEMATIC AREA 1	OBJECTIVES	STRATEGIES	ACTIVITIES	INDICATOR	PLANED TARGET	2023	2024	2025	2026	COST	IMPLEMENTING INSTITUTIONs
Government digital Infrastructure	To improve digital infrastructure development, administration, and management in the public sector.	Develop and improve digital infrastructure	Engage partners in the development of digital infrastructure	Number of partnerships established	10	2	3	3	2	**1,500,000**	EGD, Public Bodies, Civil Society, Cooperating Partners, Private Sector, Public bodies
			Deploy GWAN in public institutions and local authorities.	Number of sites connected to GWAN	497	139	116	40	40	**500,000,000**	EGD, MLGRD, Internet Service providers, MoFNP, ZICTA,
			Review of taxation on the identified ICT and telecommunication equipment.	Number of equipment provided with tax incentives	3		1	1	1	**150,000**	EGD, MoFNP, ZICTA, MOTs, ISPs, Industry
			Provide use of alternative and grid energy for Government critical ICT infrastructure	Proportion of Government critical ICT infrastructure with alternative power sources	100%		70%	90%	100%	**1,400,000**	EGD, MOTS, MoFNP, MoE, ZESCO, Infratel, REA, ZICTA
			Establish optic fibre backbone points of presence in all 116 districts (fibre last mile)	Number of Districts with optic fibre Points of Presence (PoPs)	106		26	40	40	**50,000,000**	EGD, Zamtel, ZESCO, FibreCom, Infratel, Public Bodies
			Deploy broadband access in public places	Number of public places with broadband access	300	10	96	97	97	**10,840,000**	EGD, Public/ Private Sector Companies, Star link, MoTL, ZICTA
			Establish metro Networks in all local authorities	Number of local authorities with metropolitan networks	114	57	57	-	-	**95,860,000**	EGD, Local Authorities, MoLGRD, Public bodies, Private Sector, ZAMTEL

			Establish Internet Exchange Point (IXP)	Number of Internet Exchange Point established	1	1	0	0	0	**1,000,000**	INFRATEL
			Build a Tier III National Data Centre at the ICCC Site	Tier III national data centre built	1			1		**140,000,000**	EGD, Infratel, Private Sector
			Establish disaster recovery and back-up systems at existing Government data centre	Number of Government data centres with disaster recovery plans	13	3	3	5	2	**100,000,000**	EGD, Infratel, Ministry of Home Affairs, Private Sector
			Establish Provincial Government Cache Data Centre's under the Safe City Project	Number of provincial government cache data centres established	10		3	4	3	**4,000,000**	EGD, Infratel, Ministry of Home Affairs, Private Sector
			Develop specifications for honeypot deployment	Number of honeypot sites on the GWAN	1		1			**250,000**	EGD, Infratel, ZICTA and Public bodies
			Deploy alternative technologies for last mile connectivity such as: Towers, VSATs, satellite, radio spectrum, Star link	Number of Government sites connected with alternative internet access technologies	200	10	40	100	50	**150,000,000**	MOTS, EGD/ MNOs/ IHS Holdings/ Infratel/ISPs
			Establish provincial Government digital support service centres	Number of provincial Government digital support service centres	6	3	3			**5,000,000**	EGD, ZEMA, MOTS, MoFNP, ZICTA, UNEP, UNDP, Private Sector, CPs
			Design and install eco-friendly ICT infrastructure	Percentage of eco-friendly ICT infrastructure	30%		5%	15%	10%	**5,000,000**	EGD, MIHUD, MGEE, NCC
		Facilitate the management of public sector generated e-waste and promote Green ICT's	Develop Government ICT equipment disposal guidelines	Government ICT equipment disposal guidelines developed	1	0	1			**2,500,000**	EGD, ZEMA, MOTS, MoFNP, ZICTA, UNEP, UNDP, Private Sector, CPs
			Build capacity for ICT equipment repair and refurbishment.	Number of provinces with ICT equipment repair and refurbishment capacity	10		2	3	5	**20,000,000**	MoTL- OEMS, MoGEE, Local Authorities, MoLGRD, EGD, ZEMA, MOTS, MoFNP, ZICTA, UNEP, UNDP, Private Sector, CPs,

			Set-up Provincial public service generated e-waste collection and disposal facilities	Number of provinces with public service e-waste collection and disposal facilities	10	0	2	4	4	**5,000,000**	MoTL- OEMS, MoGEE, Local Authorities, MoLGRD, EGD, ZEMA, MOTS, MoFNP, ZICTA, UNEP, UNDP, Private Sector, CPs
		Facilitate the establishment of smart cities and corridors	Conduct assessment on policy, regulatory and infrastructure requirement for smart cities and corridors	Assessment conducted	1		1			**5,000,000**	EGD, MoTL, MoLGRD, MoHIUD, MoFNP, MoE, MNOs, MOTS, ZEMA, UNEP, CPs, Private Sector, MCTI
			Develop a concept note for the establishment of smart cities and corridors.	Concept note developed	1		1			**2,000,000**	EGD, MOHAIS MCTI, MOTS, MTL, MOFNP, MLGRD, CPs
			Develop digital trade corridors	Number of digital trade corridors developed	5		1	2	2	**25,000,000**	EGD, MoTL MoHAIS, MoHIUD, MoLGRD, MoFNP, MoE, MNOs, MoTS, ZEMA, Transport and Border Agencies, UNEP, CPs, Private Sector

THEMATIC AREA 2	OBJECTIVES	STRATEGIES	ACTIVITIES	INDICATOR	PLANED TARGET	2023	2024	2025	2026	COST	IMPLEMENTING INSTITUTIONs
Electronic Government Services	To improve provision and utilisation of e-Government Services	Develop and strengthen platforms for e-Government Services	Undertake electronic government baseline study	Electronic government baseline study undertaken	1		1			**2,500,000**	EGD, MOTS, ZICTA, Public bodies, Private Sector, Cooperating Partners
			Acquire and deploy appropriate and relevant Enterprise Agreements	Number of Service Enterprise Agreements	2	1	0	0	1	**180,000,000**	EGD, Public bodies
			Develop and Implement the Zamportal service deployment Plan	Number of Zamportal service deployment plan developed	1	0	1	0	0	**2,000,000**	EGD, Public bodies
				Number of Services onboarded on the Zamportal	400	100	100	100	100	**100,000,000**	EGD, MoFNP, Public Bodies, Private Sector, CPs
			Conduct training for technical and end user staff on Zamportal	Number of staff trained on Zamportal management and support	300		150	150		**2,000,000**	EGD, Public bodies, Private sector, Civil Society, Cooperating Partners, Training Institutions
			Roll-Out of ZILAS	Number of services rolled out on ZILAS	60	60				**2,000,000**	MLNR, EGD, EGD, Public bodies, CPs, MLGRD
			Conduct public awareness programs to upscale e-Government Services uptake	Number of programs for upscaling e-Government Services conducted	50	5	20	20	5	**15,000,000**	EGD, Public bodies, Private Sector, Civil Society Organisations, Cooperating Partners
			Conduct Government e-Services demand and utilisation surveys	Number of survey reports	3		1	1	1	**2,500,000**	EGD, Public bodies, Private Sector
			Conduct an assessment for digitalisation requirements for local authorities	Number of local authorities digitalisation requirement assessments conducted	1		1			**10,000,000**	EGD, MLGRD, LAs, Private Sector
			Develop and implement a local authorities digitalisation plan	Local authorities digitalisation plan developed	1		1			**2,000,000**	EGD, MLGRD, LAs, Private Sector

			Develop and implement sector specific digitalisation strategies/plans	Number of sector specific strategies developed/plans	25	2	8	8	7	**15,000,000**	EGD, All Public Bodies
			Develop a paperless government concept note	Number of paperless Government concept note developed	1	1				**2,500,000**	EGD, Private Sector,
			Deploy electronic registry systems in Government ministries	Number of Government Ministries with electronic registry systems deployed	25		2	10	13	**20,000,000**	CP, CS, Public bodies
			Develop an Open Government Data (OGD) framework	Open Government Data framework developed	1		1			**2,500,000**	EGD, MOJ, MIM, Civil Society, Cooperating Partners
			Develop public digital services user feedback platforms	Citizens portal developed	1		1			**1,000,000**	EGD, MOJ, MIM, Civil Society, Cooperating Partners
		Enhance national identity infrastructure and systems	Develop and implement an API manager (systems) for e-KYC on the INRIS system	API manager for e-KYC developed	1	1				**1,500,000**	EGD, MoHAIS, Public bodies, Private sector, Civil Society, Cooperating Partners, Financial Institutions
			Designate a Public Institution for centralised KYC administration	National centralised KYC institution designated	1	1				**3,500,000**	EGD, MoHAIS, Public bodies, Private sector, Civil Society, Cooperating Partners, Financial Institutions
			Enroll citizens onto INRIS at national level	Number of citizens enrolled on the INRIS	17m	5m	5m	4m	3m	**10,000,000**	EGD, Public bodies, Private sector, Civil Society, Cooperating Partners
			Issue citizens with National Digital IDs	Number of citizens issued with National Digital IDs	17m		5m	5m	7m	**40,000,000**	EGD, Public bodies, Private sector, Civil Society, Cooperating Partners
		Develop and Enhance Integrated management	Develop capacity for ICT officers in the use of open-source software	Number of officers trained and certified in the use of open-source software	400		50	150	200	**5,000,000**	EGD, Public bodies, Private sector, Civil Society, Cooperating Partners, Training Institutions

		Information System	Adopt and use Government approved open-source software in public bodies	Proportion of public sector institutions using Government approved open-Source software	50%	5%	20%	25%	50%	**4,000,000**	EGD, Public bodies, Private sector, Civil Society, Cooperating Partners
			Develop Public Service Management Information Systems (MIS) for DMMU, Learning institution, HR, ZAMSTATs, Parliament, Food Security Pack, House of Chiefs, Transport and logistics, SMEs, Judiciary, Labour, National Heritage, Social Protection, MIS Inventory and Register	Number of public service MIS developed	15	4	6	5		**90,780,000**	DMMU, MoE, PSMD, ZSA, National Assembly EGD, Public bodies, Private sector, Cooperating Partners, Civil Society
			Upgrade and integrate public service management information systems for National Spatial Data, Infrastructure NSDI, National Health MIS, National Education MIS, e-Cabinet, e-GP, IFMIS, ZIAMIS, ZISPIS, ZILAS, National Audit MIS, GSB/Zamportal, ministerial websites	Number of public service MIS upgraded	13		5	6	2	**50,000,000**	EGD, MoLNR, Cabinet Office, ZPPA, MoFNP, MoA, MCDSS, Public bodies, Private sector, Cooperating Partners
			Undertake a cost analysis of the full activation of the SAP ERP	Number of assessments conducted on the SAP module activation	1	1				**150,000**	MoFNP, MoTL, PSMD, EGD, Cabinet Office
		Improve availability of end user devices in the public bodies	Facilitate the establishment of digital device assembly plants	Number of digital device assembly plants established	2		1		1	**140,000,000**	EGD, MoFNP, MoTS, Private Sector

			Provide end user devices to public bodies	Number of devices provided	100,000	25,000	25,000	25,000	25,000		EGD, MoFNP, Public institutions, Private Sector
			Establish a government-wide ICT asset register	Public sector ICT asset register	1		1			**3,000,000**	EGD, MOTs, ZICTA, Security Wings, Ministries, Public bodies
		Promote access to e-Government services for marginalised groups.	Conduct information, education and communication on e-Services to the marginalised	Number of activities conducted	16	4	4	4	4	**4,000,000**	EGD, MOTS, Cooperating Partners, Private Sector, Civil Society
			Train marginalised persons on basic digital skills	Number of trainings conducted	12		4	4	4	**3,000,000**	EGD, MOTS, Cooperating Partners, Private Sector, Civil Society
			Provide tax incentives on the importation of Digital Devices for marginalised groups	Number of incentives provided	4		1	1	2	**100,000**	MoFNP, EGD, MOTS, Cooperating Partners, Private Sector, Civil Society, ZAPD, MCDSS

THEMATIC AREA 3	OBJECTIVES	STRATEGIES	ACTIVITIES	INDICATOR	PLANED TARGET	2023	2024	2025	2026	COST	IMPLEMENTING INSTITUTIONs
Capacity Development and Change Management	Improved Human Capital and Digitally Informed Citizenry	Enhance Digital skills and literacy in the public service	Train public officers on digital skills	Number of Officers trained	4000	1000	1000	1000	1000	**10,000,000**	EGD, MoE, MoFNP, MOTS, ZICTA, Private Sector, Academia, Civil Society, Cooperating Partners
			Collaborate with academia and training institutions on digital skills training.	Number of public service personnel imparted with basic, intermediate, and advanced digital skills	10,000	2500	2500	2500	2500	**15,000,000**	EGD, MoE, MOTS, ZICTA, Public bodies, Private Sector, Academia, Civil Society, Cooperating Partners
			Conduct a Public Service digital competence needs analysis	Public Service digital competence needs analyses conducted	2	1			1	**5,000,000**	EGD, Cabinet Office, MoE, Public bodies, MOTS, ZICTA, Private Sector, Academia, Civil

											Society, Cooperating Partners
			Develop a national digital competence framework	National digital competence framework developed	1		1			**2,500,000**	EGD, MoE, MOTS, ZICTA, Public bodies, Private Sector, Academia, Civil Society, Cooperating Partners
			Conduct capacity building in new and emerging technologies such as (Big Data, Artificial Intelligence, Internet of Things, Blockchain, robotics)	Number of public service officials trained in new and emerging technologies	500	100	100	200	100	**5,000,000**	EGD, MoE, MOTS, ZICTA, Public bodies, Private Sector, Academia, Civil Society, Cooperating Partners
			Develop and implement digital and financial literacy awareness programs in all provinces annually	Number of provincial digital literacy awareness programmes undertaken annually	40	10	10	10	10	**5,000,000**	EGD, MoE, MOTS, ZICTA,
				Number of financial literacy awareness programmes undertaken at provincial level annually	40	10	10	10	10		MIM, Public bodies, Media, Private Sector, Academia, Civil Society, BOZ Cooperating Partners
		Develop and implement Electronic Government Change Management initiatives	Formulate a Digital Transformation Change Management Strategy	Digital Transformation Change Management Strategy formulated	1	1				**5,800,000**	EGD, Cabinet Office, MOTS, ZICTA, Public bodies, Media, Private Sector, Academia, Civil Society, Cooperating Partners
			Implement change management programs in provinces	Number of provinces facilitated with change management programs	10	10	10	10	10	**5,000,000**	EGD, MOTS, ZICTA, Public bodies, Media, Private Sector, Academia, Civil Society, Cooperating Partners

THEMATIC AREA 4	OBJECTIVES	STRATEGIES	ACTIVITIES	INDICATOR	PLANED TARGET	2023	2024	2025	2026	COST	IMPLEMENTING INSTITUTIONs
Digital Information Security	To strengthen public service digital information security	Strengthen Information Security Management Systems (ISMS)	Enforce compliance of Management Information Systems to network security standards	Proportion of Management Information Systems compliant to network security standards in public bodies	100%	20%	45%	75%	100%	**10,000,000**	EGD, Cabinet Office, Ministries, Public bodies, MCTI, Defense and Security Wings
			Secure ICT Systems and Infrastructure in key Government institutions	Proportion of cybersecurity incidences resolved in public bodies	100%	100%	100%	100%	100%	**5,000,000**	EGD, Cabinet Office, Ministries, Public bodies, MCTI, Defense and Security Wings
				Percentage reduction in cybersecurity incidences recorded	95%	70%	80%	90%	95%	**5,000,000**	EGD, Cabinet Office, Ministries, Public bodies, MOTs, Defense and Security Wings
		Enhance security of Government digital infrastructure	Develop Public Key Infrastructure (PKI)	Public Key Infrastructure developed	1		1			**1,500,000**	EGD, MOTs, ZICTA, Defense and Security Wings, Ministries, Public bodies
			Establish and operationalise a Government-wide Computer Incident Response Team (CIRT)	Government-wide CIRT established	1		1			**5,500,000**	EGD, MOTs, ZICTA, Security Wings, Ministries, Public bodies
			Operationalise electronic signatures in public bodies	Proportion of public bodies implementing electronic signatures	25%		5%	15%	25%	**3,500,000**	EGD, Cabinet Office, Public bodies, ZICTA, Security Wings, Business and private sector

			Undertake inventory of public ICT infrastructure for designation as Critical Information Infrastructure (CII)	Inventory of public critical information infrastructure	1		1			**5,000,000**	EGD, MOTs, ZICTA, Defense and Security Wings, Ministries, Public bodies
			Enforce provisions of the law on CII domestication for public bodies	Proportion of public bodies hosting CII locally	70%		20%	40%	70%	**5,000,000**	EGD, MOTs, ZICTA, Defense and Security Wings, Ministries, Public bodies
			Enforce provisions of the law on personal data domestication for public bodies	Proportion of public bodies hosting personal data locally	70%		20%	40%	70%	**10,000,000**	EGD, MOTs, ZICTA, Defense and Security Wings, Ministries, Public bodies
		Enhance ICT security awareness for Public Sector employees and the general citizenry	Design and implement ICT security awareness programmes in public bodies	Proportion of public sector employees sensitised on ICT securing	80%		30%	50%	80%	**10,000,000**	EGD, MOTs, ZICTA, Defense and Security Wings, Ministries, Public bodies
			Design and implement ICT security awareness programmes for the public	Proportion of the national population sensitised on ICT securing	50%		20%	30%	50%	**30,000,000**	EGD, MOTs, ZICTA, Defense and Security Wings, Ministries, Public bodies

THEMATIC AREA 5	OBJECTIVE:	STRATEGIES	ACTIVITIES	INDICATOR	PLAN TARGET	2023	2024	2025	2026	COST	IMPLEMENTING INSTITUTIONs
Government digital Entrepreneurship and Innovation	To promote digital innovation and entrepreneurship in the public sector.	Strengthen Public Sector digital innovation	Conduct a Government digital innovation eco-system assessment	Government digital innovation eco-system assessment conducted	1		1			**5,000,000**	EGD, Cabinet, Public bodies, MCTI, MOTS, PACRA, NTBC, ZICTA, Office, ACADEMIA,
			Develop a Government digital innovation coordination framework	Government digital innovation coordination framework developed	1		1				
			Establish digital transformation centres as Government digital innovation hubs	Number of digital transformation centers established	58	4	18	18	18	**80,770,000**	EGD, MOTS, NTBC, ZICTA, Academia, MCTI, MoFNP, Private Sector, Civil Society, Cooperating Partners, ZamPost
			Develop innovators and start up database	Database developed	1		1				EGD, MoTS, MoFNP, MSMED, MCTI, Innovation Hubs, Private Sector
			Establish a Government digital innovation regulatory sandbox	Government digital innovation regulatory sandbox established	1		1			**200,000**	EGD, MOTS, NTBC, ZICTA, Private Sector, Civil Society, Cooperating Partners
			Mapping and enhancement of Public Service innovation eco-system actors/players	Mapping for innovation eco-systems actors / players conducted	2		1		1	**5,000,000**	EGD, MTS, ZICTA, Private Sector
			Commercialise public sector Government digital innovations	Number of Government digital innovations commercialised annually	5			2	3	**10,000,000**	EGD, MOTS, NTBC, ZICTA, Private Sector, Civil Society, Cooperating Partners
		Strengthen Government digital Research and	Identify and fund innovative research proposals from public bodies	Number of R&D on new technologies conducted	2		1		1	**10,000,000**	EGD, Public bodies, Research and Training institutions, private sector, cooperating partners, civil society

		Development (R&D)	Engage students in learning institutions on finding local solutions to Government digital problems	Number of electronic Government application programmes developed	5		1	2	2	**15,000,000**	EGD, Public Bodies, Civil Society, Cooperating Partners, Private Sector, Public bodies
			Publicise Government digital innovations through exhibition at public, private events, and multimedia	Number of Government digital service exhibitions undertaken	8	1	2	3	2	**8,000,000**	EGD, Media Houses, Private Sector

THEMATIC AREA 6	**OBJECTIVE**	**STRATEGIES**	**ACTIVITIES**	**INDICATOR**	**PLANED TARGET**	**2023**	**2024**	**2025**	**2026**	**COST**	**IMPLEMENTING INSTITUTIONs**
Electronic Government standards and compliance	To standardise public sector digital platforms and services.	Review and develop public sector e-Government policies, standards, and guidelines.	Develop Government digital Infrastructure, Systems Standards that include Technical Human Capital, Electronic Records and Data Management Standards, Public Sector Data Centre Development Standards and ICT equipment specifications	Number of e-Government standards developed	6	3	3			**5,000,000**	EGD, ZABS, ZCSA, ZICTA, MOTS, Public bodies

			Develop e-Government implementation guidelines that include Government wide E-Waste Management Guidelines, Guidelines for adoption of emerging Technologies ICT Asset Disposal Guidelines, Public sector end user device guidelines, Systems and Infrastructure Vendor Engagement Guidelines, Public Sector Emerging Technologies Framework, Government Enterprise Architecture	Number of ICT guidelines developed	10	5	5			**5,000,000**	EGD, ZABS, ZCSA, ZICTA, MOTS, Public bodies
			Government Cloud Computing Guidelines, Guidelines for the use of Social Media Platforms in the Public Institutions, Guidelines for registration and contraction of Technology Service Providers								
		Strengthen enforcement of standards and guidelines in the deployment of ICT infrastructure, platforms, and services in the public sector;	Develop and enforce standards for digital Infrastructure, quality of service and digital systems	Number of quality assurance tools developed	3	1	2			**15,080,000**	EGD, ZABS, ZCSA, ZICTA, MOTS, Public bodies

			Develop a Government digital standards enforcement framework	Develop a Government digital system audit and standards enforcement framework developed	1	1					
			Develop and enforce a systems audit framework	Systems audit framework developed	1	1					
			Disseminate standards to all public bodies	Number of institutions oriented	516	129	129	129	129		
			Conduct compliance training on Government digital standards and guidelines	Compliance trainings conducted	13	3	5	5			
			Undertake periodic online presence compliance surveys for all public bodies	Number of online compliance surveys conducted	4	1	1	1	1		
			Develop an e-government enterprise architecture	e-Government enterprise architecture developed	1		1				
		Enhance public and private Sector collaboration on the adoption of Industry Best Practices in the deployment of digital platforms and services	Undertake ICT standardisation awareness programs for public bodies	Number of standardisation awareness programs implemented	8	1	2	3	2	**3,000,000**	EGD, ZABS, ZCSA, ZICTA, MOTS, Public bodies
			Develop a public-private sector engagement platform on ICT development and governance	Public private sector engagement platform on ICT development and governance developed	1	1				**500,000**	

THEMATIC AREA 7	OBJECTIVES	STRATEGIES	ACTIVITIES	INDICATOR	PLAN TARGET	2023	2024	2025	2026	COST	IMPLEMENTING INSTITUTIONs
Government digital policy and legal framework	To improve the policy and legislative framework governing ICTs in the public sector.	Strengthen Government digital policy and regulatory frameworks	Review and develop appropriate ICT support policies and regulations	ICT policy reviewed	1	1				**1,000,000**	EGD, MOTS, MOJ, Public bodies
				ICT regulations reviewed	1			1		**1,000,000**	
			Develop and Operationalise a national data governance framework	National data governance framework developed	1		1			**1,000,000**	
		Streamline ICT functions in public bodies	Develop and operationalise a data governance framework	Data governance framework developed and operationalised	1		1			**3,000,000**	EGD, MOTS, Public Bodies, CPs
			Restructure stand-alone ICT units in ministries and provinces into stand-alone departments/ Units	Number of ICT units in ministries and provinces restructured into standalone departments/ units	35		35			**100,000**	EGD, MoFNP, Public Bodies
			Introduce ICT activities in the national budget for NeGP implementation in public bodies	Number of provinces and ministries with annual NeGP ICT activities	35		35			**250,000**	EGD, MoFNP, Public Bodies
		Enhance local, regional and international collaboration on electronic Governance	Participate at Regional and International meetings (UNCTAD, AU, SADC, EAC, COMESA, ITU, ATU, UPU, PAPU etc.)	Number of regional and international events represented	10	1	3	3	3	**5,000,000**	EGD, MoFNP, Public Bodies, Regional and International Bodies
			Ratify and domesticate regional and international instruments on e-Government	Number of international treaties and conventions on e-Government ratified and domesticated	1				1	**5,200,000**	
		Enhance monitoring and evaluation Enhance monitoring and evaluation	Develop monitoring and evaluation plan for the National Electronic Government Plan Undertake monitoring and evaluation for the NeGP	NeGP M&E plan developed	1	1				**5,000,000**	EGD, Cabinet Office, MoFNP, Public Bodies

				Number of monitoring visits undertaken	15		5	5	5	**25,000,000**	
				Number of evaluations undertaken	1				1	**10,000,000**	
			Conduct e-Government regulatory impact assessments	Number of e-Government regulatory impact assessments undertaken	1				1	**10,000,000**	EGD, Cabinet Office, MoFNP, Public Bodies

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