

ICT POLICY FOR LESOTHO

FINAL

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DEFINITIONS

Advanced communications networks. Networks that have migrated from traditional circuit switched systems to packet switched networks. These include IP networks, ATM Networks and Next Generation Networks for example.

Advanced communications services. Services delivered over advanced communications networks, such as the Internet and related services.

Asynchronous Transfer Mode Network. A network that uses the Asynchronous Transfer Mode (ATM) protocol. The ATM protocol outlines a way to transfer data in packets, or cells. This protocol is very efficient, as it allows different types of information such as voice, data, and video to be transmitted in the same cell. This makes use of every byte of space available on the network at all times and has a higher bandwidth than other types of networks.

Broadband. High-speed data transfer connections based on optical infrastructure. T1 (1.5 Mbps) has been widely used as the threshold; however, some countries such as South Korea use T3 (45 Mbps) as the speed threshold for broadband. Broadband technology is based on optical infrastructure.

Broadcasting. Broadcasting is a process that sends voice, data, or video signals simultaneously to a group in a specific geographic area or to those connected to a broadcast network system such as a satellite or cable television system. Broadcasting is typically associated with radio, television radio transmission systems and the Internet.

Circuit Switched Network. A type of network in which a physical path is obtained for and dedicated to a single connection between two end points in the network for the duration of the connection.

Commercial Broadcaster. A broadcaster that is funded solely from private means such as sales and marketing, sponsorships, donations and merchandising but not from Government means. Commercial broadcasters are autonomous from Government and have historically operated with complete editorial freedom.

Community Broadcaster. A public broadcaster that provides programming of interest on the local level or for particular communities such as a religious community. Community broadcasters can be funded by Government, non-profits, viewers, through donations and advertising.

Digital Divide. The technological gap between countries that have fully exploited ICTs and those that have not. The digital divide is often associated with the resulting gap in terms of economic development.

Distance Learning. A method of teaching students in remote locations where educational facilities are not accessible or where desired courses and training are not available. It involves learning through TV, radio, correspondence, the Internet, CD-ROM, video and so on.

Electronic Commerce (e-commerce). The process of carrying out business transactions on-line, usually to sell goods or services. E-commerce takes three main forms: business to consumer (B2C) transactions, business to business (B2B) transactions and business to Government (B2G) transactions.

Electronic Government (e-Government). Government's delivery of services and information through the use of ICTs.

Encryption. The tools and other means necessary for the protection of data communications, which typically involves the translation of data into a secret code.

Global Information System (GIS). A system that provides a framework for data manipulation and display of map data for applications such as: (a) location verification,

(b) location correlation, (c) locational relationships, (d) district coding, (e) route analysis, (f) area analysis and (g) mapping/display creation.

Information and Communication Technology (ICT). The convergence of computing, information and communications technology. ICT makes possible the fast and worldwide exchange of information, and has the capacity to revolutionise work processes, service delivery, etc.

Information Society. Information Society is a term for a society in which the creation, distribution, and manipulation of information has become the most significant economic and cultural activity.

Information Economy. An economy where information is the key driver to economic activity.

Internet. The collection of interconnected networks that use the Internet Protocol.

Internet Protocol (IP). The method or protocol by which data is sent from one computer to another on the Internet.

Multimedia. The combination of text, sound, and/or motion video. Multimedia is usually smaller and less expensive than motion pictures and has the possibility of audience interactivity. Interactive elements can include: voice command, mouse manipulation, text entry, touch screen, video capture of the user, or live participation.

Next-Generation Network (NGN). NGNs converge three separate networks - the PSTN voice network, the wireless network and the data network (the Internet) - into a common packet infrastructure. This intelligent, highly efficient infrastructure delivers a host of new technologies, applications, and services that are more flexible, scalable and cost-efficient than services that have been offered in the past. One key NGN service is the voice portal, which provides callers with anywhere, anytime access to Web-based information

Portal. A gateway through which users navigate the Web gaining access to a wide range of resources and services, such as email, forums, websites and search engines.

Private automatic branch exchange (PABX). An automatic telephone switching system within a private enterprise.

Public Broadcaster. A public broadcaster has traditionally been subsidised by Government or supported directly by viewers. Nowadays, public broadcasters are not beholden to advertisers, political parties or Government and exercise complete editorial freedom. More and more, public broadcasters are taking on a mixed commercial model, sourcing funds through a mix of advertising and public monies.

Short Message Service (SMS). A text message service that enables short messages of generally no more than 140-160 characters in length to be sent and received from a cell phone. SMS is supported by all digital-based mobile communications systems.

Telecentre. A public place where anyone can pay to use ICT services. These services include but are not limited to the Internet, email, fax, telephone service, photo copying and other electronic information services.

Telemedicine. The use of ICTs to enable health care workers to perform remote consultations and diagnosis, access medical information and coordinate research activities and distribute health and disease prevention information to the general public.

Voice over the Internet Protocol (VoIP). The process of sending voice signals over the Internet.

Website. A website generally refers to the entire collection of HTML files that are accessible through a domain name.

Wide Area Network (WAN). A computer network that connects a group of local area networks (LANs) via telephone lines or radio waves.

Wireless Local Loop (WLL). The provision of local telephone service via radio transmission. WLL systems provide for multiple types of services such as telephone service, Internet access, and video programming.

World Wide Web (WWW). Hypertext servers (HTTP), which are the servers that allow text, graphics and sound files to be mixed together on the Internet.

FOREWORD

The constant evolution of technology brings about major paradigm shifts in human society. For example, our ability to develop technologies to harness food and energy from plants and animals and later from non-living sources such as coal, water, solar and wind led to the agricultural and industrial revolutions. Recent advancements in communications, computing and information technologies have brought about today's Information Revolution. As in times past, this new paradigm requires that we learn new skills, employ new technologies and use different resources. Most importantly, we must learn to use technology to do things differently.

Information has become the most valuable instrument for development in the Information Age. The key is to use it in such a way as to leap frog stages of development in order to rapidly attain a thriving economy and a society where each individual can achieve her or his full potential. In our quest to achieve prosperity, we should not lose sight of the opportunities offered by the technologies driving the Information Revolution to preserve our culture, expand our horizons and develop a more participatory democracy.

The Ministry of Communications, Science and Technology has formulated this ICT Policy to provide the nation with a vision and strategy for becoming a fully integrated member of the Information Society. The policy is intended to unite Government, industry, civil society and the general public in the achievement of its national development goals. It identifies key areas of the economy that will serve as catalysts in driving the policy towards its fruition. It endeavors to reduce the digital divide between the "haves" and the "have nots," to promote gender equality, protect the environment and to improve food security and the standard of living of all Basotho. It also strives to promote a healthy society capable of exploiting the full potential of ICTs.

This is a tall order considering that less than one percent of the population owns a computer or has access to the Internet. Only eight percent own a telephone and fewer still have access to electrical power. And, all too frequently, those with access to information and communications technologies do not fully understand how to use them. The nation's

low GDP per capita further constrains the ability of industry, institutions and individuals to invest in and make use of ICTs.

The implementation of this policy will be an immense challenge for Lesotho with its limited financial resources and low levels of ICT penetration and literacy. Political leadership and a shared vision will be critical to its success. I am confident that we will succeed in this grand undertaking to transform our nation into a knowledge-based society and call upon all stakeholders to actively participate.

Motsoahae Thomas Thabane MP

Minister of Communications, Science and Technology

EXECUTIVE SUMMARY

The Government has developed the Information and Communications Technologies (ICT) Policy as tool to enable Lesotho to achieve its development goals as articulated in the Lesotho Vision 2020 Policy Document and the Poverty Reduction Strategy Paper. The policy supercedes the Lesotho Telecommunications Policy of 1999, which has basically set up the appropriate institutional framework for policy formulation, regulation and operations in the Telecommunications sector. While one of the major goals of the 1999 policy was to encourage the deployment of ICT infrastructure in the country, this particular policy takes the mandate further to give direction as to how the proposed Information and Communications Technologies could be utilised to open up new opportunities, improve service delivery and hence ease the grip of poverty on the Basotho Nation.

The policy paper is structured in such a manner that the first chapter introduces the concept of ICT. The role of information in development and the importance of ICTs are introduced after a brief explanation of ICT has been provided. The picture is then completed by elaborating on the rationale of this particular policy. The second chapter considers the guiding principles behind this particular policy. The Vision and mission together with the overall goals, objectives and the strategies of the policy are articulately spelt out in this section of the document.

The various stakeholders and the roles they are expected to play towards the actualisation of the policy goals are presented in chapter 3. Specifically, the policy identifies ten cross cutting catalysts that would provide the strategic framework needed to guide the successful implementation of the policy. These are ICT supporting infrastructure, Education and Human Resource Development, Enabling Legal and Regulatory framework, Rapid Delivery of ICT Services, E-Government, E-Commerce, Health, Agriculture and Food Security, Tourism and Environment and lastly, Gender and Youth.

Each of the above cross cutting issue is dealt with under its own section. There is a brief introduction for each of these issues, which explain its importance, and where the country

is or has done as far as that particular subject is concerned. That is followed by the policy objectives and strategies on that particular subject. Policy measures, instruments and initiatives of each of the above captioned cross cutting catalysts wrap up the sections.

The last chapter concentrates on the institutional framework for the policy implementation. The chapter allocates responsibilities and tasks to the various stakeholders as far as ICT promotion and coordination, resource mobilisation, monitoring, evaluation, regional and international coordination and sector restructuring are concerned.

1.0 CHAPTER 1 THE ICT POLICY CONTEXT

1.1 Introduction

Integration of Lesotho into the global information society calls for development of an effective policy and regulatory framework for the implementation of such a strategy. The **ICT policy developed here is cognizant of converged technologies. It captures the Dynamic and pervasive nature of the technology.**

1.2 The Role of Information in Development

Sustainable social and economic development in today's *Information Age* is contingent upon each citizen's ability to access, process and create information. In times past, we searched for gold, precious stones, minerals and ore. Today, it is knowledge that makes us rich and access to information is all-powerful in enabling individual and collective success.

Information is also key to meaningful participation in the political process. For example, the free flow of information between policymakers and the public will increase the success of Government initiatives in such areas as poverty reduction and HIV and AIDS awareness and prevention programmes. It will also more closely align Government strategies with the needs of the people. The wide availability of information regarding social services, job creation and education will provide the foundation for individual empowerment, national unity and a stimulus for a thriving economy.

If Lesotho is to become a fully integrated and prosperous member of the global economy, it must recognise that information is power, critical to economic growth and sustainable development. In addition, as stated in the Lesotho Vision 2020 policy document, "all Basotho need to have a unity of purpose, well-thought-out strategies and a determination to succeed" if this dream is to become a reality.

1.3 Definition of Information and Communication Technology

Information and communication technology (ICT) is the convergence of communications, computing and information technologies. This convergence has resulted in the development of new and improved services delivered over a diverse range of technological platforms. Today, ICT encompasses telecommunications - fixed and wireless, broadcasting, multi-media, software development, electronic publishing, information storage and retrieval, email, distance learning, telemedicine, postal services, electronic commerce, the Internet and much more. In the years to come, we can anticipate an ever-expanding cornucopia of ICT products and services that will continually transform our lives and the world in which we live.

1.4 The Importance of ICT

ICTs can have a wizard effect on speeding the development process of the country. ICTs make it possible to deliver information by means of *voice, text, data, video and graphics* faster and more efficiently than before. Furthermore, the constantly evolving range and quality of ICT delivery platforms is improving the availability and affordability of accessing of information. These developments provide an enabling environment for Government to work with the private sector and civil society to improve and expand access to information for all its citizens.

For example, ICTs can be used to reduce inequalities among the sexes, by providing women with greater access to meaningful information. They can also be used to improve the lives of the disabled with technologies that enable the deaf to communicate more effectively with the hearing world and the physically immobilised to study and work from home through the Internet. Telemedicine applications can save lives in rural areas by speeding diagnosis and treatment for the isolated. Distance education provides an inexpensive and effective means of developing the human resource capacity throughout the country. E-Government services improve access to and knowledge of Government services as well as provide a vehicle for strengthening democracy.

1.5 Rationale for Lesotho's ICT Policy

The *dream* of a prospering Lesotho, fully integrated in the global economy cannot be realised without a well designed strategy. In order for Lesotho to seize and obtain maximum benefits from the opportunities provided by ICTs, it needs a roadmap that clearly defines what is to be done, when and how it will be done and who is going to do it.

The Government having developed the Information and Communication Technology (ICT) Policy as a tool to enable Lesotho to achieve its development goals as articulated in the Lesotho Vision 2020 Policy Document and the Poverty Reduction Strategy Paper is now in a position to set up the appropriate institutional framework for policy formulation, regulation and operations in the sector.

An ICT policy is needed to channel and mobilise the investment required to accomplish its great ambitions. It is needed to provide guidance to lawmakers in their review of existing laws and regulations and requisite changes, as well as in the development of new legal instruments to support the transition to an information economy.

Therefore, the rationale for developing this ICT policy is based upon the need to:

- Create a roadmap for ICT development, attract and mobilise internal and external investment.
- Co-ordinate the efforts of Government, the private sector, civil society and individuals in order to ensure a shared vision for the ICT sector, avoid fragmentation of resources and to maximise utilisation of scarce resources.
- Ensure that Lesotho is a dynamic member of the global economy and Information Society.
- Guide the delivery and creation of electronic information across all sectors in order to provide Government, individuals, the private sector and civil society with the resources and tools needed to participate in the *Global Information Society*.
- Stimulate the development of national infrastructure needed to support the delivery of ICT services throughout the country and provide universal access to information and knowledge.

- Develop a transparent and effective legal and regulatory framework that promotes investment in the ICT sector and embraces technological innovation.
- Channel delivery of ICT services and applications so as to achieve national development goals such as food security, poverty reduction, a healthy population and a stable democracy.
- Develop the human capacity needed to drive and sustain an information economy.

2.0 CHAPTER 2 Road Map To Information Society

2.1 Guiding Principles

There are many challenges that the country will face in its implementation of a policy of this magnitude. Key among these challenges is the assurance of a unified approach through all sectors of Government. In this endeavour, Government must be the key driver of the policy, actively engaging the public in the process. Additionally, the dream of a Lesotho as a fully incorporated member of the *Information Society* cannot be achieved without networks to carry services. At the same time, people cannot make use of networks if they do not know how to use them, cannot afford to access them or if the information flowing over them lacks relevance to their lives. To help ensure that these challenges do not become obstacles to the successful implementation of the ICT policy, Lesotho shall be guided, among others, by the following principles:

- Political commitment and proactive leadership in the implementation of the policy, including a leadership role in the attraction and mobilisation of investment needed to achieve policy goals and strategies.
- Good governance such as transparency, accountability and the Rule of Law.
- Commitment to the principles of the freedom of the press and the right to information, as well as the independence, pluralism and diversity of the media.
- Public-private partnerships shall be the primary vehicle in the implementation of the ICT policy.
- Legislation that encourages transparent and effective regulation that takes into account the convergence of technologies in a technology neutral manner.
- Legislation that promotes the use of electronic environments for both consumers and industry.
- Close alignment with current and future short, medium and long-term national development goals such as the Poverty Reduction Strategy and the National Vision for Lesotho 2020.

- Development of supporting infrastructure such as advanced communications networks, electrical power and roads essential for the delivery of universal access of ICT's.
- Cognizance of the information needs of all of society, including women, youth, the disabled, the elderly and the disenfranchised.
- Government's commitment to establish coordination mechanisms to promote integration across sectors and to lead public awareness campaigns
- Alignment with regional and global policies and best practices.

The genesis of this policy derives from Government's;

- Recognition of the strategic opportunities and benefits that information and communication technologies can offer to accelerate social and economic development.
- Realisation that the ability to create, access, utilise and share information and knowledge is key to effective participation and wealth creation in the 21st century.
- Belief that advanced communications networks, accessible to everyone, are critical to ensuring that all Basotho have the necessary resources to benefit from ICTs .
- Acknowledgment of the need for national coordination among stakeholders to ensure that all sectors of the economy harness the potential of ICTs to support development goals.
- Awareness of its leadership role for the transition to a knowledge-based economy and of the importance of enriching its human resource base.
- Cognizance of the technological innovations that have led to convergence in communications, computing and information services and necessitated the need for a new regulatory framework that promotes technology neutral paradigms.
- Understanding that as the *Information Society* is a global phenomenon, national efforts need to be supported by international and regional cooperation among Governments, the private sector, civil society and financial institutions.

2.2 Vision

“To create a knowledge-based society fully integrated in the global economy by 2020.”

This ICT vision anticipates that by year 2015, Lesotho will have successfully developed and deployed ICTs that:

- Respond to national needs and priorities.
- Reduce inequalities between the sexes, and decrease the digital divide between urban and rural areas and the haves and have-nots.
- Improve governance and deepen democracy.
- Develop the human capacity needed to drive and sustain an information economy.
- Support its economic activities at home and throughout the world.

2.3 Mission

“To fully integrate information and communications technologies throughout all sectors of the economy in order to realise rapid, sustainable socio-economic development.”

As Lesotho charts its course to join and fully participate in the global economy, it must embrace strategies to develop and deliver information to all its citizens. Thus, the vision and mission of the Government must be to create knowledge to fuel all sectors of the economy and enrich the intellectual capital of the nation.

This policy strives to incorporate ICTs in the everyday life of the Basotho, so as to realise the vision of a Lesotho that is fully integrated in the global economy. A parallel goal is to promote the use of appropriate, scalable ICT services and applications so as to eradicate poverty, strengthen democracy and improve quality of the life for all.

2.4 Goals

The overall ICT policy goals are to:

- Increase wealth creation and improve lives through the adoption and use of ICTs.
- Promote affordable, universal access to ICT products and services.
- Promote effective regulation of the sector by establishing rules and regulations that promote competition, protect and educate the consumer, create a level playing field among operators and service providers and encourage local and foreign investment in the ICT sector.
- Increase ICT literacy levels in the country.
- Coordinate the implementation of ICTs throughout the economy.
- Develop the human resource capacity in ICTs to meet the changing demands of the national and the global economy.
- Develop standards, practices and guidelines to support the deployment and exploitation of ICTs.
- Provide mechanisms for empowering local participation of Basotho in the ICT sector.

2.5 Objectives

The overall objectives of the ICT policy are to:

- Create awareness among all stakeholders; Government, the private sector, civil society and the general public, about the importance of integrating ICTs in Lesotho's development process.
- Facilitate the deployment of a national **broadband** backbone network to enable the delivery of ICT services and products, to meet universal access goals.
- Mobilise resources, attract investment and establish innovative financing mechanisms needed to realise ICT policy goals.
- Facilitate the broadest possible access to public domain information.

- Promote the development and dissemination of local ICT products and services.
- Promote usage of ICTs throughout all sectors of society including disadvantaged groups.
- Strengthen the existing ICT institutional, legal and regulatory framework.
- Create a conducive and secure environment for producers and consumers of information over electronic networks.
- Promote collaboration and co-ordination among all sectors of the economy and at regional and international levels.

2.6 Strategies

To drive and channel the development of an *Information Economy*, Government as a leader, in collaboration with other stakeholders, is committed to the following overall strategies

1. Establishing legal and institutional mechanisms to ensure the successful implementation of the ICT policy by:
 - Developing an enabling legal and regulatory framework that balances the interests of consumers with creating an environment that fosters a robust and profitable ICT sector.
 - Enacting new laws to promote trust and confidence in a digital environment.
 - Putting in place a sustainable institutional framework to coordinate, support and monitor the implementation of the ICT policy, strategies and plans.
 - Ensuring that policies, rules and regulations developed for the ICT sector advocate regulatory transparency, protect the consumer, promote competition and support technological neutrality.
2. Providing leadership in ICT development by:
 - Establishing a coordination mechanism to ensure implementation of the ICT policy.

- Aligning ICT development with the country's broad economic and development plans.
 - Leading the adoption of ICTs by making Government a model user in the delivery and the development of electronic services to Basotho
 - Launching ICT awareness campaigns throughout the country.
3. Investing in ICT education and human resource development by:
- Requiring that ICT literacy and training programmes are available throughout the education system and within the public at large.
 - Growing the resource pool of ICT professionals with standardised skill sets and ensuring that appropriate incentives are in place to retain these workers.
 - Encouraging life-long learning among the population at large and promoting on the job training and retraining within the public and private sectors.
 - Promoting electronic distance learning and training to maximise scarce resources and expand access to educational training and research.
4. Encouraging the production and wide distribution of local multi-media content by:
- Promoting the production of local ICT products and services that reflect the needs, interests and culture of the country.
 - Promoting universal, equitable and affordable access to ICT infrastructure and services so as to ensure universal access to information and knowledge
 - Committing to the principles of freedom of the press, right to information as well as independence, pluralism and diversity of media ownership in order to improve quality and access to information.
 - Supporting the development of a three-tiered system of broadcasting, consisting of public, commercial and community broadcasters that are fully independent in all editorial and operational matters.
5. Promoting the growth of the private sector by:

- Improving access to credit facilities and availability of capital.
 - Encouraging businesses to go on-line in order to expand customer bases both within and outside the country.
 - Lowering barriers to entry for entrepreneurs/small and medium enterprises (SMMEs) by reducing tax and duty rates on computers, accessories and other information and communication technologies.
 - Providing incentives for entrepreneurs/SMMEs to become local developers and providers of ICT products and services.
6. Ensuring universal access to ICTs by:
- Promoting the development and adoption of international standards to ensure that consumers can easily access ICT services worldwide.
 - Promoting the development of affordable, user-friendly ICT products and services that are appropriate to local needs.
 - Establishing ICT public access points in places such as post offices, schools, libraries and rural health care clinics among others.
 - Encouraging the deployment of innovative, scalable technologies that can reduce the cost of service.
 - Paying attention to the special needs of marginalised groups of society, including women, youth, the disabled, the disenfranchised and the elderly.
7. Guiding infrastructure expansion needed to support the delivery of ICTs by:
- Ensuring that ICT infrastructure is widely available at an affordable price to support the delivery of telecommunications, broadcasting, postal and multi-media services.
 - Ensuring that the deployment of ICT infrastructure is not constrained by inadequate transport and energy infrastructure.
 - Encouraging all Government and public sector institutions including educational institutions, health centres, post offices and Government ministries and departments to get connected to ICT infrastructure.
 - Supporting the rollout of ICT public access telecentres in each district capital.

8. Promoting regional and international cooperation by:
 - Pro-actively collaborating with development partners and regional and international organisations to encourage technology transfer and capacity building.
 - Becoming a leading participant in global ICT initiatives and projects in order to channel funds needed to promote the diffusion of ICTs in Lesotho.
 - Disseminating information regarding international best practices and experiences of other countries in use of ICTs for development.

2.7 Role of Stakeholders

All stakeholders will need to work together to ensure that the ICT policy achieves its full potential. This includes; to build capacity, increase confidence and security in the use of ICTs, create an enabling legal and regulatory environment, and encourage international and regional cooperation.

2.7.1 The Government

- **Government's role is to provide the vision and policy with a legal and regulatory framework that will guide the activities of all stakeholders.**
- Establish institutional mechanisms to ensure the successful implementation of the ICT policy.
- Government must also play a key role in channelling resources to invest in the supporting infrastructure for ICTs in partnership with national and regional businesses and development partners.

2.7.2 The Regulator

- The regulator for the sector shall monitor market demand and supply capacity of service providers and shall intervene to correct imbalances or market distortions in favour of users. The regulator though accountable to the Ministry of Communications, Science and Technology, shall have the necessary independence from stakeholders to ensure impartiality, flexibility and transparency.
- The mandate of the regulator will be limited to the regulation of Telecommunications, Information and Communication Technologies as well as Broadcasting, Radio frequency and Postal Services.

2.7.3 The Private Sector

- The private sector will play a key role in the development and expansion of ICT infrastructure and provision of ICT services and products.
- It must also endeavour to exploit new business opportunities presented by ICTs and spread the use of ICTs as a lever for the development of business.
- The private sector will be called upon to improve product and service quality to ensure competitiveness in the world market.
- It will also be asked to support and participate in national efforts to contribute to the general spread of ICT literacy and development of human resource capacity.

2.7.4 Educational Institutions

- Educational institutions must play a major role in improving teaching and learning mechanisms that develop a society that is ICT literate and capable of producing local ICT products and services.
- They must ensure that ICT literacy is part of core curricula.
- They must use ICTs to expand access to education as well as improving the quality of education.

2.7.5 Civil Society

- Civil society will be instrumental in disseminating information to the public regarding the full potential of ICTs.
- They will also play a key role in identifying appropriate ICT products and services for the Basotho and providing greater access to those products and services.

2.7.6 International Organisations and Development Partners

- The full integration of Lesotho into the Information Society will not be possible without support from international organisations and development partners
- Government will work proactively with the international community to attract financial and technical support needed for ICT projects and programmes.
- Government will also work to promote technology transfer and to become an active participant in international forums concerned with the use of ICTs for development.

3.0 CHAPTER 3 STRATEGIC FRAMEWORK

The ICT policy is a tool for achieving Government's broader development goals. The following 10 cross cutting catalysts have been selected to provide the strategic framework needed to guide the successful implementation of the ICT policy and to realise national development goals. These catalysts are:

- ICT and Supporting Infrastructure
- Education and Human Resource Development
- Enabling Legal and Regulatory Framework
- Rapid Delivery of ICT Services
- E-Government
- E-Commerce
- Health
- Agriculture and Food Security
- Tourism, the Environment and Natural Resources
- Gender and Youth

3.1 *ICT and Supporting Infrastructure*

The country needs modern and efficient infrastructure, including roads, utilities and communications networks in order to realise the benefits offered by ICTs. Without such infrastructure, it becomes impossible to deliver telecommunications, broadcasting, computing and information services such as the Internet, mobile cellular communications, digital television and radio, interactive multi-media, telemedicine and distance learning.

3.1.1 Policy Objectives and Strategies

Lesotho's physical infrastructure is underdeveloped and limited in coverage. Special policy measures are needed to assist the development of advanced communications networks and to improve coverage, range and quality of services. Policy measures are also needed to support the development of supporting infrastructure such as roads and

electrical power. This policy plays a key role in fostering developments through proactive strategies that promote investment and allow industry to benefit from the rapid pace of technological innovation.

Objectives

The objectives for supporting infrastructure development are to:

- Promote the deployment of advanced communications networks that are universally accessible.
- Provide and sustain the diffusion of ICT infrastructure for access to ICT services and products.
- Encourage infrastructure sharing among network operators so as to optimise scarce resources.
- Create a favourable investment environment for the private sector in the development of ICT, infrastructures.
- Endorse competition in the ICT sector so as to increase customer choice, quality and affordability of services.

Strategies

The strategies for implementing the development of ICTs and Infrastructure are to:

- Adopt a technology neutral approach in selecting appropriate, scalable technology needed to build advanced, robust communications networks.
- Promote public-private partnerships to mobilise resources needed for infrastructure deployment.
- Encourage all public sector institutions to get connected to ICT infrastructure.
- Establish efficient and effective broadband connectivity between commercial centres in Lesotho and between Lesotho and the rest of the world.
- Encourage lease of backbone communications networks at affordable rates so as to increase the number of service providers and types of services throughout the country.
- Encourage the expansion of the national grid in order to support the deployment of ICT infrastructure.

- Encourage that road networks are expanded to facilitate the deployment of ICT infrastructure.

3.1.2 Policy Measures, Instruments and Initiatives

With the goal of increasing equitable, affordable and cost-effective universal access to ICT products and services throughout the country, the Government through the Ministry of Communications, Science and Technology and in conjunction with the Department of Energy, the Ministry of Transport, the regulatory bodies and the private sector shall:

- Promote international standards and best practices in the deployment of flexible and robust ICT infrastructure.
- Ensure that regulations for the sector allow industry freedom of choice in its selection of technologies needed to deliver ICT services and products.
- Create measures to ensure an environment that attracts both domestic and foreign investment needed to develop the requisite infrastructure to support the delivery and use of ICTs.
- Establish a Universal Service Fund to promote the expansion of ICT infrastructure in underserved areas.
- Form partnerships with ICT service providers to ensure that ICT services are not restricted due to geography, income level or disability.

3.2 *Education and Human Resource Development*

Lesotho must invest in education and human resource development in order to transfer to a knowledge-based society. The country needs a human resource base that can support the deployment and exploitation of ICT services and technologies driving an information economy. Thus, investments must be made in all levels of formal education. Government in partnership with the private sector will work towards creating training opportunities and promoting an environment that is conducive to job creation and job enrichment in the ICT sector.

3.2.1 Policy Objectives and Strategies

There is a limited supply of qualified ICT professionals in the country and the high cost of ICT training programmes serves as a barrier to building capacity in this area. Educators frequently lack ICT literacy and expertise and thus, in many cases, have been ineffective at integrating and utilising existing ICTs in schools. Furthermore, the high cost of equipment deters educators from making the purchase of computers and Internet connectivity a priority when schools lack basic amenities and educational supplies.

Government is committed to a comprehensive programme of rapid deployment, utilisation and exploitation of ICTs within the formal educational system as well as vocational institutions. Policy efforts shall be directed at using ICTs to facilitate education and life long learning and to support efforts of the private sector in its delivery of on-the-job training and re-training programmes.

Objectives

The objectives that will lead to effective education and human resource development include

- Facilitate the deployment, utilisation and exploitation of ICTs within the educational system to improve access to information so as to support teaching and learning at all levels.
- Transform Lesotho into an ICT literate nation by promoting ICT awareness and computer literacy throughout the education system and within the public at large.
- Use ICTs to develop the education system to improve and expand access to educational training and research resources and facilities.
- Broaden access to education and training opportunities by promoting electronic distance education and virtual learning.
- Promote and facilitate programmes designed to improve job skills within the public and private sectors.
- Build and retain a critical mass of ICT professionals needed to manage innovation in the country.

Strategies

Strategies to be employed to achieve these objectives are to:

- Encourage all educational institutions to invest in computers and to connect to the Internet.
- Promote electronic distance learning, training and virtual learning systems to compliment and supplement campus-based education and training systems.
- Develop ICT curricula for all levels of the education system.
- Encourage collaboration between local and international educational institutions to facilitate educational exchange and promotion of ICT education and training
- Work with the private sector to create affordable packages and schemes under which students, teachers and educational institutions can afford ICT Products and services.
- Use electronic educational management and information systems to improve the management of educational institutions.
- Develop mechanisms to retain a large pool of ICT professionals to meet the needs of the country.
- Establish and enforce standards for the certification of ICT professional skills.
- Encourage life-long learning among the population at large and promote on-the-job training and retraining within the public and private sectors.
- Improve access to education to people with disabilities.
- Encourage public and private sector apprenticeship programs, internships, co-opts, and work-study programmes.
- Develop and promote programmes and initiatives for enhancing ICT skills within the existing workforce in educational institutions, industry and Government.

3.2.2. Policy Measures, Instruments and Initiatives

The Government through the Ministry of Education and Training, in conjunction with the private sector shall:

- Develop partnerships with stakeholders to facilitate the acquisition of ICTs for all education institutions.
- Facilitate the provision of distance learning applications through ICT's to ensure academic and training programmes are available nationally.
- Encourage the National Library to be equipped with appropriate ICT tools and resources.
- Integrate ICTs in mainstream educational curricula as well as other literacy programmes and provide for equitable access for students at all levels.
- Develop special ICT training programmes for disabled persons, youth and women.
- Set up mechanisms that promote collaboration between industry and training institutions so as to build appropriate human resources capacity.
- Promote twinning of training institutions in Lesotho with those outside the country so as to enhance skills transfer.
- Work with private industry to establish initiatives and programmes aimed at improving and upgrading the technical skills of existing employees.

3.3 Enabling Legal and Regulatory Framework

The vision of a thriving ICT sector that fuels the whole economy will only be realised through an enabling legal and regulatory framework. Government will ensure that legal and regulatory instruments are in place to promote investment needed to develop and deliver ICTs throughout the country. Efforts will also be made to ensure that the interests of consumers are equally balanced with creating an environment that fosters a robust and profitable ICT sector.

The key-determining factor in fostering investment is the assurance of an independent regulator that is accountable to the sector and conducts its business in a transparent and consistent manner.

3.3.1 Policy Objectives and Strategies

The Lesotho Telecommunications Authority Act of 2000 established an autonomous and independent regulatory authority to govern the telecommunications sector. Due to convergence of technologies, the responsibilities of this regulator need to be expanded. Furthermore, new legislation is needed to ensure that the sector embraces technological innovation in such a way as to benefit both providers and consumers of ICTs. Legislation is also needed to safeguard the interests of consumers and producers of information in electronic environments.

Government is committed to establishing a harmonized legal and regulatory framework that takes into account converging communications technologies, services and delivery platforms. It is also committed to protecting individuals and corporations, from some of the undesirable aspects inherent in the transformation to an information economy. Government further recognises the importance of an effective regulator that performs its functions consistently, comprehensively and fairly in a transparent manner.

Objectives

The objectives for the development of an enabling and regulatory framework are to

- Promote the establishment of a fully competitive market
- Establish a harmonized legal and regulatory framework that takes into account converging communications technologies, services and delivery platforms.
- Protect intellectual property and copyrights, privacy, data protection and on-line security without unduly restricting public access to information.
- Promote investment and innovation within the ICT sector in order to improve access, affordability and quality of services.
- Reduce the economic and non-economic cost of doing business in Lesotho to enable the private sector to flourish.
- Encourage a transparent regulatory environment that provides for open processes and access to information.

Strategies

- Promote universal access to ICT services for all Basotho.
- To put in place a legal and regulatory framework that recognises converged technologies.
- Establish cost effective regulation mechanisms.
- Develop mechanisms to improve the accountability and transparency of the regulatory function
- Promote the adoption of regional and international standards and best practices in the development of rules, guidelines and regulations for the sector.

3.3.2 Policy Measures, Instruments and Initiatives

To create an enabling legal and regulatory environment that balances the needs of both

consumers and industry, Government, through the Ministry of Communications, Science and Technology, shall:

- Enact new legislation that:
 - Takes into account the protection of individual privacy, on-line security and intellectual property rights and copyrights without unduly restricting public access to information.
 - Expands the functions of the Lesotho Telecommunications Authority to include regulatory oversight over the ICT sector.
 - Mandates that the annual budget of the Regulator be approved by the Ministry of Communications, Science and Technology and made available to the public.
 - Facilitates a fully competitive environment for the ICT sector.
 - Provides for the flexibility of establishing a multi-utility regulatory body for the water, transport, energy and ICT sectors, should the need arise.
 - Establishes a clearly defined relationship between the Government, regulator, operators/service providers and the public to ensure accountability and transparency in the regulatory process.
 - Transfers the oversight of a Universal Service Fund (USF) from the Regulator to the Ministry of Communications, Science and Technology. This USF will be established as independent advisory body responsible to the MCST

- Develop working definitions of universal access and set targets and timelines for achieving universal access goals.
- Develop regulations to establish and operate a Universal Service Fund to support ICT infrastructure expansion, local content development and access to ICT services and training.

3.4 Rapid Delivery of ICT Services to Society

Government acknowledges that Lesotho must develop initiatives that foster rapid diffusion of ICT services to the whole of society, in order to close the gap to the digital divide between itself and the rest of the world.

The proliferation of ICT services will be enhanced by ensuring that a multi-channel distribution system is available throughout the country. In this way, consumers can choose for themselves the most appropriate and affordable means of access. The quality and diversity of media is also key to rapid delivery of ICT services. Freedom of expression, media pluralism and professional codes of conduct will encourage the take up and demand for media made available via ICTs. Thus, Government is committed to ensuring that a variety of distribution channels, including radio, television, and telecommunications networks are universally available for accessing ICT services on demand. It also promises to protect freedom of expression, the right to information and to facilitate the development of diverse, independent sources of quality media.

3.4.1 Policy Objectives and Strategies

Policies and initiatives are needed to speed-up the delivery of ICT services as well as address poverty issues that impede the take up and utilisation of such services. Measures are also needed to develop and promote ICT delivery systems, services and applications that offer practical solutions to the development challenges faced by the Basotho.

Objectives

The objectives for ensuring rapid delivery of services are to:-

- Speed-up the provision of appropriate, affordable, cost-effective and equitable access to ICT services throughout the country.
- Facilitate wide access to ICT services over diverse platforms such as telecommunications networks, radio, television and the Internet.
- Encourage local content development, including information in Sesotho.

- Improve the quality of information available by strengthening and diversifying the mass media and improving independence and professionalism.
- Support and facilitate the growth of entrepreneurs in the provision of ICT services.

Strategies:

- Promote the take up of communications services throughout the country.
- Facilitate the planning, designing and development of scalable and high quality digital radio and television networks that are accessible nationwide.
- Promote and support existing community radio stations and provide incentives for the establishment of new ones.
- Provide incentives for local entrepreneurs to own and operate public ICT telecentres.
- Encourage competition in the provision of ICT delivery networks and services in order to multiply the sources of information and to lower access costs to consumers.
- Encourage public private partnerships in the provision of community based ICT services and initiatives.
- Use the Post Offices and the National Library of Lesotho and other public venues as venues to provide public access to e-services and applications throughout the country.

3.4.2 Policy Measures, Instruments and Initiatives

The Government through the Ministry of Communications, Science and Technology in conjunction with relevant stakeholders for the ICT sector and the private sector shall ensure that:

- All post offices include public access points for the Internet and other ICT services by 2010.

- The products and services offered in the National Library and in future branches include public access points for the Internet and other ICT services.
- Media Council is established to guide the media on professional and ethical standards and to promote and protect the right to information, freedom of expression and media pluralism and independence. The Media Council will also serve as an Ombudsman, investigating and resolving complaints concerning published or broadcast news.
- A three-tiered system of broadcasting is established, including public, commercial and community broadcasting.
- A universal service fund is used to facilitate rapid delivery of ICT services to the public.
- Special initiatives are developed to support access to ICTs for disadvantaged groups such as the poor, the disabled and elderly, youth and women.

3.5 E-Government

Electronic Government (e-Government) is the delivery of Government-related information and services to the public through ICTs such as wide area networks, kiosks, the Internet and fixed and mobile networks. Using ICTs to deliver Government information and services in Lesotho will be instrumental in realising the principles of good governance as articulated in the National Vision of Lesotho. ICTs can play an important role in improving delivery of Government services to the public, empowering citizens and increasing their participation in the political process. They can also be used to reduce the cost of Government through more efficient management.

3.5.1 Policy Objectives and Strategies

Government is committed to using ICTs to improve quality, accessibility, and provision of services.

Objectives

Government commits it self to:

- Improve delivery of appropriate, efficient and cost-effective services to the public

- Increase accessibility to Government information and facilitate uniform practices in its distribution.
- Use ICTs as a tool to improve and broaden public participation in civic and Government affairs.
- Provide for a favourable environment to facilitate online transactions by Government.
- Encourage information sharing, transparency and accountability in all Government processes.
- Achieve ICT literacy throughout the civil service.

Strategies

Deploy ICT's to improve the management of Government affairs that:

- Identify the information needs of the public and implement electronic initiatives to deliver it in user-friendly formats.
- Develop standard formats for computerising Government information and services, such as applications for passports, birth certificates and licenses.
- Encourage intra-communication between Government agencies.
- Encourage each Government agency employs a regularly updated mechanism of communicating with the public.
- Ensures that Government information is easily accessible in the Districts.
- Set standards for computer hardware and software within Government.

3.5.2 Policy Measures, Instruments and Initiatives

Government shall:

- Use ICTs to improve Government administration, procedures, processes and service delivery.
- Implement training programmes to improve the basic computer and ICT literacy skills of civil and public servants.

- Launch e-Government initiatives to make the most sought after Government information available, including application forms, information pertaining to licences, registrations of birth, deaths, marriages and voter registration forms.
- Require ministries, departments and public agencies to carry out research into citizens' information needs as well as barriers to information use and develop strategies to reduce those barriers.
- Ensure that all its institutions are connected to ICT infrastructure, have a website presence on the Internet and provide access to email and the Internet for all employees.
- Create an efficient and cost-effective intra-Government communication and information sharing system.

3.6 E- Commerce

Electronic commerce (e-commerce) has tremendous growth opportunities for businesses in Lesotho. Foremost, it enables local businesses to have access to potential markets throughout the world. E-commerce also reduces the barriers to entry for small and medium sized enterprises (SMMEs) as it lowers overhead and marketing costs.

3.6.1 Policy Objectives and Strategies

The successful integration of e-commerce in Lesotho is also dependent upon the level of trust and confidence businesses and consumers have in the digital environment. To build this trust, Government is committed to clarifying marketplace rules and enacting necessary cyber laws to support e-commerce.

Objectives

The objectives of e-commerce are to: -

- Encourage new business development in the area of e-commerce.
- Promote awareness among the private sector on the importance and benefits of e-commerce to sector growth.
- Create a conducive climate that will facilitate the productivity and global competitiveness of the private sector.
- Develop a transparent, stable and effective legal and fiscal operating environment to promote online commercial transactions.
- Protect the interests of all participants in e-commerce.

Strategies

- Develop laws and regulations to govern electronic commerce and trade at national, regional and international levels.
- Cultivate a culture of e-commerce in the country, which supports electronic business transactions.

- Promote affordable access to ICT products and services.
- Educate all stakeholders in the nature, benefits and risks associated with e-commerce.
- Encourage and support the creation of national associations of users.

3.6.2 Policy Measures, Instruments and Initiatives

The Government through the relevant Government agencies will work together with the private sector to:

- Enact new laws that address the prevention of computer crimes, protection of privacy, intellectual property rights and copyright and security measures for online transactions.
- Introduce incentives for businesses implementing electronic solutions.
- Work with business and consumer groups to develop a consumer protection framework for e-commerce.

3.7 Health

A “healthy and well-developed human resource base” is central to the Lesotho Vision 2020. This calls for an equitable distribution of health facilities, and a strengthening of health institutions in order to ensure efficient and effective service delivery. ICTs can play an important role in achieving these objectives.. ICTs can also provide an effective and cost-efficient means for distributing health and disease prevention information to the public. ICTs can further assist health care workers by improving health care administration and management as well as accessibility to medical research, information sharing and training through on-line educational programs.

3.7.1 Policy Objectives and Strategies

Government recognises the important role that ICTs can serve in improving the delivery and quality of health services throughout the country and in the control and eradication of disease Therefore, Government is committed to ICT strategies and initiatives that will save lives, strengthen health institutions and improve access to and reduce the cost of the health care services.

Objectives

The objectives of e-health are to

- Build a health network that will enable institutions and individuals to exchange electronic records, share information and deliver quality services in both urban and rural areas.
- Improve the performance of health care facilities through the deployment of Health Management Information Systems (HMIS).
- Use electronic systems to ensure an efficient and standardised process for recording patient information.
- Increase access to health information for all Basotho through the innovative use of ICTs.
- Empower health professionals with the knowledge and use of ICTs.

Strategies

- Ensure that all health care centres have access to appropriate and cost effective ICT infrastructure.
- Deploy HMIS in all health centres to improve management and administration of health services.
- Develop a code of conduct for the use of the HMIS and implement security measures to safeguard privacy of patient information.
- Create an electronic information network for health professionals that is accessible throughout the country
- Incorporate ICT training as part of the core curricula for health care professionals.
- Promote the development of telemedicine applications so as to improve access to and lower the cost of health care services in rural and remote areas.

3.7.2 Policy Measures, Instruments and Initiatives

The Government through the relevant Ministry shall:

- Require that all patient records, health administration and management processes are computerised.
- Establish a website so as to increase public access to health information and health professionals.
- Work with the private sector to find a cost-effective means of extending telecommunications networks to all health centres.
- Use appropriate ICTs to dialogue among infected groups and health care providers.
- Establish ICT training programs for health care professionals.

3.8 Agriculture and Food Security

ICTs have the potential to revolutionise the management of the agricultural sector and improve food security. ICTs may significantly improve information flows between farmers, consumers, and agriculturalists and thus lead to higher crop yields, production that is more responsive to consumer needs and greater market access. ICTs can be used to improve crop planning, monitoring and forecasting. Livestock Registration, Marking and Information Systems (LRMIS) can be used to prevent stock theft as well as to control diseases. It can also be used to track and locate livestock throughout the country.

3.8.1 Policy Objectives and Strategies

The Lesotho Vision 2020 has identified increased agricultural productivity and sustainable food security as one of the country's primary challenges. Government believes that ICTs can be used to improve the food security of the nation by improving communications among producers and consumers as well as providing greater access to information.

Objectives

The objectives of using ICT in agriculture and food security are to

- Improve agriculture productivity, in order to attain food security for the country.
- Protect the investment of livestock farmers and prevent the spread of disease.

- Increase access to agro-related information for farmers and other stakeholders through appropriate, scalable ICTs in order to benefit from a wide range of information services.
- Link rural agricultural producers to markets.
- Monitor the sustainable utilisation of natural resources in agricultural production.

Strategies

- Computerise all records related to agricultural management.
- Create an on-line agricultural information system to provide strategic information on agro-technologies and techniques, weather forecasting, pricing and market information to farmers, Government authorities and other stakeholders at national and district levels.
- Use scalable and affordable ICTs to increase access to agricultural information for farmers.
- Work with the private sector to find a cost-effective means of meeting the communication needs of agriculturalists.
- Develop and maintain a nation-wide Geographical Information System to monitor agricultural land use and manage natural resources at national and district levels.

3.8.2 Policy Measures, Instruments and Initiatives

Government through the relevant Ministries in collaboration with the private sector, shall:

- Increase usage of ICT's to disseminate information to farmers on a regular basis.
- Encourage agriculturalists to advertise and conduct transactions of their products on the Internet.
- Deploy LRMIS to combat theft of livestock and prevent the spread of disease.
- Partner with civil society and the private sector to improve access to ICT's for the agricultural community.

3.9 Tourism, Environment and Natural Resources

The tourism sector is one of the fastest growing sectors worldwide and information and communication technology is one of the strongest forces fuelling its growth. Information systems, computer reservation systems and the Internet are bringing people into contact with a growing number of tourism opportunities throughout the world.

3.9.1 Policy Objectives and Strategies

The natural environment of Lesotho offers tremendous opportunities for tourism. Local tour operators and tourist centres can use ICTs to enhance service delivery, marketing reach and conduct transactions with interested parties at relatively low cost.

Objectives

- Facilitate the growth of the tourist industry by connecting existing and potential tourist centres to ICT infrastructure.
- Use ICTs to actively market Lesotho as a niche tourist destination.
- Use ICTs to support the conservation of the environment and natural resources.
- Promote cross-sectoral collaboration between environmentalists and tour operators to preserve and protect Lesotho in its natural state.

Strategies

- Use electronic networks to increase the accessibility of information on natural resources.
- Encourage usage of electronic transactions in the tourism sector.
- Encourage the development of websites amongst all tourism service providers.
- Establish easily accessible regional on-line weather advisory systems.

3.9.2 Policy Measures, Instruments and Initiatives

The Government through the relevant Ministries, in conjunction with the private sector, shall:

- Develop a national information portal that promotes Lesotho as a niche tourism market and provides links to tourism opportunities and attractions.
- Place links on the Internet that direct users to the tourist information available on Lesotho.
- Make use of an integrated national Geographic Information Systems to support the planning of ICT infrastructure to tourist centres, conservation and natural resources management.
- Connect major tourist centres to ICT infrastructure.
- Encourage the tourism industry to use ICT's to market products and services.
- Deploy electronic control systems to monitor and protect wild life in national parks and reserves.

3.10 Gender and Youth

ICTs can provide a powerful means for reaching out to youth and women and including them in the development process. Access to ICTs can have an empowering effect on youth and women through the acquisition of new skills and exposure to opportunities. ICT training programmes for youth can also help ensure that the future drivers of the economy have the necessary skills to become entrepreneurs, decision makers, educators and software developers.

3.10.1 Policy Objectives and Strategies

Government is committed to deploying ICTs as tools in the process of ensuring gender equality, empowering and recognising women and youth in the development process.

Objectives

- Use ICTs as a vehicle to increase participation of youth and women in the development process.
- Use of ICTs as tools to promote gender equality in areas of education, employment, land and other social benefits.
- Include information needs of both men and women in designing ICT training programmes.
- Increase access to ICTs for youth and women in rural areas

Strategies

- Promote the use of the Internet and e-commerce to facilitate access for women and youth in business.
- Develop ICT training and awareness programmes targeted at youths and women.
- Promote affordable access to ICTs for youth and women
- Promote the use of ICTs in addressing social issues such as health and food security among youth and women.
- Include a gender perspective in the development of content for ICT applications.
- Make access to ICT education, training, and literacy at school equitable.

3.10.2 Policy Measures, Instruments and Initiatives

The Government through the Ministry responsible for Gender, Youth, Sports and Recreation, in coordination with civil society and the private sector, shall:

- Establish fora where youth and women can articulate their information needs as well as barriers to access to ICTs and related services.
- Work with the Ministry of Education to ensure equality of access to ICT education for both sexes.
- Work with the private sector and civil society to design pilot projects to expose youth and women to business opportunities made possible by the use of ICTs.

4.0 CHAPTER 4 INSTITUTIONAL FRAMEWORK POLICY IMPLEMENTATION.

This section outlines the institutional arrangements and sector restructuring needed to facilitate the successful implementation of the ICT policy.

4.1. Strengthening of the ICT Department

The Ministry of Communications, Science and Technology (MCST) shall strengthen the ICT Department as the lead implementing body of the ICT Policy and initiatives in the country. This Department is charged with:

- ICT Promotion and Coordination.
- Strategic Planning and Resource Mobilisation
- Monitoring and Evaluation of the ICT sector.

4.1.1. ICT Promotion and Coordination

The ICT Department is responsible for promoting the take up of ICT services and products throughout the economy. Specifically, the ICT Department is to:

- Implement ICT public awareness programs and initiatives to help generate demand for ICT products and services throughout society.
- Review and revise the ICT policy and strategies periodically in order to keep pace with technological developments and the needs of Lesotho.
- Advise Government on national ICT requirements and policy matters.
- Formulate laws and regulations to guide implementation of ICT policies and strategies.
- Establish an ICT Cadre to assist other Government institutions with the development of internal ICT policies, programmes and projects.
- Encourage all public sector institutions to integrate ICTs in their core activities and to train staff to make full use of ICTs.

- Establish mechanisms and working groups, as needed, to coordinate ICT activities among all stakeholders, including Government, the private sector, civil society and development partners.
- Establish a Universal Service Fund (USF) to promote universal access to ICT applications and services at an affordable price. The Fund will also facilitate the growth of national ICT infrastructure, training and production of local multimedia:
 - Monies to support a USF may be raised from Government's annual budget, a percentage of annual revenue earned by all licensed operators, and from development partners.
 - An Advisory Committee made of stakeholders from the sector, including the Regulator for the ICT sector, operators and service providers, civil society, consumer associations and Government ministries, will administer the USF. This Committee will advise the MCST on the most efficient and effective utilisation and operation of the USF.
 - All licensed operators, broadcasters, service providers, content developers, public access ICT telecentres, schools, hospitals, rural clinics and others will be eligible to receive funds from the USF depending upon the programmes and initiatives selected each year by the Fund Advisory Committee in conjunction with the MCST.
 - Projects will be selected through established criteria. Key among the criteria will be project sustainability, cost-effectiveness and applicability to the lives of Basotho.

4.1.2 Strategic Planning and Resource Mobilisation

The MCST's ICT Department is charged with formulating national/Government ICT usage strategies by developing plans in consultation with stakeholders. This process will entail the:

- Establishment of an ICT cadre for coordination of ICT activities.
- Development of a Master plan for the national implementation of the ICT policy.

- Development of specific Action Plans for the achievement of the objectives of each of the 10 cross cutting catalyst.
- Submission of an annual budget, to be funded by Government, needed to support ICT initiatives and programmes.
- Mobilisation of national and external financial, as well as technical resources needed to realise the ICT policy.
- Establishment and maintenance of a database of local, regional and international ICT related projects and programmes in order to avoid unnecessary duplication guide the development of ICT projects and learn from the experiences of others.
- Investment in a national integrated Global Information System (GIS) to assist stakeholders in their planning and development of ICT infrastructure, products and services. The ICT Department should also select an appropriate home for this technology that will enable maximum usage and access for all stakeholders.

4.1.3 Monitoring and Evaluation

The ICT Department will also be tasked with developing mechanisms to ensure the implementation and monitoring of the policy. These mechanisms will be to:

- Establish performance indicators and targets to measure the effectiveness of ICT programmes and initiatives.
- Set standards to ensure project accountability and effective project management for all sectoral ICT initiatives and programmes.
- Conduct annual ICT surveys to monitor the implementation process and evaluate the impact of the ICT policy on the growth of the economy.

4.1.4 Regional and International Coordination

The MCST shall represent the Government in regional and international fora on issues pertaining to ICT, by:

- Participating in regional and international organisations that have an inclination to ICT.

- Implementing regional, continental and the global initiatives for which Lesotho is a member.
- Reinforcing partnerships with international organisations with a view to increasing support for national and regional initiatives in the area of ICTs, encouraging technology transfer and promoting capacity building.
- Disseminating information regarding the international best practices and experiences of other countries in the use of ICTs for development.

4.2 Regulator Restructuring

The Minister of Communications, Science and Technology shall broaden the scope of the Lesotho Telecommunications authority to include responsibility over the more encompassing ICT sector. The authority will be foremost accountable to the Minister of Communications, Science and Technology, and shall report to parliament through the MCST Minister.

4.2.2 Objectives

The specific objectives of the regulatory authority will be to:

- Regulate the ICT sector in the public interest
- Contribute towards development of the social goals of ICT policy including provision of universal service and universal access.
- Ensure the provision of a wide range of ICT services to stimulate and support economic growth
- Regulate all ICT service providers
- Ensure a level playing field as permitted by the ICT policy
- Protect the interests of all ICT users and consumers as well as the general public
- Stimulate innovation in the ICT industry with a view to provide advanced ICT services.
- Manage common national resources effectively.

4.2.3 Functions of the Regulator

Regulation and Licensing

The Authority will:

- Regulate the ICT sector, the regulator shall make rules and procedures for the provision of ICT products and services and will enforce them.
- Provide Licensing of all ICT service providers.
- Undertake the review of existing licenses and fees, determine appropriate classes of licenses, and monitor and enforce compliance with relevant legislation and regulations.
- Determine procedures for allocation and management of scarce resource (e.g. frequencies and numbering schemes)
- Improve licensing regimes to promote fair competition.
- Ensuring that licence fee structures encourage investment, do not unduly burden operators and service providers or deter new entrants.
- Impose sanctions for violations of compliance covering legal, regulatory and licence obligations by operators and service providers including monetary penalties.
- Regulate tariffs as and when required in the public interest, and undertake responsibility to educate consumers, to facilitate their active participation in tariff review forums.
- Treat all of its licensees equally and apply the same means of ensuring compliance with existing rules and license obligations.

Universal access/service

- Develop specific indicators of ICT access that reasonably meet Lesotho's socio-economic aspirations
- Provide for universal service obligations in all licenses issued for infrastructure development.
- Implement the universal service policy

- Advice and participate in the Universal Access Fund Steering Committee chaired by the Ministry of Communications Science and Technology

Ownership and control

- Encourage participation of local people in the ownership and control of ICT facilities, networks as well as in provision of ICT Services.

Competition

- Promote fair competition between ICT providers
- Develop and Monitor compliance to an ICT competition policy.
- Allow all ICT providers freedom in pursuit of their commercial activities, while safe guiding the interests of the public taking into consideration the ICT policy Objectives, and those of Government.

Standards

- Undertake type –approval of customer premise equipment and set the rules for their connection to the networks.
- Set applicable Technical and quality standards in consultation with ICT industry and consumer bodies.
- Determine interconnection and numbering guidelines facilitate interconnection negotiations and approve interconnection agreements.

Furthermore the Authority will be responsible for:

- **Educating consumers.** In all matters pertaining to the ICT sector.
- **Growing the industry.** The Authority shall actively promote the development and expansion of the ICT industry in Lesotho in conjunction with stakeholders
- **Recruiting and retaining qualified personnel.** Because of the complex, constantly evolving nature of the ICT industry, it is of critical importance that the staff of the Authority be qualified in their related discipline. A qualified and professional staff will build confidence with industry and improve the functional capacity of the Authority

- **Ensuring transparency, fairness and accountability in all its activities.**
The Authority shall disclose any information, requested by a member of the general public, unless marked as confidential by operators and service providers. In short, the Authority shall keep no secrets between itself and the ICT sector and shall actively disseminate all information regarding its decisions and processes.