FOREWORD

The digitalisation of information processes and the rapid growth of network connectivity over the last few decades have affected our social, political, and economic spheres and changed the way we communicate in general as well as how we do business. Consequently, this has brought about greater efficiency and effectiveness in the manner in which information resources are generated, stored, shared and processed with the added potential to generate significant social and economic development gains for Zimbabwe by promoting investor confidence and tapping into business opportunities hatched on the transformative power of ICTs.

Under the National Development Strategy 1 (NDS 1), the Government of Zimbabwe has prioritised ICTs as a cross cutting measure to reduce the urban-rural divide and enable access to ICTs by all its citizens. The reviewed Zimbabwe National Information and Communication Technology Policy (2022-2027) follows suite by placing more focus on issues of infrastructure development and management, research, innovation and industry development, policy streamlining, equal access across gender and other marginalised groups, regulatory framework on ICTs and institutional mechanisms, as well as capacity building and content development.

The aforementioned, and the resultant natural spillover policies within the sector, provide the framework for providing practical tools for enhancing technical assistance, industry collaboration and regional and international co-operation, at the same time building the capacity of national authorities and industry players in the field of ICTs, while encouraging the exchange of information, experience and best practices within Zimbabwe and across our borders.

Whilst Government has been making great strides in the use of ICTs by introducing various e-Government services to the citizenry, effort and investment shall continue to be made in the fields of ICT backbone infrastructure development, smart education, smart health, smart agriculture, research and development, and capacity building and skills upgrade in ICTs.

As a signatory to a number of international and regional conventions and treaties such as the United Nations World Summit on Information Society (WSIS), which set the initial goals in 2003 for ICT growth in member states worldwide, and its membership of global bodies such as the International Telecommunications Union (ITU), Zimbabwe is set to continue to develop into a knowledge based and middle-income society, leveraging on its massive and talented human resources, leaving no one and no place behind, by 2030.

His Excellency Dr. Emmerson D. Mnangagwa
PRESIDENT

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Signature

FOREWORD

In the current digital age, the use of ICTs has become an essential component of socio-economic development. It is necessary for countries to create and implement effective ICT policies to fully harness the potential of these technologies in promoting inclusive and sustainable development. This requires ensuring universal access to information, uninterrupted connectivity to the Internet, good digital governance, e-commerce, equitable quality education, and other drivers of socio-economic development.

Meanwhile, the gap between those who have access to digital technologies and those who do not is increasing globally. This is why it is crucial to establish "pro-people ICT policies" that prioritize national objectives and areas that will have a positive impact on people's lives. These policies must be earmarked to ensure that we leave no person and no place behind as we forge ahead in embracing the Digital Economy.

Governments must aim to create an environment where people are not left behind and have equal opportunities to access digital technologies. Such policies must address the challenges related to infrastructure, affordability, and digital literacy to ensure that everyone has access to digital technologies. They must also prioritize the development of digital skills and digital entrepreneurship, as well as encourage local content creation.

Information and Communication Technologies (ICTs) have emerged as the most valuable driving force in all sectors of the economy. Therefore, it is crucial to consistently review the Zimbabwe National Policy on ICTs.

The revised Zimbabwe National Policy on ICTs (2022-2027) retains the previous policy's overarching objectives of growth, transformation, inclusiveness, innovation, partnership, and sustainability. The priorities of the policy are regulatory principles and approaches, infrastructure and services, digital society, industry growth sector (ICT in social and economic sectors), institutional frameworks, and capacity, confidence, and security. Although the core elements of the Policy remain the same, changes in detail have been made in line with stakeholder recommendations or contributions. Crucially this update policy acknowledges the emergence of disruptive technologies such as Artificial Intelligence, Internet of Things and Machine Learning among other 4IR smart solutions.

The Zimbabwe National Policy on ICTs is aligned with the country's vision and development strategy. The policy review process is consistent with the Government's aspirations to have a digitally literate population on the journey to becoming an "upper-middle-income society by the year 2030." The COVID-19 pandemic highlighted the need for rapid growth in teleworking and high demand for digital solutions in the economy, particularly in the business and education sectors. To meet these changing demands, it is essential to continue developing the ICT sector by implementing this Policy. To achieve the intended policy objectives, a multi-stakeholder National ICT Policy Advisory Council, an Implementation Secretariat, Implementation Plan, Communication Plan, flagship projects in all sectors of the economy, and a strategy for inclusiveness in the digital economy are covered in this reviewed Policy.

As we move towards becoming a digital middle-income economy by 2030, it is important to establish a regulatory framework that facilitates access to information and communication technologies (ICTs) while promoting trust and confidence in their use. In order to ensure that the use of these technologies is sustainable and contributes to socioeconomic development, our Ministry is committed to working with all stakeholders to put in place legislation and regulations that are competitive, secure, green, healthy, and dynamic. This includes prioritizing the development of a robust ICT infrastructure, fostering an environment that encourages innovation and entrepreneurship, and investing in the education and skills of our citizens to ensure that they are equipped to participate in the digital economy. With the right policies and strategies in place, we are confident that Zimbabwe can achieve its goal of transforming into a thriving digital economy by 2030.

Honourable Dr. T. A. Mavetera, M.P.

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Signature

MINISTER OF INFORMATION COMMUNICATION TECHNOLOGY, POSTAL AND COURIER SERVICES

POLICY FOR ICT

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ABBREVIATIONS AND ACRONYMS

3G	:	3rd Generation Technology
4G	:	4th Generation Technology
5G	:	5th Generation Technology
AU	:	African Union
BAZ	:	Broadcasting Authority of Zimbabwe
BDA	:	Big Data Analytics
DNS	:	Domain Name System
DSTV	:	Digital Satellite Television
ECMS	:	Electronic Case Management System
EMF	:	Electromagnetic Field
G2C	:	Government to Citizen
G2G	:	Government to Government
G2P	:	Government to Private Sector
GDP	:	Gross Domestic Product
GIS	:	Geographical Information System
GSMA	:	Global System for Mobile Communication
GVT	:	Government
IAP	:	Internet Access Provider
ICNIRP	:	International Commission on Non-Ionizing Radiation Protection
ICT	:	Information and Communications Technology
IDI	:	ICT Development Index
IGF	:	Internet Governance Forum
IoT	:	Internet of Things
IPR	:	Intellectual Property Right
ISP	:	Internet Service Provider
ITU	:	International Telecommunications Union
IXP	:	Internet Exchange Point
LTE	:	Long-Term Evolution
MDAs	:	Ministries, Departments and Agencies
ML	:	Machine learning
MICTPCS	:	Ministry of Information Communication Technology, Postal and Courier Services
MVNO	:	Mobile Virtual Network Operators
NDS1	:	National Development Strategy 1
NECF	:	National Economic Consultative Forum
NEPAD	:	New Partnership for Africa's Development
NGO	:	Non-Governmental Organisation
NIPAC	:	National ICT Policy Advisory Council
OVC	:	Orphans and Vulnerable Children
PFMS	:	Public Finance Management System
PIS	:	Policy Implementation Secretariat
PLWDs	:	People Living with Disabilities
POTRAZ	:	Postal and Telecommunications Regulatory Authority of Zimbabwe
PPP	:	Public Private Partnership
PTA	:	Postal and Telecommunications Act [Chapter 12:05]

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PTC   :   Posts and Telecommunications Corporation
RCZ   :   Research Council of Zimbabwe
SADC :   Southern African Development Community
SEPs   :   State Enterprises and Parastatals
SMEs :   Small and Medium Enterprises
UNECA: United Nations Economic Commission for Africa
USF   :   Universal Service Fund
VoIP   :   Voice over Internet Protocol
VSAT :   Very Small Aperture Terminal
WHO   :   World Health Organisation
WIOCC: West Indian Ocean Cable Company
ZMC   :   Zimbabwe Media Council

POLICY FOR ICT

INTRODUCTION

The Zimbabwe National Vision 2030 aims to transform the economy into an upper middle-income society offering a high quality of life to its citizens. In this Digital Age, the development and effective implementation of ICT Policies is therefore critical for Zimbabwe to harness the full potential of ICTs in driving inclusive and sustainable development through promoting universal access to information, uninterrupted universal connectivity to the Internet, good digital governance, e-commerce, and equitable quality education, among other important enablers of socio-economic development. The government is committed to the development, implementation and use of ICTs across all economic sectors by introducing the Digital Economy priority area in the National Development Strategy 1 (NDS1) which is buttressed in the Smart Zimbabwe 2030 Master Plan. Ancillary to this is the need to timeously review the National ICT Policy to ensure that the evolving information communication technology landscape is characterized by enabling frameworks that support a robust digital society.

Globally, it has been established that the digital divide is widening between the *'digital haves'* and the *'digital have-nots'* and closing the gaps-locally, nationally and globally requires creative 'pro-people ICT Policies' that focus on national priorities, and on areas that will have a positive impact on people's lives. In this regard, this Policy has been aligned with the country's Vision, NDS1 in priority area and the Smart Zimbabwe 2030 Master Plan towards having a digital economy on the journey to becoming *"an upper-middle -income society by the year 2030"*.

According to the Broadband Commission for Sustainable Development, "Half the world's population was expected to be connected to the Internet by the end of 2019. The unconnected are unable to benefit from key social and economic resources in our expanding digital world"[1]. This requires exceptional and coordinated efforts from governments, the private sector, development partners and civil society. Furthermore, confident, creative and productive ICT capability and utility of skills purposefully, safely and responsibly have become essential in the information age which is characterized by exponential technological advancements that continue to impact modern society. While confidence, creativity and productive use of ICTs is preceded by requisite digital skills, safety while transacting online is underpinned by cyber security and data protection which remain essential prerequisites for participation in the digital knowledge economy.

The adoption of the Sustainable Development Goals (SDGs), African Union's (AU) Agenda 2063, whose realisation partly depends on broadband, and the Digital Transformation Strategy for Africa (2020-2030) places emphasis on technology - including the ICTs - as a means for implementation of these globally and continentally agreed development goals. According to the Southern Africa Development Community (SADC) broadband gap analysis, 83% of African countries have broadband plans and therefore the need for broadband is not in dispute. Instead, the focus is on how to achieve universal broadband for all in Africa. In particular, an enabling transparent, pro-competitive, technologically neutral and predictable policy and regulatory framework that reflect on national realities and best practice are essential for building a people-centered Information Society.

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According to POTRAZ's 2021 third quarter Abridged ICT Sector report, the Internet penetration stood at 62.6% and the mobile population coverage stood at 99.87% 2G, 93.47% 3G and 35% LTE. However, high speed broadband coverage is still limited for most rural and formally marginalized communities.

In addition, though the liberalization of the ICT sector has brought about the potential for further growth of internet users in the country affordability and digital skills coupled with disparities in urban/rural, gender, people with disabilities, etc, across users still present challenges. The local ICT industry also needs to develop to create innovative services and employment for the citizens. This policy seeks to address these digital connectivity disparities currently obtaining.

Upon the lapse of the Zimbabwe National Policy on ICTs (2016 - 2020), this policy review has been effected in line with the technological advancements and national development priorities. This Policy is important to Zimbabwe since ICTs have become a life blood development tool providing unprecedented opportunity to meet national development goals such as poverty reduction, provision of basic health care and education, among others far more effectively than before.

This Policy is anchored on the priority areas of infrastructure and services, policy, legislation and regulation, digital skills, investment and funding, innovation and local production, inclusiveness, content and applications, emerging technologies, partnerships and collaboration, sustainability and safe use of digital services. These policy priorities are backed by both demand and supply sides action areas supported by institutional frameworks responsible for the implementation and coordination of the policy actions including flagship projects proposed to spur the Zimbabwean digital agenda. A monitoring and evaluation plan has also been included to take stock of the status of implementation of action areas throughout the term of the policy. This will, among other aspects, cover the Smart Zimbabwe 2030 master plan, the e-Government roll out, provision of power supply and other supporting infrastructure, and improvement of efficiency of state enterprises and parastatals.

In order to mobilize key stakeholders and the public in the implementation of the policy, a communication plan to create awareness, understanding and commitment to the achievement of Zimbabwe National Vision 2030 and digital agenda has been provided in Part 5 to further entrench the vision of *a knowledge-based society with ubiquitous connectivity by 2030.*

POLICY FOR ICT

1 BACKGROUND

Sustainable development cannot be achieved without a robust information and communications technology (ICT) sector to drive the necessary change across all sectors of the economy. ICT have a positive impact on reducing costs and increasing the quality of management of business and public administration. The technologies enhance public service delivery, competitiveness of business, economic and societal modernization. They also have a revolutionary power as a catalyst for change, modernization and innovation, connecting people and communities, improving standards of living, and creating new trade opportunities both locally and internationally. This offers developing countries like Zimbabwe an opportunity to accelerate economic development by modernizing production systems and rapidly increasing competitiveness in this global village.

Zimbabwe has made significant strides in the deployment and use of ICTs. However, the economic challenges that the country has experienced over the past decade has significantly delayed progress in transforming the country into a knowledge-based economy. ICTs are undoubtedly an integral part of the socio-economic and political development of any country since it is a catalyst for development globally. In line with these realities, Zimbabwe has also embraced the inclusion of ICT in all aspects and areas of its society, supported by a dedicated Ministry for Information Communication Technology, Postal and Courier Services (MICTPCS). In addition, the growth of the Internet, has led to the adoption of online service marketing and other online services.

Further, the Internet has also led to the advent of e-learning, e-business, e-commerce, and digital networks that enable online business such as gaming, shopping, social networking, and online entertainment to name a few.

The second Zimbabwe National Policy for Information and Communication Technologies (2016-2020) , was a culmination of a review process that considered the first Zimbabwe National ICT Policy 2015 through a consultative process that involved stakeholders from around all the provinces of the country. The key policy objectives in the 2016 ICT policy included the following:

a) Facilitate delivery of the National Development Strategy and other National Developmental goals
b) Enable and foster access to and increased use of telecommunications in agriculture, education, health, government etc.
c) Achieve ICT leadership in Africa
d) Bridge the digital divide
e) Manage challenges resulting from the telecommunications/ICT development
f) Lead, improve and adapt to the changing telecommunications/ICT environment

The Zimbabwe National Policy on Monitoring and Evaluation requires that *"A Process Evaluation shall be carried out within the first twelve months and thereafter every five years. There shall, however, be a continuous Review Process of the Policy" (Section 8.3 on Review of Policy).* The National ICT Policy (2016-2020) elapsed and a new policy that takes into account new developmental needs is therefore mandatory.

In this regard, this reviewed policy (Zimbabwe National Policy for ICT 2022-2027) has been developed through consultations which brought about a shared vision, unity of purpose, and joint ownership of the ICT policy. This approach was adopted in order to not only enhance the quality of the final product, but to also ensure that the same product was a people driven output with which people would claim ownership. This resulted in the citizenry having a sense of commitment to the policy-making which will contribute to its successful implementation by all stakeholders.

The new National ICT Policy 2022-2027 (ZNICTP 2022) is informed by the *Zimbabwe National Vision 2030* and the economic blueprint NDS I. In the vision, Zimbabwe aims to attain an "upper middle -income economy" status by 2030. The NDS1 identifies a digital economy as one of the priority areas towards the socio-economic transformation of Zimbabwe.

During the NDS1 period, in order to enhance ICT access, usage, digital skilling and industrial development, measures will be put in place to develop smart solutions such as Smart Government, Smart Agriculture, Smart health, Smart Transport and Smart Cities through the use of ICTs and other emerging technologies.

Consequently, the National Vision and Mission with respect to ICTs are as follows:

1.1 Vision

A knowledge-based society with ubiquitous connectivity by 2030.

1.2 Mission

Exploit the potential of ICTs for sustainable socio-economic development in Zimbabwe.

1.3 Guiding values

ICTs are known to strengthen democratic values and promote gender equality and the interest of marginalised groups. Therefore, the values underpinning this policy are thus *democracy, equality and inclusiveness, innovativeness and sustainability.*

Consistent with the vision, mission, and guiding values, this policy covers the following pillars:
   a) Regulatory principles and approaches
   b) Infrastructure and Services
   c) Digital Society
   d) Industry growth sector (ICT in social sector and economic sectors)
   e) Institutional frameworks
   f) Emerging technologies
   g) Human capacity, Confidence and Security
   h) Inclusiveness
   i) Sustainability

In addition, the policy actions in the elapsed policy which were not realised are included in this policy for the period 2022-2027.

2 MAIN SOCIO-ECONOMIC DEVELOPMENT INDICATORS AND ICT STATUS IN ZIMBABWE

2.1 Key Demographic and Socio-Economic Indicators

Zimbabwe has an estimated population of 14,546,961 in 2016, and occupies a land area of 150,803 sq. mi (390,784 sq. km). It is bordered on the north by Zambia, on the northeast and east by Mozambique, on the south by South Africa, and on the southwest and west by Botswana. The capital and largest city is Harare.

The population growth rate for Zimbabwe is currently estimated at 1.1 %. The county's major population is in rural areas with 67.76%, where mainly the underserved communities are located. ICTs have an important role to play in addressing the needs of the citizens including the provision of education through e-learning.

Table 1: *Basic demographic indicators*

Indicator	Measurement
Total population (millions)	13 061 239
Growth rate (annual %)	1.1%
Sex Ratio (Males/ 100 Females)	93
Male population	6 280 539
Female population	6 780 700
Urban/Rural Population Distribution	
Urban	67.76 %
Rural	32.24 %

Source: Census 2012 National Report

2.2 Policy, Legal and Regulatory Frameworks

The telecommunications sector in Zimbabwe was liberalised through the Postal and Telecommunications Act [Chapter 12:05], No. 4 of 2000 which came into operation in the same year and demerged the Postal and Telecommunication Corporation into three entities [Zimbabwe National Policy for ICT (2016-2020)]. The three entities were authorised to operate with postal, telecommunication and cellular telecommunication licenses (ibid, 2016-2020). The regulatory entities in the ICT space are the Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ), the Zimbabwe Media Commission (ZMC) and the Broadcasting Authority of Zimbabwe (BAZ) (ICT Policy, 2016-2020, Section 5).

Government then established the Cabinet Committee on Scientific Research, Technology Development and Applications to provide support to the regulatory bodies. The ICT Policy states that arrangements were made to computerise government ministries in the core centres of Zimbabwe and the creation of a Ministry responsible for ICT. The aim of this move was strategic to ensure that ICT was introduced into the Government sectors and cascaded downwards in the long run. Moreover, the introduction of ICT in Government ensured that the officials who manned the departments would themselves be equipped to train other government Ministries, Departments and Agencies (MDAs). The move also spurred innovation within the

sectors in which ICT was initially mandated to be introduced. The Zimbabwe ICT Policy (2016-2020) sought among other things to:

a) Enhance collective efforts between relevant institutions and Government,
b) Facilitate the introduction of ICT education and its use in primary and secondary schools as well as vocational training centres and tertiary institutions,
c) Promote e-learning throughout the country,
d) Enhance research in ICTs,
e) Cultivate an e-commerce culture,
f) Enhance business innovation and transparency,
g) Ensure that consumers are empowered through ICT use and knowledge,
h) Encourage investment in ICT and enhance Public Private Partnerships (PPPs) especially in infrastructure development initiatives, and,
i) Promote regulatory and institutional efficiency and effectiveness.

The foregoing, policy, legal and regulatory framework facilitated the development of ICTs, to their current level in Zimbabwe. Table 2 illustrates the state of ICT (Licensed Communications Providers) in Zimbabwe as recorded in the POTRAZ register of January 2021.

Table 2. Licensed Communications Provider in Zimbabwe at a glance

Service provider/ licensee	Number
Internet Access Providers (IAPs)	9
Converged licensing framework licensees	5
Public Data Service Providers	2
Postal Service General Operators	1
Mobile Cellular Operators	3
Fixed Telephony Operators	2
Private Network Licence Holders	40
Television Broadcasters	7
National Radio Broadcasters	5

Source: http://www.potraz.gov.zw/ *(Accessed on 16th January 2022)*

Based on the information above, there is a huge opportunity for Zimbabwe to expand services through Public Data Service providers and Mobile Cellular Communications Operators or Mobile Network Operators (MNOs) based on appropriate legal and regulatory interventions to ensure that the population is covered.

In this regard, the existing policy, legal and regulatory situation in Zimbabwe will be improved to enable the development of ICT towards the implementation of Smart Solutions and make it easier to integrate with the region and the rest of the globe.

2.3 ICT Challenges in Zimbabwe

The ICT sector is faced with both supply and demand challenges which curtail the realisation of the full potential of ICTs and which are addressed by this policy:

2.3.1 Supply side challenges
a) Inadequate communications infrastructure including for people with special needs – high speed broadband coverage is still limited

b) Inadequate commercial electricity – national power grid does not cover the whole country leaving the majority of the population with no power sources load shedding has exacerbated the problems into urban areas

c) Duplication of both passive and active equipment by ICT service providers - though services providers have embraced passive infrastructure sharing much needs to be done on sharing active infrastructure

d) Local industries have not been developed to lessen technological dependency in the form of importation of hardware and software into Zimbabwe

e) Fragmented approach to the development and implementation of the ICTs.

f) Inadequate foreign currency allocation for ICTs

g) Sanctions – service providers are failing to access critical ICT services and products from key international vendors due to ZIDERA.

2.3.2 Demand side challenges

a) Inadequate ICT skills – there is a shortage of ICT skilled manpower to roll out ICT programmes and for productive use of ICTs

b) High internet prices for service subscriptions hence the need for intervention from the regulator to protect the consumer

c) Limited awareness - Citizens are not fully aware of ICT policies and regulations.

d) Inadequate local content

e) Insufficient online government information – government is yet to fully automate and digitize its business operations.

f) High cost of ICTs-devices, servers, network equipment etc

2.4 Strategies to Mitigate ICT Challenges

This policy aims at addressing the gaps identified in the development of the ICT sector in Zimbabwe. The following are some of the possible strategies to mitigate the challenges being faced so as to achieve the objectives of the policy.

2.4.1 Supply Side

a) Increase national bandwidth by promoting competition in the deployment and use of fibre-optic cables on key internet routes, especially those that link the country to the undersea cables and between cities including by reducing copper wire on key routes and dependence on V-SAT connections for these routes

b) Make Wi-Fi more freely available including for educational use

c) Expand coverage of postal services to the rest of the country and automate the post offices

d) Increase the international gateway capacity to supply sufficient bandwidth to allow information out of and into Zimbabwe

e) Maximize voice and data traffic locally and regionally to build local and regional economies of scale by expanding service offering

f) Develop a national definition of universal service and universal access, which incorporates digital literacy and nationwide broadband presence

g) Strengthen institutions to deliver on the objectives of the ICT policy

h) Enact laws and issue regulations necessary to spur further development of the ICTs in Zimbabwe

  i) Promote the widespread use of ICTs

  j) Provide power supply and other complementary infrastructure necessary for the deployment of ICTs

2.4.2 Demand Side

To ensure commensurate adoption and utilisation of ICTs, the services and products offered should appeal to consumers and meet expected standards of quality, conformity, health and security. Thus, during the term of this policy, the following will ensue:

  a) Address disparities across gender, income, age and location which lead to guarantee access to all

  b) Promote development of digital skills for all citizens

  c) Ensure affordability of ICTs

  d) Support research and innovation by encouraging learning institutions to develop ICT solutions

  e) Address access and affordability issues to enhance the use of the Internet

  f) Support innovative solutions by small and medium enterprises (SMEs) to the country's connectivity and services challenges

  g) Promote access to ICTs by youth, marginalised communities and people with disability in the framework of inclusiveness

  h) Create awareness of the policy and the benefits of ICTs

  i) Consumer protection including the protection of vulnerable groups

Section III

THE POLICY

3 POLICY PRIORITY AREAS

These policy priorities are backed by both demand side and supply side action areas supported by institutional frameworks responsible for the implementation and coordination of the policy actions including flagship projects proposed to spur the Zimbabwean digital agenda. The Government will thus promote the ICT agenda across the following priority areas.

3.1 Infrastructure and Services

The rapid evolution of the digital space necessitates continuous innovation, adaptation and agility. Further, ancillary demands on regulation such as for scarce resources as spectrum are imminent. As such, there is need to ensure that regulations are responsive and enabling to facilitate roll out and uptake of new technologies and services. Aspects such as technical specification, type approvals, allocation of scarce sources and licensing should accommodate emerging technologies and trends to ensure that the ICT market is competitively ready for improved ICT experiences. An enabling regulatory environment is imperative to ensure that available and emergent infrastructure is optimally utilised. Critical information infrastructure should also be adequately secured.

3.1.1 Policy actions on infrastructure and services

The following specific actions will be taken to support this pillar:

a) Promote competition in the provision of ICT infrastructure and services
b) Promote the provision and maintenance of infrastructural facilities necessary for ICT development, such as reliable supply of energy, communications and transport facilities
c) Promote service research and innovations including disruptive technologies
d) Adopt integrated planning for ICT deployment with other sectors including energy and public works sectors to ensure that no crucial input is omitted
e) Ensure that existing infrastructure is effectively shared on both passive and active equipment to save on costs and improve coverage
f) Promote efficiency in operation of ICT infrastructure and services including managing of internet traffic at national level as well as on the gateways
g) Restructure the local Domain Name System (DNS) and internet exchange point (IXP) with a view to co-locating the management of the country's DNS and IXP at the same location and under one entity
h) Promote the development and use of green energy to power ICTs
i) Facilitate the establishment of a national fibre backbone with open access by the State including through partnerships
j) Promote the use of ICT to address sustainable development challenges including employment creation, development of ICT enabled systems, eradication of corruption etc.
k) Promote adoption of ICT at all administrative levels of government
l) leverage on ICT to foster cybersecurity and enhance accountability and transparency in the public and private sectors.

3.1.2 Broadcasting Services

Due to convergence at the technological, applications and services level, it is envisaged that POTRAZ, ZMC and BAZ work closely together in support of the National ICT Policy (2022-2027) provisions. The common understanding is that ICT includes all types of telecommunication and broadcasting systems and services (wire-line, wireless, mobile, satellite), computer hardware, software, networks and services, content producing and managing multimedia systems.

The policy statement is:

> *To promote the development of broadcasting and telecommunications services through the provision of infrastructure to enable expansion of digital TV coverage in unserved and underserved areas; encouraging development of high quality, easily accessible, relevant local content; and ensuring that the radio frequency spectrum is managed in equitable and transparent manner with specific and clear conditions.*

3.1.3 Postal and Courier Services

This National ICT Policy caters for the Postal Service General Operators that handle Postal and Courier traffic countrywide. It is the objective of this policy to expand coverage of postal services to the rest of the country and automate the post offices to enable support for e-services. However, local postal and courier as well as international outgoing postal and courier items have steadily faced challenges over the past decade due to advances in technology thus the need for postal and courier services business innovation through adoption of emerging technologies.

The policy statement is:

> *To support the implementation of future plans related to Zimbabwe's postal and courier services, market structure and competition, National Address System, Zimbabwe Post Office infrastructure, Universal service and access and postal services generally", as guided by the Postal Sector Policy.*

3.2 Policy, Legislation and Regulation

An enabling environment is imperative for a functional ICT ecosystem. The volatility of the ICT sector and the transitory nature of innovation necessitates an agile legal, regulatory and institutional environment capable of responding to the changing needs of the market. The promulgation of the Cyber and Data Protection Act (Chapter 12:07) ensured the increased consumer satisfaction and ethical use of ICTs. It also ensured improved data protection in order to build confidence and trust in the sector of information and communication technologies.

In order to realise the objectives of this policy, the following policy, legislative and regulatory actions will be implemented during the term of the Policy to further support the overall vision of the Government:

a) Conduct regular and adequate policy reviews in consultation with stakeholders
b) Ensure consumers are protected during the dispensation of the rapid adoption and diffusion of ICTs including 3G, 4G (LTE), 5G, and other emerging technologies

c) Develop guidelines to provide a high level of protection for all people against substantiated adverse health effects from exposures to electromagnetic fields (EMFs)

d) Establish institutional mechanisms and procedures for determining sectoral ICT application priorities

e) Develop policy, legal and regulatory framework for adoption and use of emerging technologies in all sectors including public, growth and private sectors among others

f) Advocate for increased infrastructure sharing for both active and passive infrastructures

g) Regulate Mobile Virtual Networks (MVNOs)

h) Implement mobile number portability

i) Facilitate the integration of national policy and regulatory frameworks with regional frameworks

j) Review the current Universal Service Fund mandate and application framework to align the entire process with the MICTPCS Policy goals by amending the PTA Act (2000), [Chapter 12:05]

k) Enact legislative amendment to ensure that there exist autonomous regulatory bodies in the ICT sector as a way of dealing with issues of conflict of interest in the exercise of distinct regulatory mandates

l) Develop policies, legislation and regulations for Smart Solutions including for Smart Health, Smart learning, Smart Agriculture, Smart Manufacturing, Smart Transport, Smart Tourism, Smart Mining among others

m) Take legislative measures for a procurement quota system to support locally developed ICT solutions

n) Provide tax incentives for innovative ICT companies and those that take students on industrial attachment for ICT research and innovation

o) Enact legislation for digital financial services

p) Enact legal and regulatory framework for the National Data Centre

q) Enact framework for cloud computing and big data

r) Implement regulatory framework and processes to rationalize data tariffs to make broadband services more affordable and to increase usage

s) Provide the legal and regulatory framework to guide the implementation of smart city initiative

t) Amend the Lawful Interception Framework to be in line with global standards and best practice

u) Enact new and periodically review existing legislation governing ICTs in line with current trends

v) Enact a legal and regulatory framework that creates an environment of market competition to among others address issues of access cost, service availability, consumer choice and quality of service among other issues.

3.3 Smart Zimbabwe 2030 Master Plan

The government of the Republic of Zimbabwe is committed to strengthening ICTs as they are cross-cutting enablers across all sections of the society and economy. To systematically exploit the potential of ICTs for natural development, Zimbabwe developed a Smart Zimbabwe 2030 Master Plan with the key pillars anchored on

a) Policy, Regulation and Statutes

b) Secure and Shared Infrastructure

c) Partnerships, Skills, Capacity Building and Content Development
d) Confident and Security of Network Services

This National ICT Policy correlates with aspects articulated in the Smart Zimbabwe 2030 Master Plan. The Smart Zimbabwe 2030 Master Plan speaks to the NDS1 by articulating the Digital Economy as an outcome of its implementation.

3.4 Digital Skills

The Government of Zimbabwe intends to increase digital skills across the country through enhanced teaching and learning using ICTs. The main objectives are to develop ICT Innovations, Digital Entrepreneurships, ICT industry development and growth, increase ICT literacy among others. This policy aims to provide conducive enabling environment, digital skilling platforms and mechanisms to all learning institutions to enhance digital skills development. Therefore, the following strategies that ensure resources are availed and optimally used in order to realize ICT policy goals will be implemented:

a) Mainstream ICT training into the primary, secondary, tertiary education and life-long learning systems in the context of creating a digital society
b) Establish strategic partnership with leading ICT countries and organisations for capacity building and skills exchange
c) Launch regional ICT innovation and entrepreneurship projects
d) Attract ICT skills both internally and from the diaspora
e) Lobby for the provision of renewable energy (green energy)
f) Offer PhD research incentives in ICTs and related disciplines
g) Set up ICT innovation hubs and Techno parks
h) Use broadband connectivity programs to provide internet access to all stakeholders including schools and hospitals, among other institutions.
i) Lobby for the inclusion of ICT subjects in curricula or courses offered at all levels of education
j) Train the rural population to improve their skills to use modern technological devices and services for productive purposes and in all aspects of human endeavour
k) Promote extensive capacity building and training programmes to provide adequate supply of qualified ICTs personnel and knowledge workers in all sectors
l) Capacitate the Ministry responsible for ICT to enable it to support the formulation of sector specific ICT policies that are aligned with the national ICT policy
m) Promote e-learning and use of e-learning materials throughout Zimbabwe
n) Make use of the USF to boost connectivity for remotely located schools, in order to facilitate the e-Learning Programme at all levels of education
o) Promote acquisition of lifelong digital skills by all Zimbabweans
p) Establish partnership with regional and international development partners for development of digital skills
q) Promote retention of skilled citizens
r) Support the capacity building of the security sector to enable them to provide leadership in development, adoption and diffusion of technological/digital transformation.

3.5 Investment and Funding

In as much as the licensing regime has been converged thus enabling a range of available service options, the need for funding to realise the ICT policy objectives and expand service provision and utility still exists both in the public and private sectors. To further support the drive towards a digital Zimbabwe, a variety of investment and funding options will be pursued across the entire ICT value chain with incentives where necessary to drive the digital agenda. In order to attract investment, the following actions will be implemented:

a) Collaborate with relevant ministries, departments and agencies (MDAs) to create policies and incentives for foreign direct investment (FDI) and domestic investment in ICT
b) Create attractive investment policies in the ICT sector, including facilitation of Public Private Partnerships (PPPs), especially in infrastructure development
c) Provide incentives to support investment in the ICT sector.
d) Utilise USF to prioritise the technologies, infrastructure and systems to provide the most affordable means of communication to unserved and underserved communities, cater for disaster management and serve marginalised communities
e) Facilitate Public-Private Partnerships as an approach to enable empowerment of local firms to participate in the development of the ICT sector
f) Grant Special Economic Zone status to ICT Technology Parks.
g) Encourage public and private investment in ICT e-services applications development
h) Provide incentives for local software, and applications development by creating a market and appropriate promotion

3.6 Innovation and Local Production

ICT innovations will be promoted to position Zimbabwe as the regional ICT center as part of the overall strategy to develop a knowledge-based economy. In addition, local production of ICT products and services will be promoted to create local industry and reduce costs of ICTs. To achieve this, establishment of innovation and techno-preneurship hubs will be supported. Under this pillar, the actions will be as follows:

a) Establish innovation hubs for idea development and actualization
b) Provide seed funding to support ICT innovations and entrepreneurs
c) Provide a platform for advertisement of locally developed ICT products and services
d) Support research and development in current and future technologies and leverage on transformation opportunities and societal models that are homegrown
e) Invest in security programs and capacitate the population on resilient online presence and secure online interactions in line with existing and emerging ICT innovations
f) Promote knowledge and technology transfer while upholding the intellectual property rights of right owners to nurture a progressively competitive information society.

3.7 Inclusiveness

The policy will provide an all-inclusive environment that provides equal opportunities for all persons - men, women, persons with special needs, youth and children. Similarly, affordability of ICT services for consumers and ensuring that smart devices are available and affordable to consumers will be promoted. The policy actions include:

a) Promote affordability of data and internet access to all the citizens through effective tariff management
b) Ensure affordability of special devices for access to ICTs by persons with disabilities through provision of tax rebate on imports of these devices
c) Support local manufacture and assembly of ICT devices and equipment through import substitution
d) Support acquisition of (including local manufacture and assembly) ICT devices and equipment for people with special needs
e) Promote infrastructure sharing to reduce the cost of ICT charged to consumers
f) Develop and implement policies to ensure gender equality and equity in access to and use of ICTs
g) Ensure gender mainstreaming in Zimbabwean local authorities to ensure that gender balanced perspectives and experiences are incorporated into the design and implementation of ICT programs to ensure equality for all.
h) Create opportunities to ensure the full participation of youth and children in the ICT space to enable them to access national, regional and global opportunities in the information society
i) Support the ICT enabled inclusion and participation of vulnerable and marginalized groups such as children, orphans and people living with disabilities in matters that affect them.

3.8   Content and Applications

There is need for development of local content and applications across all sectors of the economy. The policy is to promote development of local content and applications across all sectors of the economy - including in agriculture, mining, health, education and others. In this regard, this policy seeks to empower entrepreneurs to create locally relevant content and applications that increase Zimbabwean web exposure and build a software industry in the country. This will be achieved through ensuring that at least 30% of ICT software and applications used by government institutions are developed locally in all national languages. Consequently, the following actions will be implemented regarding content and applications development:

a) Facilitate and encourage the development of content that is culturally, socially, economically and religiously acceptable and pertinent.
b) Promote local production of ICT products and services that ensure relevance of content in local languages and the use of appropriate technologies that meet international standards
c) Ensure that ICT training is cascaded to all levels and communities, such as to farming, rural and high density areas where the knowledge is needed to take action.
d) Encourage public and private investment in ICT content and e-services applications development.
e) Offer incentives for local software, and applications development by creating a market and appropriate promotion for these locally developed products.
f) Develop an appropriate policy and adequate support for patent and copyright protection
g) Create a framework for cloud computing, big data and related emerging technologies

3.9 Emerging Technologies

The growing impact of cyber activities across the globe especially in business, social and the global economic domain, in general makes the cyber-space an essential dimension of human activity in the modern day.

Some of the emerging technologies that the National ICT Policy will encourage, support and superintend include 5G and later generations of networks, Internet of Things (IoT), Artificial Intelligence (AI), Machine learning (ML), Big Data and Big Data Analytics (BGA), Block chain technology and Cryptocurrency, Cloud computing, Cyber Security, Optical Fibre Communications (OFC), 3D Printing, Open Data, and Paperless/ contactless technology, etc. Consequently, the development and deployment of the 4IR smart solutions will be encouraged and promoted. Digital business creates new value chains and business opportunities. Disruptive technology introduces double threat in both the upstream accumulated core technical capabilities, and the established business model.

Regarding emerging technologies, this National ICT Policy will:

a) Provide guidelines for responsible and ethical use of AI and other emerging technologies including IoT, BGA, among others
b) Provide policy and legal framework for AI in e-learning, e-health, e-business and all other e-applications across all sectors - political, social and economic
c) Provide a set of standardized data-protection laws and ways of addressing ethical concerns associated with emerging technologies
d) Establish a strong research environment and industry-academia integration on emerging technologies
e) Promote development of the workforce for the AI digital economy including data scientists, computer scientist, IT professionals, engineers, doctors, psychologists, among others.
f) Promote the development and deployment of the Fourth Industrial Revolution (4IR) smart solutions that draw from ICTs and emerging technologies
g) Promote 4IR characterised by cyber-physical systems namely Interoperability, Virtualization, Decentralization, Real-Time Capability, Service orientation and Modularity

3.10 Partnerships and Collaborations

The policy implementation will employ a multi-sector wide approach where partnerships and collaborations will be promoted across all sectors. The implementation of the ICT policy should make substantial use of regional and global platforms. In this regard, the policy will seek to create a conducive environment for investment including through partnerships and collaborations in the ICT sector, and across other sectors. In particular, public private partnerships (PPP) will be encouraged and promoted to support ICT infrastructure development. Further, collaborations and partnerships with other national, regional and global organisations including development partners and specialised UN agencies will be encouraged and promoted. The strategies to promote partnerships and collaborations include to:

a) Promote collaboration between governments and development partners to take a proactive role in promoting the provision of ICT infrastructures by the private sector.

b) Promote national, regional and international integration through enabling and interoperable frameworks and initiatives that support secure utilisation of the internet and digital presence

c) Promote local and international smart partnerships in e-commerce

d) Establish partnerships with organisations including the ITU, UNESCO, Silicon Valley, Global System for Mobile Communication Africa (GSMA) and ICT advanced countries, among other partners, for development of ICT in Zimbabwe

e) Launch regional ICT innovation and entrepreneurship projects which are implemented by teams or partnerships across borders to create critical mass, share ideas and increase the degree of innovation. In this regard, SADC and AU based projects will be a starting point.

f) Develop an efficient framework for public private participation in ICT to stimulate investment in this sector.

g) Implement public sector measures to attract private investment, such as investment incentives, risk reduction mechanisms and training

3.11 Roll Out of Smart Government Solutions

The overall aim is to develop a strategy and coordinate all ICT projects managed by different units involved in the e-government programs in Health, Education, Home Affairs and Finance, among other projects. Due to the crucial role the ICTs play, the action points to promote Smart governance will include to:

a) Implementation of the Smart Zimbabwe 2030 Master Plan

b) Update and sign the national e-government strategy and implementation plan;

c) Introduction Smart government in all MDAs.

d) Development and implementation of Smart Government Cloud, Smart Government Communication Suite, Government Systems Automation & Digitisation and Government Wide Area Network.

e) Development and implement Smart Government Integrated Country Engine

f) Promotion. of the development and deployment innovative e-services across all sectors of the economy

g) Design a robust monitoring, evaluation and review framework for the e-governance for the whole of Zimbabwe.

h) Expand the reach and integration of the ICT government platforms with other e-platforms to support delivery of commercial and social services

3.12 Power Supply

It is noted that power supply remains a crucial challenge to the deployment of ICTs thus affecting socio-economic development. The absence of power or its interruptions constitute a significant barrier to effective roll out and utilisation of ICTs across Zimbabwe. In order to optimally leverage on ICTs, reliable power supply is a priority to complement ICT interventions by stakeholders including service providers who work to ensure that there is adequate provision of infrastructure and ICT services to further drive the successful

implementation of the national ICT vision. In this regard, the following actions will be implemented:

a) Incorporate power supply and other supporting infrastructure alongside the ICT infrastructure/ service development plans across all policy priority areas plans
b) Promote the development and use of green energy to power ICTs
c) Adopt integrated planning for ICT deployment especially with energy and public works sectors.

3.13 State Enterprises and Parastatals

The State Enterprises and Parastatals (SEPs) will play an important role in the realization of a digital society in Zimbabwe alongside all other stakeholders. It is noted that the SEPs are under-capitalized and thus constrained in their effort to extend services to the citizens. There is therefore need to enhance their efficiency to enable them to effectively discharge their mandate. The following policy actions will be implemented to improve the performance of the SEPs:

a) Capitalize the SEPs to enable them implement flagship projects with the greatest impact on society such as broadband connectivity, cloud services and data centres that will be identified in all sectors of the economy
b) Promote deployment of efficient backbone and international/ internet gateways in order to coordinate the spread of international gateways and curb loss of revenue
c) Optimise the operating models of SEPs to increase efficiency and create market critical mass and economies of scale
d) Implement transformation projects to create a performance driven culture, accountability for results, and business efficiency
e) Facilitate exemptions from specific public sector requirements to enable SEPs in key procurements and retention of key staff
f) Ensure capital expenditure optimisation and infrastructure sharing opportunities
g) Ensure application of effective governance practices in implementing the ICT policy by SEPs
h) Encourage the development, exploitation and protection of intellectual property rights (IPRs) in the ICT sector
i) Ensure efficient and effective utilisation of resources by SEPs in implementing the ICT policy

3.14 National Payments Systems Digital Financial Policy

The goal of the National Payments Digital Financial Policy is "To explore opportunities provided by digital technologies to promote competition, efficiency, innovation, financial stability and inclusion within the payment ecosystem, as provided for by the Reserve Bank of Zimbabwe Act, [Chap: 9:15] and the National Payment Systems Act [Chap: 24:23]".

Policy Statement:

To continuously promote a cash-lite society through the development of a well-integrated digital payment ecosystem leveraging on financial technological innovations which are guided by public interest objectives, anchored on customer trust, confidence building, regulatory compliance and best practices to support financial stability and inclusivity in the economy.

The National Payment Systems Digital Policy aims to provide an orderly development of a payment ecosystem that is efficient, safe, accessible, interoperable, competitive and promotes usage as well as fosters innovation and confidence driven by a culture of compliance with the statutes and best practices. In this regard, this ICT policy will promote the deployment of technologies, infrastructure and services which will support the realisation of the national Payment Systems Digital Financial Strategy.

3.15 Sustainability

It is desirable that policy action across the ICT ecosystem include measures aimed at ensuring sustainability of the sector. To achieve this, the supporting policies, legislation, regulations and guidelines should be market responsive in a manner that guarantees competition, technology and service neutrality, availability and prudent management of scarce resources, and effective monitoring and enforcement. Within the supply and demand pillars, service providers and consumers should ensure that their technology, services and usage adhere to accepted environmental and health standards to protect special interest groups such as children from harmful exposure. Therefore, green solutions will be promoted to further support conservation efforts while continuous capacity building and learning across the ICT landscape will be mainstreamed for sustainable advancement within the sector. Consequently, the government will:

a)   Promote green ICT solutions

b)   Formulate e-waste policies, legislation and regulations

c)   Create awareness on the sustainable use of ICTs including conservation of energy

d)   Promote secure online presence for all consumers and citizens through legislation, regulation and education of consumers

3.16 Safe Use of Digital Services

Telecommunication is essentially made possible by-electric and magnetic fields also known as electromagnetic fields and high frequencies. Although some efforts have been made in the medical field to study the possible effects of electric and magnetic fields on human health, further studies have been recommended. The electric and magnetic/electromagnetic fields (EMF) result from the sun and various electronic devices including cables. EMF stands for electric and magnetic fields (at low frequencies) and electromagnetic fields (at high frequencies). At low frequencies, electric and magnetic fields appear separately, but at high frequencies they appear simultaneously as electromagnetic fields. Usually, low frequencies are called *non-ionising radiation* while high-frequency radiations are known as *ionising radiation,* meaning they can strip electrons from atoms at the human cell level and cause genetic mutations that can lead to cancer.

However, existing evidence suggests that more studies are needed to better understand the relationship between *non-ionising radiation* and cancer. According to the World Health Organisation (WHO), a number of epidemiological studies suggest a small increase in the risk of childhood leukemia with exposure to household radio frequency magnetic fields, although a cause-and-effect relationship has not been established, and further investigations are ongoing. The Government will ensure the safe use of ICTs and protection against harmful effects of EMF by:-

a)   Ensuring compliance with safety standards for all electrical and ICT devices required for access to and use of digital services;

b) Monitoring EMF safety compliance by service providers and users of ICT services
c) Educating citizens about the effects of EMF on their health
d) Promoting the safe use of devices, including mobile phones, WiFi devices, computers/laptops, IoT devices, among others
e) Encouraging measurement of EMFs to generate evidence needed to formulate further interventions
f) Partnering with organisations competent in EMF safety standards and domesticating these standards in Zimbabwe.

3.17 Cyber Security

Cyber-attacks have emerged as a global threat to economic stability and the way we live. Successful cyber-attacks on computer systems and networks supporting critical national assets and infrastructure could cause significant havoc to our way of life, cause financial loss, undermine public confidence, and cause major disruption to our economy. These new and emerging threats have left nations and organizations exposed and vulnerable to cyber-attacks. Current trends in cybersecurity point to significant increases in attacks against Critical Information Infrastructure (CII) and related organizations that are drivers of national economies. It is therefore imperative to launch a national effort to curb cyber-crime and create a safe and secure cyber space. Consequently, the Government will;

a) Formulate, evaluate and review policies, regulations and guidelines for the security of Information Communication Technology (ICT) systems, networks and related infrastructure.
b) Ensure the security of Information Communication Technology systems, networks and infrastructure by coordinating the implementation of security standards and procedures.
c) Establish technical and procedural security control measures to preserve the Confidentiality, Integrity, and Availability (CIA) of information.
d) Conduct periodic awareness and training on cyber security.
e) Foster co-operation between the public and private sectors in safeguarding the national critical infrastructure.
f) Establish international linkages with other regional and international bodies on information security, e.g. the SADC regional Computer Incidence Response Team.
g) Establish cyber security structures such as the national CIRT for effective response to cyber threats.

3.18 Policy Actions

This policy aims to ensure adequate supply of ICTs and stimulation of their safe and productive use for socio-economic development of Zimbabwe. The following are high level supply and demand side policy actions that will be implemented to realize the vision of the policy.

3.18.1 Supply side
a) Leverage the national ICT backbone, SEPs and the West Indian Ocean Cable Company (WIOCC) shareholding, among other options, to achieve further supply side internet price reductions
b) Facilitate the deployment of efficient last-mile access technologies to reduce prices
c) Facilitate negotiations with upstream internet bandwidth suppliers to encourage continuous supply side internet price reduction

d) Facilitate competition among Internet Service Provide (ISPs) as a mechanism to further reduce internet prices to consumers

e) Promote the use of mobile virtual network operators (MVNO) as a vehicle to implement empowerment of local entrepreneurs in telecommunications

f) Promote the production, manufacturing, development, delivery, and distribution of ICT products and services by local industry

g) Promote local development and manufacture or assembly of ICT hardware and software to ensure their availability at affordable prices

h) Foster efficient utilisation of network resources as well as scarce network resources that include radio frequency spectrum, numbering, and rights of way

i) Foster efficient utilisation of regulatory resources in the form of spectrum management resources and other regulatory logistics

j) Increase the availability of power supply including renewable sources of energy

3.18.2 Demand side

Increasingly, almost all facets of modern society are becoming digital. The demand for internet has further driven up demand for services and solutions that consumers interact with regularly. One area that has experienced exponential growth is the e-commerce sector especially during the COVID 19 pandemic period when physical contact was significantly restricted. To effectively trade online, digital payment solutions have also gained prominence. Thus, in this policy it is envisaged that appropriate interventions will be pursued to ensure that the heterogeneity of the Zimbabwean population is accommodated within the digital marketplace. This should be supported continuously with ancillary implementation of other enabling facets such as cyber security, consumer protection and digital literacy. The following actions will be taken:

a) Ensure gender equality and equity in access to and use of ICTs

b) Bridge the digital divide in relation to men and women, the youths, elderly, people living with disabilities and Orphans and Vulnerable Children (OVC)

c) Create opportunities for youths and children in the development and use of ICTs, particularly in content development, education, employment and income generation

d) Inculcate a culture that embraces ICTs from Primary and Secondary education through to Vocational and Tertiary education system

e) Ensure affordable access to ICTs by people living with disabilities and people with special needs

f) Create and expand a conducive and enabling environment for e-commerce

g) Support the roll out of digital financial services including mobile financial services

h) Avail e-government services to all citizens

i) Promote digital service innovations in all sectors of the economy

j) Promote trust and confidence in the use of ICTs

k) Promote safe use of ICTs by addressing EMF health and other concerns

l) Protect ICT consumers in the cyber space

m) Create awareness of the ICTs - their availability, potential to impact development and their safe use

To effectively implement this policy, it is important that the responsible agencies be sufficiently strengthened and empowered to exercise the various mandates attendant to the realisation of the desired policy outcomes. One area that requires immediate attention is the streamlining of functions across various institutions to eliminate duplicity of functions. To this end, functions susceptible to conflict of interest should administratively be distinguished and headed by independent boards complete with functional and financial autonomy subject only to best practice accountability through the ombudsman or judiciary. In this regard, the MICTPCS will be provided with adequate resources to support the implementation of this policy across all sectors. Further, necessary legislative action will be taken (in the framework of converged ICT regulator) to remove any potential conflict among institutions that are mandated to implement this policy thus enabling the successful implementation of the policy.

3.19.1 Coordination of Implementation of the ICT Policy

For purposes of ensuring that the policy is coordinated and implemented across all sectors, Government will enhance the capacity of the MICTPCS to coordinate and provide technical support to all MDAs. This will enable corroborated institutional ICT strategies and implement them in line with the national vision. In particular, the government will:

a) Strengthen the capacity of institutions involved in the implementation of this policy

b) Establish a multi-sectoral advisory council - National ICT p

Policy Advisory Council (NIPAC) to provide strategic direction on the implementation of this Policy

c) Establish a policy implementation secretariat (PIS) to track the implementation of the policy through a communication, coordination, monitoring and evaluation framework for the policy.

3.19.2 Stakeholder Engagement during Implementation of the ICT Policy

The government will set up the following structures to enable continuous stakeholder engagement during the life of this policy:

a) National ICT Policy Advisory Council (NIPAC)
b) Publicity platform and resources
c) Information sharing platforms
d) Platform to allow interested people to engage on the Policy

The National ICT Policy Advisory Council is a team of distinguished policy makers, academic, and industry and development professionals cutting across the public and private sector.

3.19.3 Roles in Implementation of the ICT Policy

The various Government Ministries, Departments and Agencies (MDAs), the Legislature, Judiciary, business community, civic organisations, research and academic institutions; consumer organisations, and ordinary citizens have critical roles to play in the implementation of this ICT policy while some of the roles will be coordinated through respective Government ministries.

As the champion of this policy, Government will facilitate the participation of specific institutions in the industry that are necessary including providing a suitable regulatory

framework, ensuring adequate capacity building in implementing institutions, coordinating policy implementation, supporting research and innovation, and providing incentives for all stakeholders involved in the implementation of the policy.

3.19.3.1 The Executive

As a driving force behind this policy, the Government encourages the participation of sector-specific institutions by ensuring that capacity building measures are put in place.

3.19.3.2 Parliament

Parliament needs to:-

a) Advocate for the allocation and timeous availing of financial resources to sustain implementation of the ICT policy;
b) Promote and monitor utilization of resources in implementing the ICT policy;
c) Ensure good governance practices are applied in implementing the ICT policy;
d) Enact and periodically review legislation governing ICTs in line with current trends
e) Assume a leadership role in the usage of new technologies.

3.19.3.3 The Judiciary

The judiciary needs to interpret the laws governing the use of ICT. To do this effectively, it not only needs to use the legal knowledge, but also to use ICT in its day-to-day affairs. With the continued growth of the ICT sector, disputes and conflicts are likely to occur. Judges and prosecutors must be able to deal with judicial and jurisdiction issues related to ICT disputes. Cyber crime and other tech-enhanced crime are some of the issues judges face in court. It is therefore recommended that the judiciary and other law enforcement agencies, with the assistance of ministries responsible for ICT and education, initiate a process to enable and train incumbents on ICTs. This is imperative with the imminent introduction of the Electronic Case Management System (ECMS) by the Judiciary Service Commission in the Courts as one of the e-applications in MDAs. The Judiciary will: -

a) Preside over cases and pass judgement on all ICT legal matters
b) Collaborate with other arms of government to continuously develop the ICT sector
c) Advocate for improved quality of ICT services to deliver e-justice

3.19.3.4 Regulators

It is the role of the converged ICT regulator (POTRAZ) to play the leading role in managing the sector. There are other actors in the ICT sector and, as such, there are areas of regulation that involve more than a single regulator. It is the responsibility of the relevant regulatory authorities in each sector to ensure that the ICT development and management guidelines in this policy are followed through collaboration. To achieve this and the objectives of this policy, the converged ICT regulator will play a leading role in exchanging information on ICT policy, legislation, and regulation.

3.19.3.5 Service providers

The service providers will play a crucial role in the implementation of this policy. They will, among other roles: -

a) Invest in the ICT sector
b) Provide quality services through service level agreements
c) Deploy efficient technologies
d) Engage in fair competition
e) Collaborate with other service providers to effectively serve the citizens
f) Implement service innovations through adoption of emerging technologies

g) Provide services at affordable prices

3.19.3.6 Development partners
Development partners will play an important role in the implementation of this policy through partnerships and collaborations including: -

a) Mobilising resources for implementation of the Policy
b) Capacity building and strengthening institutional frameworks
c) Providing technical support
d) Supporting policy review
e) Supporting research

3.19.3.7 Research Institutions
Research institutions will: -
a) Expand and consolidate research and development in ICT usage
b) Use ICT to expand scientific and research institutions using the Internet
c) Take leadership in the development and testing of new technologies
d) Create networked and multidisciplinary research teams on ICT
e) Initiate and support ICT innovation and incubation, technology transfer and adaptation.

3.19.3.8 Civil Society
With regard to the implementation of this Policy, the Civil society will: -
a) Provide advocacy and funding for the use of ICT by vulnerable groups and marginalized communities such as rural areas
b) Complement government efforts to develop and use ICT in all sectors of society
c) Advocate for the equitable distribution of ICT resources to enable and use public access, organize awareness-raising campaigns on the use of ICT
d) Champion consumer rights in relation to ICTs.

3.19.3.9 Consumer Organisations
The role of the consumer organisations will be to: -
a) Operate within the existing legal framework to articulate and lobby for the interests of consumers of all ICT services including telecommunications, broadcasting and postal and courier services including for:
   i. Pricing
   ii. Quality of service
   iii. Consumer choice
   iv. Consumer rights
b) Collaborate with the ICT sector regulator on consumer education and creation of awareness

3.19.3.10 Citizens
The citizens have a crucial role to play in the implementation of this policy including through consumer organisations. They will, among other roles: -

a) Demand and pay for quality services
b) Use ICT services for productive purposes
c) Protect the ICT infrastructure from vandalism

3.20 Flagship projects and Coordinated Implementation

This policy recognizes that ICTs make a significant contribution to reducing social, political and economic inequalities, increasing national productivity, promoting wealth creation and entrepreneurship, and increasing the efficiency of public administration. The ICTs also strengthen democratic values, promote gender equality, and the interests of marginalized groups. This ICT policy is an effective catalyst for national development because it will enable modernization and substantial investment in high performance ICT infrastructure, capacity building and strengthening of institutional arrangements. ICT policies are also designed to ensure that private sector interests and expertise create investments in which the ICT sector creates jobs, increases national productivity and empowers citizens by expanding choice through unrestricted connectivity.

3.20.1 Flagship projects

Existing and new public and private sector institutions in all economic sectors are expected to formulate sectoral strategies / programs for the implementation of ICT flagship projects. Such projects will, among other things, raise awareness of the benefits of ICT, develop human ICT skills, improve research and training capacities, demonstrate the benefits of public sector ICT leadership and promote public-private partnerships. The projects will cover all policy priority areas, including infrastructure, content e-applications in all sectors including health, education, agriculture, mining, public administration, emerging technologies pilots, capacity building, R&D, service innovations, etc

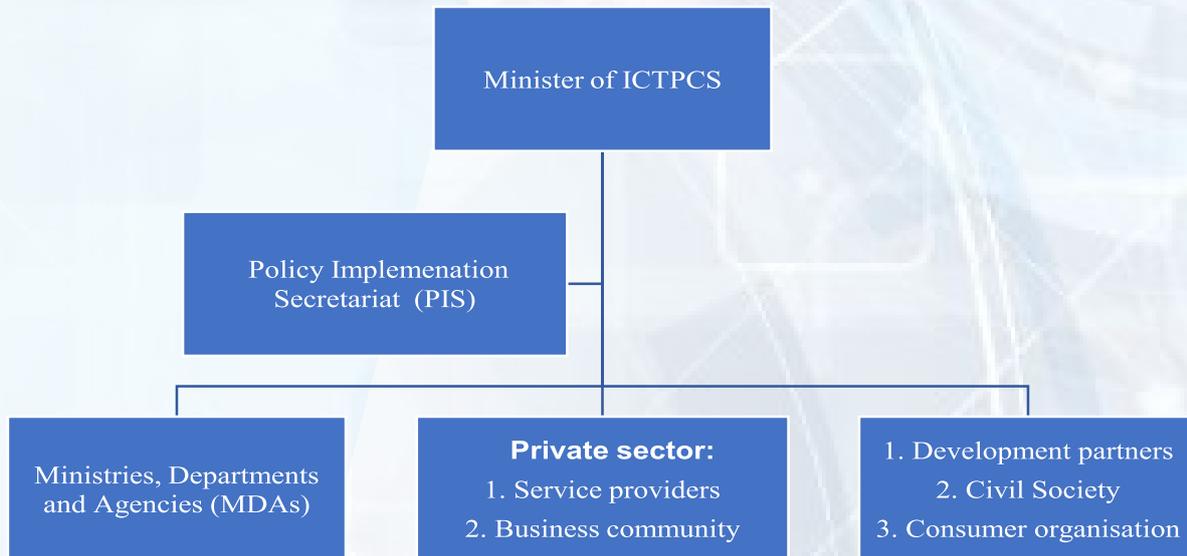### 3.20.2 Coordinated Implementation of the Policy

In order to realize a coordinated implementation of this policy, a National ICT Policy Advisory Council (NIPAC) will be put in place. The organogram (Figure 1) provides the structure of the Council which will ensure full implementation of the policy. The Minister of ICT, Postal & Courier Services leads the Council whose functions will be coordinated by a secretariat - the Policy Implementation Secretariat (PIS).

POLICY FOR ICT

Figure 1: *Policy implementation coordination structure*

Further, the government will ensure that all sectoral ICT policies are aligned with the national ICT policy values to enable coherent and coordinated implementation of this policy.

3.21 Monitoring and Evaluation

In view of the dynamism of the ICT sector and its cross-cutting nature, and in line with best practice, the policy shall be continuously monitored and evaluated. A mid-term evaluation will be conducted at the end of the 2nd year and the end-term evaluation done at the end of the 4th year followed by a review in the last quarter of the 5th year (See Table 4). It is expected that a dedicated monitoring and evaluation of the implementation of the policy will avert the danger of the Policy lapsing without achieving the intended objectives.

Table 3: *M&E Timelines for ZNICT policy2022-2027*

Evaluation	Time
Mid-term	Year 2, Q4
End-term	Year 4, Q4
Review	Year 5, Q4
Annual review and reporting	Q1 of subsequent year

The progress of the implementation of this policy will be assessed according to targets pertinent to the Republic of Zimbabwe as well as alongside the 10 SADC broadband targets for 2025 which are aligned with the Broadband Commission targets for the same period. For the purpose of the M&E, a comprehensive framework for the policy will be developed within the first three months of the launch of the policy to guide in the coordination, measurement, and reporting of the progress of the implementation of this policy. The comprehensive framework will be according to the policy priority areas as captured in the implementation plan at Part 4, Table 5 and Table 6 of this Policy. Meanwhile, the policy implementation progress will be measured and reported every year and the results of this measurement used to make necessary adjustments.

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3.22 Policy Review

In view of the dynamism in the ICT sector, this ICT Policy will be reviewed on an annual basis to assess progress and realign certain sections with industry developments.

Section IV

IMPLEMENTATION AND COMMUNICATION PLAN

4 IMPLEMENTATION PLAN

Table 4. **Implementation Plan**

Policy priority/theme	Policy Objective	Action	Responsibility	Period
Regulatory principles and approaches	Promote investment, competition, and quality	i. Adopt technology neutral and market responsive regulatory principles ii. Enhance the monitoring capacity for all ICT providers' services iii. Strengthen the enforcement of regulations iv. Enact further needed regulations that support the widespread availability of connectivity such as infrastructure sharing v. Ensure affordable access to scarce communication resources such as spectrum vi. Monitor and measure the implementation of the policy vii. Provide investment incentives	MICTPCS POTRAZ Ministry of Finance & Economic Development Development partners	2023 2024
Infrastructure and Services	Promote the development of a robust ICT infrastructure and service innovations in Zimbabwe	i. Attract investment in the ICTs ii. Capitalise SEPs to deliver their mandate iii. Support ICT service innovations iv. Setup a Board to monitor progress on infrastructure implementation every quarter v. Provide national funding through Universal Services Fund to develop infrastructure in rural/remote areas vi. Enhance compliance with and enforcement of infrastructure sharing following a consultative process with all the key players vii. Enhance transparency and accountability on the use of the Universal Services Fund viii. Capitalise SOEs to develop own infrastructure in order to compete fairly on the market ix. Revamp the ICT procurement processes to expedite the processes	MICTPCS POTRAZ Reserve bank of Zimbabwe (RBZ) Service provider Banks	2024 2027

Policy priority/theme	Policy Objective	Action	Responsibility	Period
Digital Society	Promote the digital society ecosystem involving people, technology and services	x. Promote digital payments systems i. Develop digital skills programmes at all levels of society ii. Support the deployment of enabling technologies iii. Support digital service innovation that respond to national priorities iv. Support local entrepreneurs v. Establish community centres to provide digital skills vi. Ensure Curriculum review complies with the Education 5.0 National Policy that promotes innovation and development of products/services vii. Ensure a gender balance on all educational access, promotion and skills development viii. Promotion of local content development inclusive of rural areas and encourage to consume local ix. Ensure Intellectual Property protection and associated legal framework and special courts x. Promotion of Collaboration among Academia, Gvt and Industry in a triple helix model fashion. xi. Encourage the creation of an integrated sharing of content from both Gvt and the public xii. Provide leadership on PPPs for ICT growth and development xiii. Prioritise skills development to improve on productivity xiv. Provide necessary tax incentives for digital society development	MICTPCS ZIMCHE Ministry of Finance & Economic Development Private sector Development partners Universities	2027
Industry Growth sector (ICT in social sector and economic sectors)	Promote flagship project in every growth sector in the economy	Implement e-applications/services in all priority sectors, including education, health, agriculture, mining etc	All growth sector MDAs Private sector Development partners	2024
Institutional Frameworks	To ensure a robust institutional framework to deliver the digital society promise	i. Establish a multi-stakeholder coordination committee for the implementation of the ICT policy ii. Strengthen the capacity of existing institutions to deliver their ICT mandate	MICTPCS MDAs Development partners	2024
Related policy aspects	Promote e-applications	Develop and implement at least one e- flagship project in each growth and social sector	MDAs Private sector Development partners	2024

Policy priority/theme	Policy Objective	Action	Responsibility	Period
• e-commerce and other e applications • Financial technology (fintech); • Big data and analytics		Develop and implement an e-commerce strategy	MICTPCS RBZ Ministry of Trade Private sector Development partners	2025
	Promote financial technology innovations	Develop and implement a Fintech strategy	RBZ MICTPCS	
• IPv6 transition, Internet governance and net neutrality • Sustainability	Promote internet governance	i. Complete the IPv6 transition ii. Implement net neutrality	POTRAZ Service providers	2024
	Promote the development of digital society skills	iii. Support skills development programmes in data science including big data, analytics etc at vocational training centres and institutions of higher learning	MICTPCS ZIMCHE Academia Development partners	Continuous until 2025
	Promote sustainable deployment and use of ICTs	i. Embed sustainability requirement in all ICT projects	POTRAZ ICT licensees	2024
Emerging technologies	Promote the adoption of emerging technologies	ii. Establish innovation hubs iii. Pilot projects iv. Support local ICT innovations v. Enact policy, legislation and regulation for adoption and diffusion of emerging technologies	MICTPCS POTRAZ Entrepreneurs Private sector Development partners	2025
Smart Solutions	Promote local innovations and their commercialisation	i. Develop and implement flagship projects for smart solutions e.g. Smart Cities, Smart Government, Smart Agriculture, Smart Health and other emerging technologies ii. Provide leading-edge research on smart ecosystem iii. Establish ICT Innovation Hubs and strengthen existing hubs iv. Prioritize Identification and Protection of Blockchain Infrastructure, opportunities, high value information and digital assets; v. Conduct Research and provide leadership approaches to Cyber Security matters vi. Develop a national Rapid Recovery programme from incidents when they occur and promote the adoption of the smart ecosystem collaborative platforms	MICTPCS ZIMCHE Reserve Bank of Zimbabwe Academia Private sector	2027

Policy priority/theme	Policy Objective	Action	Responsibility	Period
		vii. Ensure recruitment and retention of the most highly-qualified Cybersecurity & Blockchain Technology Workforce talent viii. Promote the efficient and effective acquisition and deployment of existing and emerging Technology in Blockchain-based systems.		
Capacity, confidence and security	Promote human capacity development, build confidence in the use of ICTs in all sectors of the economy	i. Create awareness ii. Develop digital skills iii. Strengthen the legal, regulatory and institutional framework for cyber security and data protection	POTRAZ ZIMCHE Academia Parliament Service providers Civil society	2027
Environment, e-waste and climate change	Promote environmentally friendly ICT development	Provide regulatory and fiscal incentives for green ICT deployment	POTRAZ Service providers Consumer organisations	2024
Access to ICTs by all	Connect all Zimbabweans with broadband	Support rural connectivity projects including through subsidies and regulatory incentives	POTRAZ Service providers	2027
Support infrastructure	Promote multi-sectoral approach to delivery of the digital society projects	Develop an integrated plan for the digital economy	MICTPCS Ministry of Energy Ministry of Public works	2024
Monitoring and evaluation	To ensure that the implementation of ZNICT policy 2021-2025 is successfully implemented	Measure the progress of implementation of the policy and take corrective action as necessary	MICTPCS (the implementation coordinating committee)	
Policy alignment	To promote coherent implementation of the National ICT Policy by ensuring that policy values are reflected across all sectors of the economy	Communicate the policy values to ensure that MDA and sectoral ICT policies are aligned with the national ICT policy.	MICTPCS MDAs All Sectors of the economy Service providers	

4.1 Amplification of Some Strategic Policy Actions

The following (Table 6) is an amplification of some of the strategic policy actions, namely Inclusiveness, consumer protection, universal service fund, convergence, data sovereignty and SADC level integration.

Table 5: Amplification of Some Strategic Policy Actions

Policy Priority	Strategic Actions	Responsibility	Period
1. Bridging gender digital gaps (*Inclusiveness*)	i. To measure the digital disparity across gender and provide incentives to address the disparities ii. To address gender-specific disparities to guarantee access for all iii. To develop and implement strategies to address gender equality and ensure equal opportunities in access to and use of ICT iv. To ensure gender digital mainstreaming in all Zimbabwean local authorities v. To ensure gender balance in all digital educational access, promotion and skills development opportunities vi. To promote the interest of marginalised groups with regard to digital economy	MICTPCS PIS Ministry of Finance & Economic Development Civil society Development partners	2025
2. Customer service (*Consumer protection*)	i. To strengthen POTRAZ's institutional capacity for customer service ii. To formulate and enforce consumer protection regulations for all categories of consumers iii. To sensitize consumers on their rights and obligations to improve service delivery iv. To educate and protect consumers in order to increase trust and confidence in the use and maintenance of ICTs v. To ensure that consumers are protected during rapid adoption and diffusion of ICTs including 3G, 4G (LTE), 5G, etc., and other emerging technologies vi. To make ICT services affordable to consumers vii. To promote and ensure that smart devices are available and affordable to all consumers viii. To promote the establishment and capacitation of consumer organisations (consumer protection).	POTRAZ Civil society Consumer organisation Service providers	2025
3. Quality broadband service (*Ensure meaningful connectivity*)	i. To build capacity at POTRAZ to measure broadband service to consumers and enforce quality of service standards ii. To ensure adequate governance of quality of service	POTRAZ Service providers	

| 4. | Universal Service Fund | i. To conduct a baseline survey to quantify universal broadband gaps and utilise USF to fund programmes to bridge the gaps
ii. To amend the law, i.e. , PTA [Chapter 12:05] and review the current USF mandate and application framework process
iii. To ensure the proper use of the USF to improve connectivity for remote schools and those in urban informal settlements to facilitate the e-learning programme and address the needs of citizens with special needs - the elderly, children, people with disabilities
iv. To use the USF to deploy technologies and infrastructures by prioritizing the most cost-effective systems of communication to the unserved communities
v. To apply the USF for emergency communications systems such as for disaster management.
vi. To enhance the institutional and operational capacity of the Universal Service Fund (USF)
vii. To promote universal service programs that are technology-neutral, pro-competitive market, private-sector conscious and are administered in a transparent, non-discriminatory and competitively neutral manner. These will be based on balanced and flexible funding strategies to uphold the principle of affordability. In this regard, the following actions will be taken:
  a. To establish a USF board/agency to manage the fund based on best practice including competitive recruitment of staff.
  b. To involve key stakeholders in the selection process of programs targeting specific development goals and priorities
  c. To publish annual reports on the use of the fund | MICTPCS

Parliament

POTRAZ

Development partners | 2023 |
| 5. | Services for people with disabilities, children, and other special needs groups (*Inclusiveness*) | i. To promote research and innovation (including manufacture) on devices and services for all people with special needs
ii. To ensure the affordability of special devices for use by people with disabilities through tax reductions on imports of these devices
iii. To ensure affordable access to ICTs for people living with disabilities and people with special needs
iv. To support the inclusion and participation of vulnerable and marginalized groups such as children, orphans and people living with disabilities in matters that affect them in relation to the digital economy. | MICTPCS

POTRAZ

ZIMCHE

Research Institutions

Development partners | 2024 |

6. Convergence	Evidence abounds that convergence is occurring at the technological, applications and services level. The convergence of technology platforms has resulted in multiple services which used to be offered over separate platforms being availed on a single platform/network. This has rendered it unnecessary to have multiple institutions overseeing the development of electronic communications in any given country. Zimbabwe is a Member State of SADC, the AU and ITU and fully participates in all their activities, including convergence and harmonisation of the ICT infrastructure, regulatory framework and services. The e-SADC framework addresses convergence issues and harmonization of ICT infrastructure, services and indicators, promotes ICT usage for regional economic integration, enhancement of connectivity and access to ICT services. In this regard, there is need to take legislative measures to ensure that: (i) All ICT matters are under one Ministry, and (ii) There is an integrated and autonomous regulatory body for the ICT sector as a way of dealing with issues of convergence. The policy statement concerning convergence is "To promote evolution to converged ICT institutional and regulation framework".	Parliament MICTPCS	2024
7. **Data sovereignty** (Data protection)	Data sovereignty is the concept that information in binary form is subject to the laws of the nation-state where the data is located. As the popularity of cloud computing continues to grow, data sovereignty has become an important legal issue for businesses of all sizes. The object of the Data Protection Act [Chapter 11:12] of Zimbabwe of 2021 is to increase data protection in order to build confidence and trust in the secure use of information communication technologies by data controllers, their representatives and data subjects. The Zimbabwe Data Protection Act [Chapter 11:12] of 2021 designates POTRAZ as the Data Protection Authority. The Act provides for data protection with due regard to the Declaration of Rights under the Constitution and the public and national interest, viz. ■ To establish a Data Protection Authority and to provide for their functions; ■ To create a technology driven business environment and encourage technological development and the lawful use of technology; to amend sections 162 to 166 of the Criminal Code (Codification and Reform) Act [Chapter 9:23] ■ To provide for investigation and collection of evidence of cybercrime and unauthorised data collection and breaches, and to provide for admissibility of electronic evidence for such	MICTPCS Parliament POTRAZ Development partners	2023

	■ To amend the Interception of Communications Act [Chapter 11:20] to establish a Cyber Security Centre and ■ To provide for matters connected with or incidental to the foregoing. However, the practice in some other jurisdictions is to have an autonomous data protection authority separate from the ICT sector regulator since the scope of data to be protect ed is wide. In this regard, there is need for the Data Protection Act to be amended to provide for a separate Data Protection Authority by removing this mandate from POTRAZ.- the ICT sector regulator. The actions on data protection and cyber security will be in accordance with the *African Union Convention on Cyber Security and Personal Data Protection* the "*Malabo Convention of June 27, 2014",* National laws and other relevant regional and international conventions. With regard to data sovereignty, the following are pertinent: i. On cross border data flows, attendant regulations could be enacted to require end- to- end encryption of sensitive data and local hosting of associated encryption keys (*where data localization is preferred* .) ii. Legislative and regulatory i nterventions could support cooperation through adoption of convergent approaches such as interoperable best practice approach (*where data globalization is preferred* .) Therefore, t he policy statement is: *"To enhance the institutional and regulatory framework and capacity for data protection and cyber security".*		
8. Alignment of MDA/ other sectoral organisations policies sectoral ICT policies to the national ICT policy *(Policy coordination)*	The National ICT Policy provides an overarching policy framework for development of the digital economy in terms of adoption, diffusion, and use of ICTs and emerging technologies in Zimbabwe purposed to guide the nation with respect to all ICT issues. In t his regard, the MDAs and other sectoral ICT policies will be aligned with the values espoused in the national ICT policy. The policy statement is: *"To ensure that MDA and sectoral ICT policies are aligned with the national ICT policy".*	NIP AC PIS	Continuous

9.	SADC Level integration (Partnership and collaboration)	The progress on the implementation of this policy will be assessed according to targets pertinent to the Republic of Zimbabwe as well as alongside the 10 SADC broadband targets for 2025 which are aligned with the Broadband Commission targets for the same period. This policy facilitates the integration of regulatory frameworks and policy with regional institutions. Further, seamless integration across geographical boundaries within and between nation states is encouraged. Hence the policy statements are: (i) To effectively participate in and implement the SADC levelintegration agenda including e -SADC provisions". (ii) To promoteseamless integration across geographical boundaries within and between nation states".	MICTPCS POTRAZ Development partners	continuous

5   COMMUNICATION PLAN

There is a fundamental need to mobilize key national stakeholders and the public to be part of the exercise at the implementation of this policy. Various stakeholders need to be part of the process to build consensus and encourage national mobilization and participation. Apart from Government and the private sector, other key stakeholders, includes development partners, the media, labour unions, academics and other sections in the civil society need to contribute to the process. Therefore, effective stakeholder engagement and communication will be essential for successful implementation of the Zimbabwe National ICT Policy 2022-2027.

The purpose of the communication plan is to create awareness, understanding and commitment to the attainment of the Zimbabwe National Vision 2030 with regards to the Digital Economy priority area as enunciated in the NDS1.

5.1   Objectives
The objectives of the Communication Plan are:
  a) To link the policy to the national vision and development priorities, link institutional ICT policies with national ICT policy
  b) To explain the legislative needs to operationalise the reviewed ZNICT policy
  c) To explain policy priorities to all ministries, and social, economic, and political sectors of the economy
  d) To explain the rights and obligations of citizens and service providers for a vibrant ICT sector
  e) To explain sectoral priorities and projects to departments within each ministry
  f) To explain opportunities for innovation in the ICT sector necessary to improve efficiency and create more jobs for/by innovators
  g) To communicate to potential partners - investors and collaborators - on opportunities in the ICT sector

5.2   Target audience

The intended audience includes Ministries, Departments and Agencies (MDAs), Parliament, investors, service providers, consumers of ICT services, learning institutions and the general public including communities comprising adults, youth and children. Specific messages will be customised to these audiences and communicated to them on regular basis.

5.3   Levels of communication

It is envisaged that the communication of the ZNICT policy 2022 - 2027 will be at least eight levels (Table 7).

Table 6: **Level of communication and key message**

Level	Key message
Presidential level	Linking the policy to the national vision and development priorities
Parliamentary level	Legislative needs to operationalise the reviewed ZNICT policy
Ministerial level (MICTPCS as lead)	Targeted ICT policy objectives and programmes messages to all other ministries, social, economic, and political sectors of the economy
Regulator's level	Rights and obligations of citizens and service providers for a vibrant ICT sector
MDAs levels	Sector (e.g., health) priorities and projects to departments within each ministry
Business and entrepreneurship	Opportunities for innovation in the ICT sector necessary to improve efficiency and create more jobs by innovators
Development partners	Opportunities for investment, partnerships and collaboration
Community Level	To cascade the communication to ward/village/chieftainship levels covering: i. The benefits of ICTs and how to use them ii. Rights and obligations with regard to ICTs

5.4   Frequency of communication

It is desirable that the communication of the policy be at appropriate regular intervals with clear message. In this regard, the frequency of communication on the ZNICT policy 2022-2027 be as follows (Table 8):

Table 7: Communication frequency for ZNICT policy 2022 - 2027

Method of communication	Frequency	Responsibility
Address to the Nation	Annually	Presidency
Address to the Sector	Bi-annually	MICTPCS
Sector Report	Quarterly	POTRAZ
ICT investment forum	Bi-annually	MICTPCS
Briefing of Parliament Committee on ICTs	Quarterly	MICTPCS
Press release, opinion editorial, features	Monthly	POTRAZ
Brochures, posters, letters, leaflets	Continuous	
Online media	Continuous	
Conferences e.g., ICT Day, workshop, stakeholder consultation	Quarterly	POTRAZ
Advertising: Print, Radio and Television	Quarterly	MICTPCS

6 CONCLUSION

This policy recognises that ICTs contribute significantly to the reduction of social, political and economic inequalities, increase national productivity, enhance wealth creation and entrepreneurship and increase efficiency in public administration. ICTs also strengthen democratic values and promote gender equality and the interest of marginalised groups.

The policy further recognises that in order for ICTs to act as an effective catalyst for national development, substantial investment, upgrading of broadband ICT infrastructure and capacity buildings as well as enabling institutional arrangements are a prerequisite. The policy also seeks to ensure that private sector interests and expertise create investment in which the ICT sector generates jobs, increases national productivity and empowers citizens through the amplification of choices brought by unfettered connectivity. Therefore, the existing and new public and private sector institutions across all sectors of the economy are expected to formulate sector-based strategies/programmes to implement ICT flagship projects. Such projects will, *inter alia*, promote awareness of the benefits of ICTs, develop human skills in ICTs, enhance research and training capability, demonstrate the benefits of public sector leadership and encourage public   - private partnerships. A summary of key policy result areas, actions and outcomes is presented in Table 9.

Table 8 : *Key Result Areas, Actions and Outcomes*

Result	Actions	Outcomes
A Strong Foundation for ICT Development	i. Review Institutional Framework ii. Promote stakeholder participation iii. Build Human Capacity iv. Enhance Infrastructure v. Ensure Security and Resilience of Infrastructure vi. Consumer Education and Protection to enhance and maintain trust in the use of ICTs vii. Define and Implement Innovative Financing Mechanisms, including ICT Industry Stimuli viii. Provide adequate power supply for the ICTs deployment ix. Monitoring, measurement and Evaluation.	■ Ubiquitous Coverage with National Backbone ■ Converged Institutions in Place ■ An ICT literate workforce ■ ICT Integrated in National Curriculum ■ Secure, Reliable and Resilient Infrastructure and Mechanisms and Processes with National Capacity to Respond to Cyber Security Threats ■ Mechanisms in Place for Education and Protection of Consumers of ICT Services ■ Available and affordable power supply for ICT systems deployment throughout the country ■ Monitoring and Evaluation in Place and used to Track and Measure the Progress of Implementation; and action taken in case of missed targets.
An Enabling Environment for ICT Growth	i. Holistic Approach and Vision towards Legal and Regulatory Framework. ii. Efficiency in Coordination, Planning, Investment, Implementation and Utilization of ICT Infrastructure and Services. iii. Innovation and Partnerships iv. Sustainability. v. Promote and Attract Investment. vi. Training, especially for the Youth. vii. Entrepreneurship in ICT.	■ ICT Integrated in National Development Plan cross the Sectors. ■ Accessibility and Affordability of ICT Devices and Services. ■ Inclusive Consultation and Participation of Interested Stakeholders in Process ■ Growth in Government Services Online. ■ Increase in Sustainable ICT projects. ■ ICT SME and Incubator Growth

POLICY FOR ICT

Result	Actions	Outcomes
		■ Increased Investment in ICT Infrastructure and Services ■ Development of ICT Enabled Services among Citizens Promoted
ICTs as an Engine for Economic and Social Growth	i. Inclusiveness ii. NDS 1 iii. Promoting e- Services to Achieve Growth. iv. Local Content Promotion. v. Community participation and outreach.	■ Digital Literacy of Population. ■ e-Accessibility as Part of National Vision. ■ Effective Government and e-applications ■ Locally Grown Solutions in Languages ■ ICT Devices & Services are Available and Affordable to the majority of Population
Leadership and Innovation	i. ICT Industry Awareness and Promotion in Target Markets. ii. Promoting Innovation through ICTs.	■ Growth in ICT Products ■ Research and Development Programmes Launched.
Participation in the 4IR	i. Provide a legal and regulatory framework for adoption of emerging technologies ii. Adopt emerging technologies iii. Implement digital transformation across all development sectors	■ A robust digital economy

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8 GLOSSARY

Information Communications Technology (ICT): This term is generally used and usually refers to the integration of information and telecommunication technology sectors involving their convergence with the media technology sector based on common digital technology. ICT includes all types of telecommunication and broadcasting systems and services (wireline, wireless, mobile, satellite), computer hardware, software, networks and services, content producing and managing multimedia systems. ICT, therefore, means any communication device, application, or service related to radio, television, cellular technology, computing, networking, and satellite systems, including services such as videoconferencing and distance learning.

Fourth Industrial Revolution (4IR): This is an industrial set up comprising cyber-physical systems which are characterised by Interoperability, Virtualization, Decentralization, Real-Time Capability, Service Orientation and Modularity. This industry is enabled by internet and computer-based systems including software.

Notes
1. 2025 Targets: "Connecting the Other Half"
   https://broadbandcommission.org/Documents/publications/wef2018.pdf

2. Ms Doreen Bogdan Martin, Director BDT, International Telecommunication Union (2019 October 17). Available at https://live.worldbank.org/connecting-africa-roadmap-inclusive-growth (Accessed March 17 2020)

3. "ITU Report on Assessment of Broadband Gaps in SADC" Prof. Thomas Senaji, March 2020

4. http://www.zim.gov.zw/index.php/en/government-documents/category/1-vision-2030