

EXECUTIVE SUMMARY

- i. This Policy provides Botswana with a clear and compelling roadmap that will drive social, economic, cultural and political transformation through the effective use of Information and Communications Technology (ICT). The Policy, titled Maitlamo, complements and builds upon Vision 2016 and provides many of the key strategies essential for achieving Botswana's national development targets.
- ii. The Policy has been completed with the assistance of approximately one thousand people from all elements of society and all parts of the country. Their input was invaluable. Special acknowledgement should be given to the seven Task Force committees, who gave up their valuable time to create the Action Plans and recommendations that lie at the core of this document. They are the architects of the National ICT Policy and are to be congratulated for their efforts.
- iii. Botswana's National ICT Vision and Objectives were developed in April 2004. They are as follows:

“Botswana will be a globally competitive, knowledge and information society where lasting improvements in social, economic and cultural development is achieved through effective use of ICT”.

 - Creation of an enabling environment for the growth of an ICT industry in the country;
 - Provision of universal service and access to information and communication facilities in the country; and
 - Making Botswana a Regional ICT Hub so as to make the country's ICT sector globally competitive.
- iv. Formal Benchmarking and e-Readiness Assessments were conducted in June of 2004. The results indicate that Botswana has invested heavily in telecommunications infrastructure in recent years and already has a number of ICT related initiatives underway. The World Economic Forum currently ranks Botswana 55th in the world in terms of national connectivity (out of a total of 102 countries). On the surface, this position does not appear alarming, however Botswana has slipped from 44th position within the past twelve months – emphasising the competitive aspects of ICT diffusion and the need to swiftly implement formal connectivity programmes.
- v. Good levels of technical infrastructure and supporting legislation are already in place and provide the country with a solid foundation for



accelerating an integrated National ICT agenda. As Botswana is currently in the early stages of its national ICT programme, levels of ICTs in home, communities and businesses are relatively low, and ICTs in healthcare, education and government remain in their formative stages.

- vi. A survey of the ICT market was finalised in November 2004 to support the National e-Readiness Assessment. The survey indicated that annual ICT expenditure in Botswana might be approaching 1 Billion Pula. This is very encouraging and demonstrates significant domestic demand for ICT products and services – however, much of this revenue goes directly abroad and not to local companies. Based on this impressive internal demand for ICT products and services, this Policy stresses the urgency for increased domestic development of specialised ICT skills, and the need for on-the-job training etc., to ensure that young graduates have a career path in Botswana’s emerging ICT sector, and that these significant revenues remain within the country.
- vii. Further enhancements in infrastructure and supporting legislation will allow for improvements in electronic interaction and on-line service delivery, however ICT driven innovation in education and major skills development programmes will be necessary to enable long-term sustainability, economic diversification and national growth.
- viii. An ICT Legal Framework has been produced as a companion to this Policy. The Framework provides a review of current legislation in Botswana and identifies appropriate policy actions that need to be taken to establish a trusted and secure e-Commerce environment.
- ix. Seven Task Forces were assembled to develop key aspects of the ICT Policy, focusing on the following areas:
 - Community Access and Development
 - Government
 - Learning
 - Healthcare
 - Economic Development and the ICT Sector
 - Infrastructure
 - Legal and Policy
- x. The Task Forces met at regular intervals during the planning process, to share their ideas and to identify the numerous dependencies and important points of integration. Individually, the Task Force Action Plans are comprehensive and creative – all are integrated with, and dependent upon, one another to achieve their goals. Collectively, they form a blueprint for a connected, informed and educated nation, a realistic ICT roadmap, and the



prospect of an exciting future for Botswana in the global information society.

xi. Highlights of the National ICT Policy include:

a. Connecting Communities Programme

Hundreds of Community Access Centres will be established throughout the country. These access centres will provide citizens who do not have computers and Internet access at home with an “on-ramp to the Information Superhighway.” Centres will be tailored to the specific needs of the community and will provide easy access to information and services relating to healthcare, jobs, education and government services etc. Far more than a simple Internet café, these sites will offer training, education and assistance to the community and ensure that local residents learn to use ICTs for maximum social, cultural and economic benefit. Training in business start-up and e-Business will also be provided to local companies and entrepreneurs.

National targets for the *Connecting Communities Programme* are:

- All communities over 2000 inhabitants to be connected to high speed network access by 2016
 - 50 fully functioning Community Access Centres by December 31, 2010
 - 100 fully functioning Community Access Centres by December 31, 2012
- All public libraries and/or book rooms connected to high-speed network access by December 31, 2010;
- 5 Mobile Internet Units, with high speed satellite access, deployed by December 31, 2007;
- Complete coverage of all of Botswana by national radio and TV (public broadcasters) by December 31, 2008; and
- A measurable increase in employment, wealth generation and healthcare awareness in communities that maintain working high-speed networks in excess of four years.

b. Government on Line

Government must act as the catalyst for Maitlamo, as it will be the trigger for many ICT related initiatives across all segments of society. Designed within a broader public sector reform initiative, the Government on Line programme will make all appropriate government information and services electronically.

National targets for *Government On Line* include:

- All appropriate government information on-line by December 31, 2007;



- All appropriate government services on-line by December 31, 2009;
- All government employees to receive formal e-Government and Customer Service Training within one year of joining the public service – starting January 1, 2008.

c. ThutoNet

This programme is pivotal to the entire Maitlamo initiative and aims to provide the literacy, skills and knowledge required for both formal and non-formal learners in the networked world. The programme will provide all schools in Botswana with modern computers and access to the Internet. All teachers will be trained how to use ICTs as a classroom tool and formal ICT education will be introduced into the school curriculum to help prepare the nation's children for success in the digital age. Locally produced educational software will be produced to assist with e-Learning and ensure local content and subject relevance.

National targets for ThutoNet are:

- All schools and libraries with computers and Internet connectivity by December 31, 2010;
- All teachers to receive ICT training by December 31, 2010;
- ICT content and curriculum development available at all levels of the education system by December 31, 2010; and
- A recommendation that a 1:7 computer to student ratio be introduced into all schools by December 31, 2012 has been proposed, however the exact ratio has still to be determined.

d. e-Health Botswana

This programme will introduce a number of ICT initiatives aimed at improving the health of Botswana and improving the overall efficiency and effectiveness of the healthcare system. Simple applications such as a Healthcare Portal and improving health related information delivered over the radio and television will provide rapid benefits. Over time, more sophisticated solutions such as Telehealth (healthcare advice provided over the telephone) and Telemedicine (healthcare services provided over the Internet) will be introduced.

e-Health Botswana targets include:

- All health facilities in which care is available for more than ten days per month to be connected by December 31, 2008;
- All Botswana have appropriate access to health information on-line by December 31, 2009; and
- Services to provide health services remotely available across Botswana by December 31, 2010.



e. ICT and Economic Diversification

The strategy for enhancing the ICT sector in Botswana will be focused on the further development of the International Financial Services Centre (IFSC) and positioning the country as an attractive location for Business Process Outsourcing (BPO) investment. In addition, traditional industries such as agriculture, mining, manufacturing and tourism will benefit from the introduction of ICTs into ongoing operations. This programme, in conjunction with the Connecting Communities and Government on Line initiatives will also focus on training and assistance to SMEs to provide them with the necessary tools for moving their businesses on-line and using the Internet as a vehicle for increasing productivity and sales.

Targets for the ICT and Economic Diversification Programme include:

- An additional 15,000 to 17,000 new jobs created in IFSC and BPO centres;
- Domestic ICT Sector to double in size based on demand from Maitlamo driven initiatives;
- Measurable growth in agriculture GDP and employment;
- Measurable growth in tourism revenues and employment;
- 30 export-ready manufacturing SMEs, operating on-line; and
- Non-mining sector at least 80% of GDP by 2009.

f. Connecting Botswana

This programme will assist in the design and deployment of an enabling technical infrastructure for Maitlamo. It will provide adequate, affordable, reliable and sustainable ICT infrastructure solutions to enable full connectivity to homes, communities and establishments, and the delivery of health, education, public services and e-Commerce solutions to everyone in the country. The initiative will identify the technical requirements to support the rollout of Maitlamo and develop a “future-looking plan” to ensure that the country’s ICT infrastructure is constantly evolving and improving. Providing electricity and Internet access for remote and rural communities is of particular importance to ensure equity and Universal Access, and will be a key focus of the programme.

National targets for Connecting Botswana are:

- Competition in all areas of ICT implemented by December 31, 2008
- 50% of citizens will have access to reliable power and connectivity by December 31, 2010
- Access to ICT technologies is available to all citizens by December 31, 2016



g. Connectivity Laws and Policy

Supporting legislation is as important as supporting infrastructure in determining the overall success of Maitlamo. A key element of the Connectivity Laws and Policy Programme will be developing the necessary legal environment for increased levels of competition within the telecommunications space. In addition, the e-Legislation initiative will develop policies that enable increased levels of e-Commerce and e-Government, examining areas such as electronic signatures, privacy, security, and intellectual property rights. The rights of consumers in an e-Commerce environment will also be examined and appropriate legislation and codes of conduct put in place.

Goals for the Connectivity Laws and Policy Programme include:

- Media neutral legislation to deal with electronic documents (e-Commerce legislation) by the end of 2005;
 - Amendments to specific legislation, including the Criminal Procedure and Evidence Act, the Authentication of Documents Act, the Foreign Documents Evidence Act, and possibly selected other legislation (e.g., the Botswana Stock Exchange Act) by the end of 2005;
 - Development of policy and possibly legislation dealing with electronic signatures by the end of 2005 – if legislation is required mid-2006;
 - Development of policy and possibly a combination of legislation and industry codes of conduct to deal with the protection of personal privacy, particularly in the context of cross-border data flow, health care and financial services by mid-2006.
- xii. An initial funding estimate of 950M Pula has been identified as being necessary to support the design and implementation of the ICT Policy over the next five years. Exact funding requirements will become more clearly defined as each of the various programmes and projects are designed in greater detail.
- xiii. A series of "Fast-Track Projects" have been identified. They will be introduced over the next twelve months and will provide the necessary platform for accelerating the country's connectivity programme in subsequent years. Costing estimates to support year one fast-track initiatives are expected to be in the region of 35M Pula.
- xiv. Senior government leadership and solid governance arrangements will be key in ensuring the entire suite of Maitlamo initiatives remain aligned and integrated. This will be essential if Botswana's ICT agenda is to move forward effectively and maximum benefits are to be achieved.



- xv. The National ICT Strategy has been designed to provide all Batswana with exciting new opportunities for learning, developing skills, and receiving important information and services - at any time from anywhere. Components of this Policy will ensure that children from the earliest age are given all the tools necessary to succeed in tomorrow's world. It will bring communities closer together and will provide all citizens with access to ICTs in their everyday lives. There is also a specific focus on the important role that young adults will play in Botswana's transition. Plans are laid out within the Policy that will help them acquire new skills, share these skills with others in the community and prepare themselves for an exciting and prosperous future in the networked world. Through the implementation of recommended programmes, small businesses will soon become e-businesses and will be able to compete in arenas that were traditionally only open to larger players. Botswana's ICT sector will expand significantly creating many new employment opportunities and investor confidence will continue to grow.
- xvi. The plan is complete. The roadmap has been laid out. Although the challenge is significant, the tasks are clear and achievable. Botswana has an unprecedented opportunity to chart a new and exciting future for its children. A future filled with countless opportunities and few boundaries. It is now time to move forward at Internet speed.



