

Republic of Botswana

BOTSWANA PARLIAMENT

ICT MASTER PLAN





Parliament of Botswana

ICT Master Plan

August 2012



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Foreword

The Parliament is made up of the elected representatives of the citizens and should be the leader in advocating for harnessing information and communication technologies (ICTs) to empower citizens within their constituencies. The Members of Parliament (MPs) can only be leading voices for this if they are well-equipped with skills and know about recent developments in ICTs and how they can improve people's lives. With this knowledge and skills, MPs can advocate confidently for ICT developments in their constituencies and they can explain to the people how important these technologies are to them and ensure that ICTs are used much more widely within the country, especially in the remote areas.



As legal representatives of the people, MPs can take advantage of ICT to foster democracy. They can help shape the Information Society and improve their own particular roles within it. A healthy democracy is marked by a parliament that is transparent and accountable, and can respond to constituents in such a way that they are motivated to participate actively in the policymaking and decision-making processes of their countries. Parliament needs to give special consideration to rural areas, the disabled, under-privileged urban areas, institutions of learning and health, women and women's organizations, community media groups and other key stakeholders.

The needs assessment has identified challenges facing the Parliament of Botswana such as lack of awareness about the benefits of using ICTs in the Parliament, lack of capacity and skills, and non-existent policies and strategies. These need to be addressed urgently, as they affect the transformation process that would realize the full potential of ICTs.

Deployment of ICTs can enhance MPs' effectiveness, for instance by improving their scrutiny of decision-making, their interaction with the electorate and their contribution to the debate on the Information Society, both regionally and globally. It is difficult to plan, allocate resources, monitor and oversee the effective implementation of any policies without an enabling and supportive legislative environment.

The ICT Master Plan is premised on the principles adopted locally in the Botswana ICT Policy, regionally in the SADC Parliamentary Forum Strategy and internationally at the World Summit on the Information Society (WSIS). It will guide us how to make best use of ICTs to drive national development efforts and will assist us to address traditional development problems with innovative solutions that are effective, easily scalable and can be replicated. It is a useful tool for helping us make decisions. It aims to raise awareness, harness the potential benefits of ICT in supporting Parliament's basic values of transparency, accessibility, accountability and effectiveness, and at the same time improve the efficiency and effectiveness of Parliament's representative, legislative and oversight functions. It will contribute to the realization of the vision: "Harnessing ICT potential to establish and develop a paperless Parliament that is Representative, Responsive, Efficient, Effective, Accountable, Accessible, Legitimate and Linked (REAL)".

The Master Plan is also intended to foster systematic use of ICTs, to enhance ICT capabilities among staff and MPs, and to strengthen the institutional framework for ICT and the parliamentary Information System Operation Policy. It will support e-government and democracy through enhancing Parliament's functions of representing, legislating, oversight and forming government. It will promote interactivity by harnessing ICT potentials to promote community and constituency development and cooperation between parliaments. It will ensure sustainability by boosting parliamentary oversight over national and subregional ICT policy and strategies, as well as over the funding and the monitoring and evaluation of the plan.

This ICT Master Plan will enlighten MPs and equip them to deploy ICTs in their work, to take the Parliament to the people, to enhance the interaction between the public, Government and the private sector and to address effectively the challenges facing the nation, such as: developing the human capital, combating HIV/AIDS, developing infrastructure, reducing the number of people living below the poverty line, and creating digital opportunities to meet our development challenges.

For these reasons, I challenge all parliamentarians, staff of the Parliament, Government Ministries, parastatals, non-governmental organizations (NGOs), the private sector and all stakeholders to be actively involved in mobilizing resources and in implementing, monitoring and evaluating the ICT Master Plan. Join hands with Parliament's ICT Committee, which has been mandated to coordinate and ensure the effective implementation of the ICT Master Plan.



Hon. Dr. Margaret Nasha
Speaker
Parliament of Botswana

Preface

In both developed and developing countries, information and communication technologies (ICTs) have become an important strategic tool for promoting competitiveness and stimulating economic growth. They also lower delivery costs for public services in all sectors. The economic and social development mandate of the United Nations Economic Commission for Africa (ECA) has enabled it to play a primary role in facilitating the development of international and regional policies and programmes to ensure Africa's full and active participation as a partner in developing the global knowledge economy. ICTs play an important role in facilitating the attainment of development goals and in response to the challenges of the information age. In recognition of this, ECA launched the African Information Society Initiative (AISI) in May 1996 as a common vision, not only to bridge the digital divide between Africa and the rest of the world but also to create opportunities for Africans to develop digital capacities effectively and to speed the continent's entry into a global economy propelled by information and knowledge.

Since the launch of AISI, ECA has been supporting member States to develop national information and communication infrastructure (NICI) policies, plans and strategies. These provide the framework within which ICTs are mainstreamed into the national planning process to facilitate the achievement of national development priorities and objectives. ECA has also been supporting Regional Economic Communities (RECs) and national and regional institutions to develop e-strategies to support their core business. E-parliament is one of these areas of intervention and national parliaments can benefit from the principles and programmes of AISI through partnerships with ECA.

In increasing the capacity of African stakeholders to contribute to building the Information Society, ECA has identified Members of the Parliament (MPs) as a priority group and undertaken several capacity-building initiatives. To date, approximately 600 African MPs have participated in awareness, sensitization and training programmes on the benefits offered by ICTs and on how MPs can become advocates for promoting the adoption of ICTs within their constituencies and nationally. By working with parliaments, ECA aims to empower MPs as well as staff of African parliaments to utilize ICT tools and gain adequate knowledge on Information Society issues, so as to increase their efficiency and effectiveness.

The overall objective is to:

- (a) Use ICTs to enhance democratic governance and enable effective debate, sharing and enhanced public participation in the legislative and policymaking processes;
- (b) Support greater oversight by parliaments through the use of ICTs;
- (c) Strengthen the capacity of parliamentarians in making decisions about the Information Society, advocating greater investments in ICTs and promoting pro-poor ICT applications and benefits within their constituencies; and
- (d) Create ICT parliamentary committees to support parliaments in their use of ICTs as well as provide leadership and oversight on how national development efforts tackle Information Society issues.

The mandate of ECA includes supporting development programmes for member States. In line with this and through its Southern Africa Office (ECA-SA), ECA has assisted the Republic of Botswana to develop an ICT Master Plan for its Parliament. The Master Plan is intended to support the Parliament in addressing broad developmental goals, such as democratic governance, and also to reinforce Botswana's commitment to addressing special national needs and meeting the Millennium Development Goals by 2015.

In addition, the Southern African Development Community, through the Parliamentary Forum (SADC PF), identified ICT as being of cross-cutting importance in all areas of development and also recognized the vital role of parliamentarians as representatives, overseers and legislators in driving national, regional and international initiatives. This recognition guided the formulation of the ICT strategy for the SADC subregion. Parliaments are the best institutions for enabling, monitoring and appraising the positive effects of new technologies in terms of their contribution to economic development and for dealing with new challenges of promoting, regulating and safeguarding the development of an equitable Information Society. The ICT strategy also served as a platform for facilitating international and regional bodies to support effectively the process of formulating and implementing ICT strategies and policies in the region.

The development of the ICT Master Plan for the Parliament of Botswana is a major step in the right direction. The process was fully supported by the MPs and the plan was crafted by a local consultant and the staff of the Parliament to ensure its sustainability. Now we must give high priority to implementing the plan and garner the necessary investment if we are to realize the benefits of these noble efforts. In this context, it is critical that we strictly adhere to the implementation timelines set.

I congratulate the Government of Botswana and its Parliament for developing this ICT Master Plan and assure them of ECA's continued support to the implementation process.

I also call on other development partners to give the Parliament of Botswana their full support to implement its ICT Master Plan.

Abdoulie Janneh

United Nations Under-Secretary-General
and Executive Secretary of ECA

Abbreviations and acronyms

ACHAP	African Comprehensive HIV/AIDS Partnerships
ADSL	Asymmetric Digital Subscriber Line
AIDS	Acquired immunodeficiency syndrome
AISI	African Information Society Initiative
BGCIS	Botswana Government Communication & Information System
BIS	Botswana Information Society
BNA	Botswana National Assembly
BNLS	Botswana National Library Services
BPO	Business Process Outsourcing
BPR	Business Process Reengineering
BTA	Botswana Telecommunications Authority
CRASA	Communications Regulators' Association of Southern Africa
DIT	Department of Information Technology
e-applications	Electronic applications
ECA	United Nations Economic Commission for Africa
ECA-SA	UN Economic Commission for Africa, Southern Africa office
EASSy	East Africa Submarine System
GoB	Government of Botswana
HIV	Human immunodeficiency virus
HoC	House of Chiefs
ICT	Information and Communication Technology
IFSC	International Financial Services Centre
IPU	Inter-Parliamentary Union
IT	Information Technology
MDGs	Millennium Development Goals
MP	Member of Parliament
NA	National Assembly
NAZ	National Assembly of Zambia
NICI	National Information and Communication Infrastructure
NGO	Non-governmental organization
PC	Personal computer
PDA	Personal digital assistant
PSRU	Public Service Reform Unit
RISDP	Regional Indicative Strategic Development Plan
SADC	Southern African Development Community
SADC PF	Southern African Development Community Parliamentary Forum
SAPOA	Southern Africa Postal Operators Association

ToRs	Terms of reference
UN	United Nations
VANS	Value-Added Networks Services
VOIP	Voice Over Internet Protocol
WAFS	West African Festoon System
WSIS	World Summit on the Information Society

Glossary of terms

Digital Democracy: The term is used when the use of ICTs enhances citizens' participation in the democratic process. It is the computerization of political discourse, policymaking and the political process and is aimed at increasing, enhancing and deepening citizens' participation in the policy and decision-making processes of government through a spectrum of activities such as: electoral campaigns, voting, consultation and participation in the policy process, public opinion polling and communication exchange between elected officials and constituents.

Digital Divide: The term denotes enormous disparities between and within countries in the ICT endowment and/or infrastructure, in the capacity to use ICTs, and in affordable and equitable access to knowledge, information and suitable digital content. "The digital divide" is also defined as the unequal access to and diffusion of ICT. The global digital divide is calculated by dividing the penetration rates of ICT in the developed world by the penetration rate in the developing world. Indicators measure insufficient infrastructure, high cost of access, lack of locally-created content, and uneven ability to derive economic and social benefits from information-intensive activities.

e-Commerce/Electronic Commerce: Business activities involving consumers, manufacturers, suppliers, service providers and intermediaries and using computer networks such as the Internet.

e-Governance: A broad concept which includes enhancing the delivery of government services and information through ICTs, thereby strengthening accountability and transparency of government actions, launching new participatory mechanisms and fostering decentralization processes.

e-Government: Defined broadly, this is the use of ICT to promote more efficient and effective government, facilitate more accessible government services, allow greater public access to information, and make government more accountable to citizens, thus empowering them. "E-Government" denotes the e-services and e-applications used by government in carrying out its day-to-day activities.

e-Parliament: A legislature that is empowered to be more transparent, accessible and accountable through ICT. It empowers people, in all their diversity, to be engaged in public life by providing greater access to its parliamentary documents and activities. Connected stakeholders use information and communication technologies to support parliament's primary functions of representation, law-making and oversight more effectively. Parliament fosters the development of an equitable and inclusive Information Society through the application of modern technology and standards and the adoption of supportive policies.

e-Parliamentarian: A legislator who makes effective use of the enabling capabilities of ICT and the opportunities this creates to make significant contributions to development and governance, and who takes responsibility to provide strategic direction and is a champion for developing and exploiting the enabling capabilities of ICT to address the development challenges she or he faces in the constituency, country and region.

Information and communication technologies (ICTs): Technologies that facilitate communication and the processing and transmission of information by electronic means. This broad definition encompasses the full range of ICTs, including radio, television, telephones (fixed and mobile), computers and the Internet.

Information economy: An economy based on the exchange of knowledge information and services rather than on the exchange of physical goods and services.

Acknowledgement

The preparation of the ICT Master Plan drew liberally on inputs from Members of Parliament (MPs) and staff and Heads of Departments of the Parliament. Various officials from Government Ministries, the business community and ICT experts gave diverse inputs and insights into the development of the plan. Comments and suggestions made by participants at the sensitization workshop for MPs also greatly enriched the ICT Master Plan.

The ICT Master Plan was developed by Dr. Shedden Masupe, a consultant contracted with the support of ECA-SA. The project was undertaken under the overall leadership of Mrs. Barbara Dithapo, the Clerk of Parliament, with a technical team comprising Mr. Dominic Mogwe and Mr. Isaiah Mosutlha and directed by Ms. Nkabo Kefhilwe. The following core staff of Parliament supported the project: Mrs Stella Moroka (Acting Parliamentary Counsel); Mr Thebenala Thebenala (Senior Assistant Clerk); Mr Christopher Lebekwe (Deputy Manager, Corporate Services); Mr Elliance Mosweu (Assistant Systems Analyst); Ms Kgakgamatso Monnaesi (Assistant Systems Analyst); Mr Josiah Redman (Principal Public Relations Officer); Ms Mosamaria Kgaoganang (Principal Clerk Assistant - Research). This support provided a strong, integrated input which enriched the ICT Master Plan and ensured its relevance to the current parliamentary reforms.

The work on the ICT Master Plan for the Parliament of Botswana benefited from the valuable technical support and direction provided by the ICT, Science and Technology Division at ECA Head Quarters, Addis Ababa, including Ms. Aida Okopu-Mensah (Director), Dr. Sizo D. Mhlanga (Chief, ICT Policy and Development Section) and Mr. Thierry H. Amoussougbo (Regional Advisor). It also gained from the technical contribution of Ms. Atamelang Ngwako (Associate Economic Affairs Officer) under the direction of Dr. Munorweyi E. Dhliwayo (Senior Economic Affairs Officer) and overall guidance of Ms Jennifer Kargbo (Director) in ECA's Southern Africa Office.

Part 1: Background and Context

1. Introduction

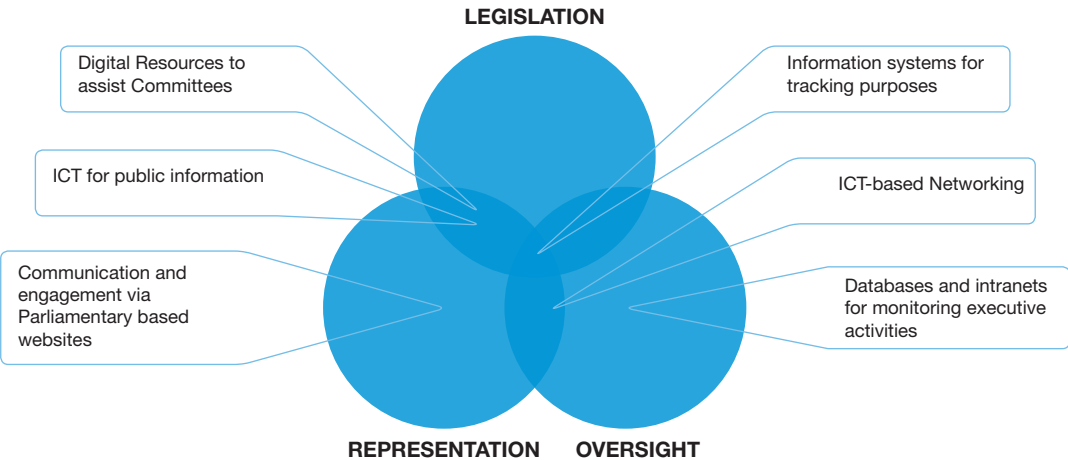
Parliament is the third main pillar of democratic society, alongside the executive and the judiciary. As the legislative institution, parliament is an important cornerstone of democracy. All three pillars combine to play key roles in the promotion and enhancement of democracy and democratic values. Over the last two decades, increase in the number of democratic governments - many of them in developing countries - has reached an unprecedented peak. The number of parliaments has followed a similar trend.

Worldwide, information and communication technologies (ICTs) are being widely deployed and used in various economic and public spheres. However, their use in parliaments is lagging, at least in relative terms. When ICTs are deployed in parliaments without a well-thought plan on how the institutions' core functions will be implemented the effects can be detrimental to the intended objective. Technology by itself cannot provide any comparative advantage to parliaments as democratic institutions or to members of the parliament (MPs) as the representatives of their constituencies unless they are used to produce efficiencies in their work processes and therefore make the institution more effective.

The process of integrating ICTs into parliamentary processes can lead to e-parliaments. These can be defined as parliamentary institutions that use ICTs with the objective of enhancing and strengthening their three core functions: legislation, oversight and representation.

In March 2006, the United Nations Development Programme published a report “Empowering Parliaments through the Use of ICTs” (UNDP, 2006), which established that ICTs can be used to enhance the links between the three core functions and thus bring more credibility to parliaments. The study highlighted the areas (shown in figure 1) that would benefit from the use of ICTs in legislation, oversight and representation.

Fig. 1: ICT to empower Parliaments Main Functions



Source: UNDP (2005)

In addition, work conducted by the United Nations Economic Commission for Africa (ECA) and the Southern African Development Community Parliamentary Forum (SADC PF) indicates that parliaments in the region need to develop strategies to use ICTs effectively to strengthen their rightful roles in a healthy, democratic dispensation. The appropriate use of ICTs has been identified as playing a crucial role in advancing developmental goals and contributing effectively towards an enabling environment for resolution of social and economic challenges, such as the attainment of the Millennium Development Goals (MDGs)².

The development of the ICT Master Plan for the Parliament of Botswana is thus a response to priority programmes, strategies and policies laid down by governments at international, regional and national levels to fast-track development through the use of appropriate technology in national parliaments.

The objectives of the ICT Master Plan include: mapping the course for strengthening ICT infrastructure and human capital for optimum use of ICTs in the Botswana Parliament; enhancing citizens' participation and fostering better relations between MPs and their constituents; and effectively improve the accessibility, transparency and accountability of the National Assembly, culminating in an enhanced environment of good governance.

The methodology used for the development of the ICT Master Plan included studies of the current situation and consultations with all stakeholders through workshops, interviews and surveys to assess the status of ICTs in the Parliament of Botswana. These studies highlighted that, although progress had been made to digitize Parliament, some significant work still remained to be done in order to accomplish the intended goals of optimizing facilities, building capacity to enhance effective use of existing resources, and expanding and diversifying the use of ICTs to enhance Parliament's interaction with citizens.

Strengthening ICT infrastructure and building capacity in utilization and maintenance of ICT resources were identified as crucial for optimizing the use of ICTs in Parliament to enhance internal efficiencies and accelerate parliamentary business. Greater citizen participation, transparency, accessibility, accountability and effectiveness were all features which were highlighted as being crucial for strengthening the representative, legislative and oversight functions of MPs. These features were identified as important action lines in the implementation of the ICT Master Plan.

In order to ensure that sustainability of the systems is implemented, it is important that the Parliament of Botswana reviews its programme of institutionalizing ICT within Parliament and its financing mechanisms for effective implementation and maintenance of the ICT Master Plan. As part of their oversight role, MPs must be empowered to ensure that budget allocations are made for the integration of ICTs into national development processes. ICTs can also be used to assist MPs to track and monitor progress of the Government's development projects and programmes which would assist with the role of advocate in support of legislation for ICT for Development (ICT4D) strategies.

Finally, ICTs can be used to promote exchange of information and best practices, including access to pro-poor ICT applications; enhanced cooperation between parliaments; and the establishment of innovative mechanisms to facilitate greater information flow at global, regional and subregional levels.

1.1 Background

Recently, there have been ongoing, collaborative efforts at national, regional and global levels to support governments in developing countries to bridge the digital divide between their respective countries and the developed world. Key strategies implemented include developing national ICT policies to promote the establishment of information- and knowledge-based societies. These can be a foundation for wealth creation and can assist in accelerating progress to achieve the MDGs, such as the elimination of extreme poverty, combating

disease and achieving universal primary education and gender equality. However, ICTs remain out of reach for many citizens, particularly in the rural and remote areas of developing countries. In addition, where they are accessible, their benefits may not be fully realized due to high costs of access, poor infrastructure, limited human resource capacity and a lack of policies, legislation and an enabling environment. In countries with well-developed enabling environments, ICTs have had a revolutionary effect, fuelling globalization, enhancing governance and stimulating development in education, health and the business sectors. The global nature of the Information Society means that national, regional and global efforts must be supported by multi-stakeholder cooperation at the national, regional and international levels in order to be successful.

AISI

The ECA recognized the important role that ICTs play in facilitating the attainment of development goals and in responding to the challenges of the Information Age. It launched the African Information Society Initiative (AISII) in May 1996, which was adopted by African Ministers responsible for Economic and Social Development and Planning at their thirty-first session in Addis Ababa, Ethiopia, and endorsed by the Assembly of Heads of State and Government of the then Organization of African Unity, now the African Union (AU), in 1996. AISII is a common vision, not only of bridging the digital divide between Africa and the rest of the world, but more importantly of creating effective digital opportunities which Africans and their partners can develop, and of accelerating the continent's entry into and active participation in the global economy of information and knowledge. The AISII vision focuses on priority strategies, programmes and projects that could help build African information and knowledge economies.

NICI

A key outcome of AISII was the development of National Information and Communication Infrastructure (NICI) policies, plans and strategies (commonly called "national e-strategies") in many countries across Africa. The NICI methodology has provided the framework within which ICTs are mainstreamed into national planning processes and integrated into all sectors of the economy in order to facilitate the achievement of national and sectoral development priorities and objectives.

WSIS

The strategic importance of ICTs in facilitating the development of knowledge-based economies formed the underlying theme of the World Summit on the Information Society (WSIS, 2003 and 2005). The WSIS was an initiative of the 1998 Plenipotentiary Conference of the International Telecommunication Union (ITU), endorsed by the United Nations (UN) General Assembly as an effective means to assist the UN in fulfilling the goals of the Millennium Declaration. It provided a global platform where key players, governments, UN agencies, the private sector and civil society came together to develop a common vision and an understanding of the Information Society. They adopted a Declaration of Principles and a Plan of Action, setting the stage for international cooperation to close the existing digital divide between developing and developed countries, while involving all stakeholders in building an inclusive Information Society. Heads of State and Government and stakeholders recognized and endorsed the need to create an enabling environment based on clear policies, laws and regulatory frameworks in order to enable universal, equitable and affordable access to ICTs for the development of a knowledge-based society.

The WSIS Declaration of Principles (2003) declared “our common desire and commitment to build a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life, premised on the purposes and principles of the Charter of the United Nations and respecting fully and upholding the Universal Declaration of Human Rights.”

According to author Kate Nash (2001), information can be seen as the “material foundation” of the information age that we live in today. Therefore inequitable access to ICTs can negatively affect a developing country’s ability to use information and knowledge effectively for their social and economic development and this, in turn, contributes to the widening gap between rich and poor nations.

Botswana Vision 2016 and MAITLAMO

In the spirit of the Botswana Vision 2016 (“Long-Term Vision for Botswana: Towards Prosperity for All”), Botswana’s National ICT Policy was developed in five phases as follows:

- (a) To develop the national ICT vision, goals and objectives;
- (b) To undertake e-readiness assessment and ICT surveys for benchmarking;
- (c) To develop the national ICT policy;
- (d) To develop the national ICT Master Plan; and
- (e) To develop the ICT monitoring and evaluation programme.

The Botswana ICT Vision is:

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

Its objectives are as follows:

- (a) To create an enabling environment for the growth of an ICT industry in the country;
- (b) To provide universal service and access to information and communication facilities in the country; and
- (c) To make Botswana a regional ICT hub so as to make the country’s ICT sector globally-competitive.

The current challenge is to formulate national strategies and develop comprehensive implementation plans to operationalize the ICT policy and ensure the effective cross-sectoral integration of ICTs into all sectors of the economy.

The Parliament

The Parliament as an institution has a crucial role to play in supporting Government's efforts to stimulate the integration of ICTs into the economy. Parliamentarians are elected representatives, legislators, overseers and monitors of government policy and administration, and so they can play a critical role in leading the transformation into the knowledge society. They can help shape the development of the Information Society by supporting the implementation of initiatives that promote the increased participation of citizens, building their capacity and strengthening their own ability to leverage ICTs to support parliamentary processes effectively, while ensuring that appropriate laws are drafted to establish an environment in which ICTs can be applied effectively to stimulate the economy and to foster democracy and good governance for the benefit of the citizens. They have a special role in overseeing the effective implementation of national ICT plans, once national strategies have been formulated which assign a specific role to the establishment of enabling legal and regulatory frameworks in order to stimulate the growth of the ICT sector and its effective integration into national development plans and processes.

Supportive policies and legislation must be put in place and strategies developed to ensure the promotion of access for all to information and knowledge.

1.2 The role and business of the Parliament of Botswana

MPs in Botswana are elected to Parliament through a system whereby the parliamentary candidate that wins the majority of votes during an election campaign automatically becomes a parliamentarian. The President is elected from the winning party. In Botswana, elections are held every five years.

Parliament of Botswana comprises two houses: the National Assembly (NA) and the House of Chiefs. However, only the NA has the power to make laws that govern the country. The House of Chiefs is an advisory body which can only advise the National Assembly on constitutional, customary and land issues. The main functions of the NA are:

- (a) To examine government policies;
- (b) To approve government spending; and
- (c) To discuss national and international issues.

According to the Constitution of Botswana, there are three arms of government, namely: (a) the Executive (Cabinet); (b) the Legislature (Parliament); and (c) the Judiciary (Courts). Each of these arms of State has its own functions, which are independent from the others. However, these three arms ensure that power is divided so that no arm has all the powers. This division of power is enshrined in the Constitution and it is called "the separation of powers."

1.3 The context: the SADC Parliamentary Forum (SADC PF) ICT Strategy

As part of the implementation of the SADC PF programme for development, ICTs were identified as critical cross-cutting tools that could be applied to enable access to a wide range of knowledge and information resources, to assist MPs to make informed decisions, to facilitate research and to offer appropriate channels for networking and constituency interaction and outreach. The Parliamentary Leadership Centre Survey (2001) and the ICT Survey (2002), conducted by SADC PF, highlighted the challenges that parliaments in the subregion faced in

effectively adopting ICTs to leverage and support parliamentary processes. The survey outcomes also alluded to a low level of ICT awareness amongst MPs and the detrimental effects this had on their ability to engage with and lead in transformation processes to establish the necessary environment for their countries to realize the full potential of ICTs.

Following findings and recommendations from these two surveys, in 2008 the ECA's Subregional Office for Southern Africa (ECA-SA) and its ICT, Science and Technology Division (ISTD), in collaboration with the SADC PF, developed a subregional strategy for empowering parliaments through the use of ICTs and guide the development and utilization of ICTs in SADC national parliaments- the SADC PF ICT Strategy.

The strategy was formulated after reviewing the status and future plans of SADC national parliaments, which accentuated the need to develop baselines and benchmarks for monitoring and evaluating ICT programmes being implemented, including a review of global and regional ICT initiatives.

The SADC PF ICT Strategy was therefore designed to address, at the policy level, issues of convergence, harmonization of ICT indicators and promotion of ICT usage in regional economic integration, enhancement of connectivity and access to ICT services among and within member States. It was also established to guide the development and adoption of ICTs at the regional level and to act as a framework for national e-parliaments. The National Assembly of Zambia (NAZ) ICT Master Plan is one of the first building blocks and pillars to be developed in the implementation of the SADC PF ICT Strategy for the foundation of effective e-parliaments in the subregion.

An analysis of the potential of ICTs vis-à-vis the three core functions of parliaments led to the development of a framework that focused not so much on the use of ICTs per se, but rather on the way parliaments executed their core business and the impact that ICTs could have if they were deployed strategically. The framework suggested how generic or specific ICT applications could be brought into the core functions of parliaments. The starting point for supporting the use of ICTs in parliaments was not the deployment of the latest technology, but rather a comprehensive understanding of the way in which parliaments operated within their national contexts. The identification of critical or priority areas in which ICTs could be deployed for maximum impact was also essential to secure buy-in and ownership by the institutions and by the MPs.

Part II: Rationale for the Parliament of Botswana Master Plan

2. General overview of current ICT status

2.1 ICT interventions at the Parliament of Botswana

In April 2008, SADC PF and the ECA conducted a first parliamentary workshop on ICT on the theme “The Role of Members of Parliament in building an inclusive Information Society towards accelerating the Millennium Development Goals (MDGs)”. The workshop attracted MPs and representatives from SADC member States including Angola, Botswana, Democratic Republic of the Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, the United Republic of Tanzania, Zambia and Zimbabwe, as well as key stakeholders and development partners in the region. Strategic outcomes from this workshop were the Terms of Reference (ToR) for the development of ICT Master Plans for SADC parliaments and the establishment of ICT committees in each of these parliaments.

The ToR called for the need to equip MPs and parliamentary staff adequately with the required information technology skills in order to enable them to advocate for the development and use of ICTs in parliaments and facilitate engagement of parliamentarians in ICT issues in their country. The scope of work was to assess the ICT status within Parliament and to identify the needs and strategies, as well as related actions and solutions

In line with the recommendations from the workshop, the Parliament of Botswana took the initiative to review its utilization of ICTs and explore ways in which to enhance its core functions of legislation, oversight, and representation and to align this with regional parliamentary developments. In November 2010, the ICT Committee was established.

2.2 Summary findings – Parliament of Botswana, ICT Section and parliamentary departments surveys (2010)

A survey was designed with the purpose of assessing the status of ICT integration and the contribution of MPs, staff and other users towards implementing the Information Society. It should also evaluate their skills and the existing infrastructure both for advocating ICTs for Development as well as the use of ICTs in Parliament. The survey aimed to assess the capacity of the Botswana Parliament to use ICTs effectively and efficiently in order to enhance its activities and improve its transparency and connection with the electorate. The survey was also intended to assess the level of Parliament with regard to establishing legislative frameworks required for developing sustainable ICT policies and to build a conducive environment for dissemination and development of secure use of national ICTs.

The assessment covered five sections of the World Summit on Information Society (WSIS) action lines, specific to the following areas:

- (a) ICT vision, strategy and leadership;

- (b) Capacity, infrastructure and applications;
- (c) ICT services: document management and interaction with citizens;
- (d) Contributing to an inclusive Information Society in Botswana; and
- (e) Inter-parliamentary cooperation.

The survey targeted three parliamentary groups namely: ICT Staff at parliament (ICT Section), the parliamentarians and the administrative staff. An in-depth analysis was conducted and the findings highlighted a number of challenges to be addressed.

2.2.1 Parliament of Botswana ICT Section findings

In terms of resources, the ICT Section comprises of four technical staff who perform various functions, including network operations, user support, system administration and PC installation.

Parliament has 57 Constituency Offices, of which 10 are not connected while 47 are connected to access the Internet and webmail using Asymmetric Digital Subscriber Line (ADSL) for connecting. The constituency offices are not connected to the government data network and so they have no access to the government intranet.

The headquarters of Parliament (main building annex 1 and annex 2) are connected to the government data network. There are four servers, each for a particular purpose, namely: mail server, file server, domain controller and a group update provider server (which runs and updates Symantec endpoint antivirus protection). All Parliamentarians have a fully-networked computer in their office.

2.2.1.1 ICT vision, strategy and leadership

The survey highlighted that currently all the funding for ICT initiatives comes from the Botswana Government and that a task force was set up in 2008 to identify initiatives that could strategically position the Parliament of Botswana for success, through effective appreciation and use of ICT. This implies that the political leadership is willing to champion ICT development within the Botswana Parliament.

2.2.1.2 Capacity, infrastructure and applications

The survey highlighted that all the staff members within the ICT Section of Parliament have personal access and use computers with a shared network connection. All staff members have official e-mail addresses as well as personal cell phones for the purposes of communication. Despite having formal training in specialized areas of ICT (such as MSCE, CISCO, ITIL and Website Content Management training), the staff of the Section still need to receive training in critical areas which are aimed at raising more ICT awareness within Parliament and enhancing skills in web-portal development and maintenance and in e-security. In particular, training is also needed to improve awareness of the Botswana ICT Policy and its priority areas, through which both staff and MPs could contribute to building the Information Society in Botswana and to fostering their role in strategic processes related to ICTs.

2.2.1.3 ICT services: document management and interaction with citizens

All ICT services are available. They are supported by contractors and by the ICT Section. System administration is exclusively supported internally and this suggests that the IT Section needs both manpower and training to be able to handle other services internally.

The ICT Section is in the planning process for the procurement of a document management system, which will create and manage parliamentary bills in digital format. Bills are in digital format, but there is not yet a completely automated system that comprehensively manages the process of creating legislation. The section is also in the process of planning to acquire an automated library resource management system, which is intended to have “e-resource management capabilities”.

2.2.1.4 Contributing to an inclusive Information Society in Botswana

The staff of the ICT Section are fully aware of the status of the Botswana National ICT Policy, called “*Maitlamo*”, and its related strategies. They have indicated that the policy is currently going through the implementation stage and they are also fully aware of its priority areas, including e-government. The staff members believe that the *Maitlamo* ICT Policy will have “quite a high impact” in contributing to achieving the MDGs, including poverty reduction and sustainable development, if it is implemented correctly.

The ICT staff felt there is need to improve awareness-raising and capacity-building on the Information Society as this would boost the MPs’ role in strategic processes relating to ICT and their involvement in the *Maitlamo* Policy, including its scrutiny and oversight. This can be achieved by organizing awareness-raising campaigns on the *Maitlamo* Policy, as well as by training MPs in the priority areas of the policy framework.

The survey concluded that the government has been “quite successful” in terms of approving ICT bills and enacting legislation related to the development of the Information Society. To fund the implementation of inclusive Information Society in Botswana, the staff felt that there is need to ensure that funds are allocated specifically for ICT within each development area and that partners allocate budgets for integrating ICT in the areas of cooperation, as a tool to accelerate the expected achievements. Recommendations included advocating for legislation in favour of both foreign direct investment and local investment in ICT, including promoting tax incentives on relevant ICT4D programmes.

Because most Constituency Offices have Internet and are connected, the ICT Section felt that the government has been “quite successful” in promoting ICT infrastructure for constituency development.

2.2.1.5 Promoting inter-parliamentary cooperation through ICT

The staff of the ICT Section assessed the impact of inter-parliamentary communication using ICTs and felt that there has been “quite a high impact” on reinforcing Botswana Parliament’s control, influence and scrutiny and that the promotion of inter-parliamentary communication using ICTs was “quite successful”.

One conclusion from the survey was that a well-implemented ICT programme could bring benefits to inter-parliamentary cooperation through establishing innovative mechanisms to facilitate information flow between parliaments at subregional, regional and global levels. Another benefit could be to promote best practices, including the accessibility of best practices on pro-poor ICT applications and information exchange between parliaments in order to reinforce parliamentary control, influence and scrutiny at all levels.

2.2.1.6 Parliament of Botswana website

This section reviews the Parliament of Botswana website (www.parliament.gov.bw) and compares it to the websites of some other parliaments. The Botswana website is up-to-date. It has various pages such as “About Parliament”, “History” and “Members”. The Members section gives contact details of the MPs, although not all listings contain e-mail addresses. The same section has a “Contact your MP” facility where a visitor can enter a

query, but it appears that the form is routed to a central point, from where it would be manually routed to the appropriate MP.

However, many parliamentary websites, such as the UK (www.parliament.uk), have video clips of parliament proceedings. The website of the US House of Representatives (www.house.gov) has a list of representatives and when the visitor selects one, she or he is redirected to the website of the appropriate representative. The South African Parliament website (www.parliament.gov.za) has an interesting section “Participate in Parliament” which encourages the public to follow and join parliamentary debate on any sector of their choice. This highlights that there is room for improvement for the website to include more information and a higher level of interactivity.

The survey highlighted that there is a need to develop websites for MPs.

2.2.2 Parliament of Botswana findings

The survey was directed towards the National Assembly as indicated by the findings in subsequent paragraphs.

2.2.2.1 Capacity, infrastructure and applications: access and use of computers

The survey asked MPs about their access to computers: 79 per cent of the surveyed MPs said they work on a personal computer, a very high percentage (86 per cent) have access to the Internet, but only 9 per cent of MPs have a presence on the Web in the form of web pages.

The survey responses indicated that 74 per cent of MPs had e-mail available at their offices. The ICT Section have forwarded information which states that all MPs have government e-mail addresses and have the Internet connected in their offices. The lower result from the responses could be due to information not reaching the MPs about what they have in their offices. Based on the information that all MPs’ offices are equipped with computers, it could be due to lack of training that only 79 per cent of MPs say they work on the computers.

2.2.2.2 Capacity, infrastructure and applications: knowledge/skills

The survey indicated that some 65 per cent of MPs said they had been through some level of training, over the period 1980-2007. Only 41 per cent of the MPs indicated “adequate” skills in basic word-processing applications. The adequacy level dropped significantly for other applications, and the lowest was presentations where only 19 per cent rated their skills “adequate”.

The “knowledge/skills” section of the survey covered IT knowledge in depth. For example, the sections on Internet use sought to find out to what level the respondent can browse the Web using links and URLs (web addresses), and his or her use of search engines and commands such as “download” and “print”. The survey also sought to find out if respondents can participate in online discussions and whether they can recognize which chat rooms (areas on the Internet or other computer networks where users communicate, usually on specific topics) might be appropriate. The table summarizes results of respondents who rated their skills as “good” and “very proficient”. The remaining percentage would require training to bring their knowledge level to “good” at least.

The findings suggested that there is very low knowledge of spreadsheets, as only 18 per cent of respondents indicated that their knowledge of using spreadsheets was “good” or “very proficient”. This implied that 82 per cent of MPs require some basic training in the use of spreadsheets. Skills could also be upgraded in other areas that demonstrated low levels of proficiency. The highest skill levels were shown in using e-mail, where about 41 per cent of the MPs indicated that they were fairly comfortable with e-mail usage.

There is a standing programme to train MPs regularly on ICTs. However, about 28 per cent of the respondents indicated a clear “No” when asked about it, but the difference between those who said “No” and those who said “Yes” could be attributed to the fact that the large majority of the current MPs are new entrants.

The survey also asked whether MPs would like training on awareness of the benefits of ICT usage in general for good governance, improvement of the democratic process and for cooperation with other parliaments. The responses might suggest that in general MPs do not feel they need such training. However, a significant number of respondents chose not to fill anything on this section, and it might be assumed that a missing entry implies that the respondent does require training on that aspect.

2.2.2.3 Contributing to an inclusive Information Society in Botswana

Only 41 per cent of the surveyed MPs indicated that they are aware of the current status of the National ICT Policy and Strategies. This low level of awareness of the state of the policy is closely linked to the 95 per cent who said they lacked awareness of the priority areas of the policy. However 38 per cent of the MPs believed that the policy, if implemented, will have a “high impact” on the attainment of the MDGs.

The survey asked how successful Parliament had been in terms of providing effective parliamentary scrutiny and oversight over the National ICT Policy and Strategies, and 19 per cent of respondents indicated that it had been “quite successful”. This low rate could be from the fact that 60 per cent of the respondents either did not respond to this question or their response was “don’t know”. A convincing 84 per cent of MPs indicated that more needs to be done in terms of raising awareness and building capacity-building on the Information Society to help MPs take a stronger role in “e-strategy” processes.

On average 30 per cent of the respondents chose not respond to the question, and this could suggest that more explanation was required for them to respond to the section adequately.

2.2.2.4 Contributing to an inclusive Information Society in Botswana: oversight

Some 30 per cent of the respondents indicated that Parliament had been “quite successful” in terms of approving ICT bills or enacting legislation related to the development of the Information Society. Again the rate was low and could be linked to the fact that 56 per cent of the respondents either did not respond to this question or indicated “don’t know” as their response.

2.2.2.5 Contributing to an inclusive Information Society in Botswana: funding

MPs were asked about potential strategies for ensuring more funds for implementing an inclusive Information Society in Botswana. An average of about 44 per cent did not respond to this question.

The last question on this section asked whether MPs had been promoting ICT for development in their constituencies and only 16 per cent of MPs indicated some level of success. The conclusion was that MPs would like to have an awareness-raising campaign on ICT for community development.

2.2.2.6 Promoting inter-parliamentary cooperation through ICT

The survey assessed the impact of inter-parliamentary communication using ICT, including its impact on reinforcing parliamentary control, influence and scrutiny at all levels. Only 19 per cent of MPs felt that inter-parliamentary communication would have some level of impact and 11 per cent responded that the Parliament of Botswana has had a limited success in promoting inter-parliamentary communications using ICT.

2.2.3 Parliamentary staff survey findings.

2.2.3.1 Capacity, infrastructure and applications: access and use of computer

In general, 74 per cent of the surveyed parliamentary staff (users) replied that they did work on a personal computer and a significant percentage (71 per cent) that they had access to the Internet. However only 11 per cent of Parliament staff said they had web pages. There was a question about this figure for staff web pages, since the ICT Section revealed in discussion that no official web pages were available at that time.

2.2.3.2 Capacity, infrastructure and applications: knowledge/skills

The “knowledge/skills” section of the survey covered IT knowledge in depth. For example, the sections on Internet use sought to find out to what level the respondent can browse the Web using links and URLs (web addresses), and his or her use of search engines and commands such as “download” and “print”. The survey also sought to find out if the users can participate in online discussions and whether they can recognize which chat rooms (areas on the Internet or other computer networks where users communicate, usually on specific topics) might be appropriate. The table summarizes results of respondents who rated their skills as “good” and “very proficient”. The remaining percentage would require training to bring their knowledge level to at least “good”.

Some 62 per cent of staff users said they had been through some level of training, and this training had been over the period 1989-2010. There was quite a high level of adequacy in basic word-processing applications, as 77 per cent of users indicated they rated their skills in word-processing as “adequate”. The level dropped for other applications and the lowest skill level was for using presentations, where 36 per cent described their skills as “adequate”. Spreadsheets were better, as 37 per cent of respondents indicated their skills with spreadsheets were “good” to “very proficient” and above. The Parliament of Botswana is doing enough when it comes to training its staff on basic computing fundamentals.

In addition to surveying the basic training needs in ICT skills, this section of the survey also tried to find out if the users would like training on awareness of the benefits of ICT usage in general for good governance and improvement of the democratic process, in cooperation with other parliaments. The table shows the percentage of respondents who indicated that they did not want training in this.

2.2.3.3 Contributing to an inclusive Information Society in Botswana: oversight

Only 18 per cent of the surveyed users indicated that they are aware of the current status of the National ICT Policy & Strategies. However the 41 per cent of the users said they believed that if it is implemented, the policy will have a “high impact” on the attainment of the MDGs.

In response to a question on how successful Parliament had been in providing effective parliamentary scrutiny and oversight over the ICT Policy and Strategy, 20 per cent of the respondents indicated that it has been “quite successful”. A very high 86 per cent of staff respondents indicated that more needs to be done in terms of raising awareness and building capacity on the Information Society in order to foster MPs’ role in processes linked to “e-strategy”. To a question asking how successful Parliament had been in terms of approving ICT bills, or enacting legislation related to the development of the Information Society, 17 per cent of the respondents have indicated that it has been “quite successful”.

Part III: The ICT Master Plan

3. Introduction

Countries have been encouraged to adopt ICT within their national development plans because of international evidence that using ICTs can significantly improve the livelihoods of citizens. The SADC PF recommended that member States should create ICT plans specific to the situations of their parliaments. The main objectives are:

- (a) To guide the development and adoption of ICTs at the subregional level;
- (b) To champion the development and use of ICTs in the parliaments; and
- (c) To help parliamentarians in the subregion to become more involved in ICT issues.

The Botswana ICT Master Plan answers to the SADC PF ICT Strategy at country level. The themes and pillars will therefore be adopted from this Strategy. The plan will map a way forward for the Parliament of Botswana to be representative, responsive, efficient, effective, accountable, accessible, legitimate and linked (REAL).

Once the parliamentary ICT plans are in place, legislators will be able to experience the benefits that ICT brings. This will mean they can better support ICT policies and strategies aimed at citizen empowerment. The ICT Master Plan will aim to empower MPs, parliament staff and constituency staff to make effective use of ICTs in order to carry out their roles more effectively.

Box 1: Benefits of ICT adoption

“First, transparency, accessibility and accountability, as well as people’s participation in the democratic process, largely depend on the quality of information available to members of parliaments, parliamentary administrations, media and the society at large and on citizens’ access to parliamentary proceedings and documents. Both can be improved through ICT applications, which in turn could dramatically strengthen the policymaking process.

Second, the efficiency of the internal business practices of services to members and staff and the performance of the organization as a whole may impact on the effectiveness with which parliament carries out its legislative process, scrutiny functions and members’ duties. Both the efficiency and effectiveness can be increased by sound adoption of new technology coupled, if necessary, with organizational re-engineering.

Third, full participation in the emerging global information network is crucial for an institution that wants to avoid marginalization. Parliaments today are confronted with a new reality of information integration and knowledge exchange, as well as with an increasing demand for inter-parliamentary cooperation. That requires a change in the way parliaments act internally and in the way they interact with the outside world, including through the use of ICT.

The effective use of ICT can result only from a clear vision of how they are to be used to support the work of parliament, a strategic plan that sets realistic goals and strong management to ensure that objectives are achieved. Without political involvement in these efforts, not only may parliaments waste resources and create systems that fail to serve their many functions and higher goals, but they may also fail to keep pace with the evolution of society around them, thus broadening the gap between citizens and their representatives.”

Source: World e-Parliament Report 2008

As with many other plans, the document will require dynamic modification as and when there are changes to the environment which dictated its formation. The changes might be driven by changes in technology, national strategy or other factors that affect trends in ICT.

3.1 ICT Master Plan objectives

Some of the specific objectives which need to be achieved in order to transform the Parliament of Botswana into a REAL parliament are the following:

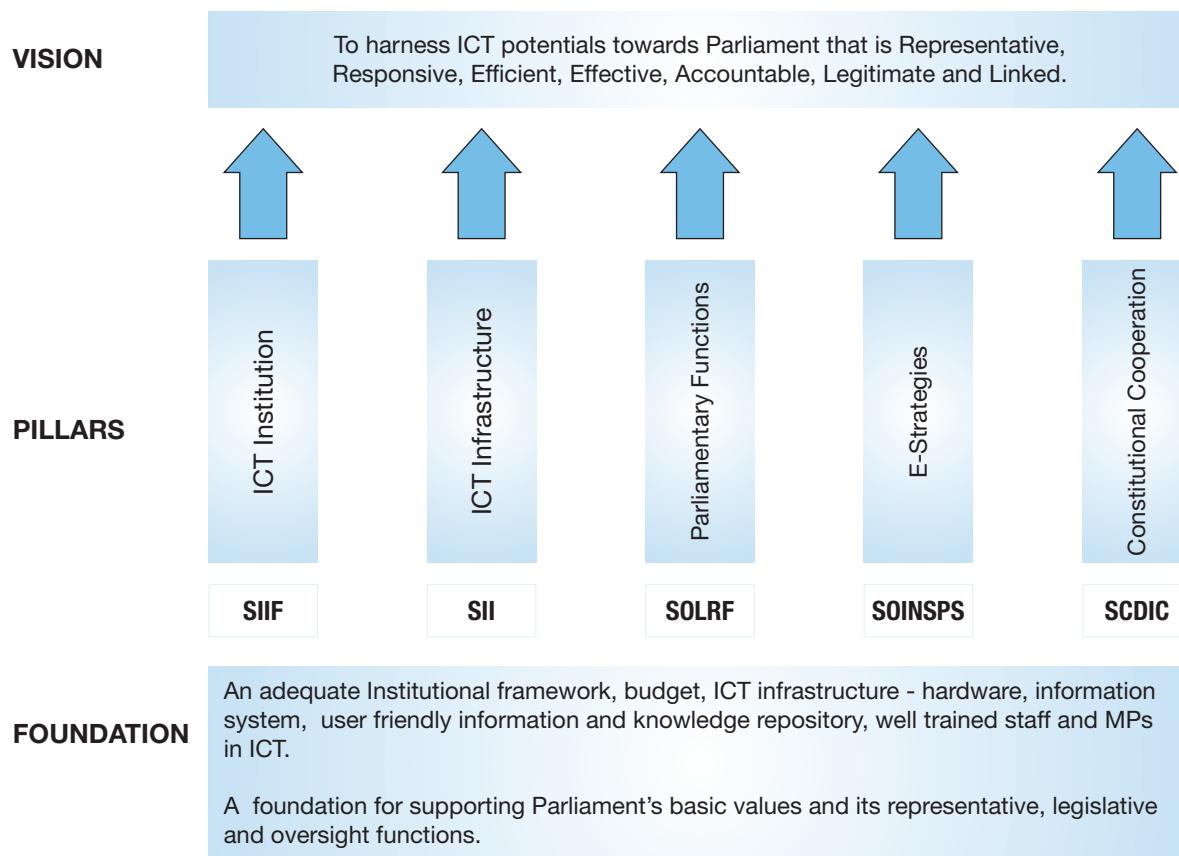
- (a) Strengthen ICT governance;
- (b) Strengthen Parliament's information and knowledge infrastructure;
- (c) Strengthen Parliament's oversight, legislative and advocacy functions;
- (d) Strengthen Parliament's involvement in national and subregional ICT policy and strategies;
- (e) Strengthen MPs' involvement in ICT for community development activities;
- (f) Strengthen MPs' capacity and advocacy for e-government, e-governance and e-democracy, and develop strategies to raise awareness within parliaments on the practical benefits of e-government, e-governance, e-voting and e-democracy;
- (g) Assess the risks inherent in the ICT Master Plan and suggest strategies to mitigate the risks as well as systems for tracking indicators of progress in implementing the plan;
- (h) Develop and implement a strategy to mobilize resources that will accelerate the implementation of the ICT Master Plan;
- (i) Enhance inter-parliamentary cooperation, collaboration and knowledge-sharing through use of appropriate technology; and
- (j) Develop a comprehensive detailed budget and short-, medium- and long-term project plans outlining activities and time scales, covering the first three years.

3.2 ICT Master Plan pillars

The following pillars are adapted from the SADC PF ICT strategy. This highlights the areas in which parliaments' functions need strengthening in order to be fully responsive to constituents:

- (a) Strengthen the ICT institutional governance framework (S.I.I.F.);
- (b) Strengthen ICT infrastructure, including hardware, software, human capital and systems (S.I.I.);
- (c) Strengthen the oversight, legislative and representative functions through access to adequate information and knowledge resources (S.O.L.R.F.);
- (d) Strengthen oversight over national ICT policy and strategies and ICT applications towards a people-centred, development-oriented, inclusive Information Society (S.O.I.N.S.P.S.); and
- (e) Harness ICT's potential to promote community/constituency development and inter-parliamentary cooperation (S.C.D.I.C.).

Fig 2: Pillars of the ICT Master Plan



S I I F	Strengthening the ICT institutional governance framework
S I I	Strengthening ICT infrastructure, including hardware, software, human capital and systems
S O L R F	Strengthening oversight, legislation and representation functions through access to adequate information and knowledge resources
S O I N S P S	Strengthening oversight over national ICT policy and strategies and ICT applications towards a people-centred, development-oriented, inclusive Information Society
S C D I C	Harnessing ICT potential to promote community/constituency development and inter-parliamentary cooperation.

3.3 Policy issues

Programme 1: Pillar 1: Strengthen the ICT institutional governance framework

Objectives

A solid ICT institutional framework is required in order to move the parliaments ICT agenda inside and outside parliament. The deficiencies identified during the survey are significant and weaken the Botswana Parliament’s ICT institutional governance framework. It is urgent that this is remedied by setting up strong and capable institutional structures.

The strategic planning process included an awareness workshop, and during this workshop MPs agreed to include an order to establish the Parliamentary ICT Committee in their review of Parliament's "standing orders". The workshop also covered the terms of reference for the committee. The Parliamentary ICT Committee was created in November 2010. This committee's main task is to ensure the implementation of the Master Plan and that the ICT Section is restructured and capacitated to carry out the projects. There a need to train the members in order for the committee to become effective.

The Parliament of Botswana has a small ICT Section which cannot effectively carry out the mandate of an ICT department in their current state. In total, there are four employees in this section and out of these three are seconded from Department of Information Technology (DIT), which is part of the Ministry of Transport and Communications. The section is too small to support the number of infrastructure components within Parliament's ICT system. Geography is the other factor which makes it nearly impossible for the ICT Section to cope with so few staff, since Parliament's ICT system spans the entire country, including maintaining 57 constituency offices spread throughout the country. It is impossible to over-emphasize the need for a strong and independent ICT Section within Parliament to tackle the enormous task of running and maintaining the Parliament network system. The Section would have to be completely reworked, looking at its people, processes and technology (enterprise architecture) in order to build a fully-fledged section with the capabilities and sufficient resources to deliver its mandate effectively.

The Parliament of Botswana has a working document, which was produced by an ICT task force. The document is very comprehensive and contains most of the tasks that the Parliament of Botswana will need implement in order to become fully automated. However is not an ICT strategy document, but a fairly good guide towards the Master Plan. The master plan is comprehensive and there is a need for the committee to drive the implementation of the plan. These people have to be at the head of parliament understanding the needs and the functions of parliament and to champion the ICT mandate activity by activity.

3.3.1 Activity 1: To develop and implement a parliamentary information system operation policy (ISOP) and guidelines.

This activity is to outline the guiding principles for managing the parliamentary information system so that it can provide reliable, secure, useful and easily-accessible information and resources. This would cover: guidelines for general use, ownership, security and proprietary information, unacceptable use, system and network activities, e-mails, budgeting and resource mobilization mechanisms, communication activities and enforcement. Each MP and staff member should take the responsibility for the accuracy, timeliness, protection and preservation of information resources within Parliament. The ISOP will include the following components:

- (a) Parliament ICT organization chart;
- (b) The ICT Committee;
- (c) Responsibilities/functions;
- (d) Guiding principles, usage, access of the information system;
- (e) Security and privacy: The Master Plan should ensure:
 - i) Data is protected;
 - ii) Users are authenticated;
 - iii) Data confidentiality and integrity are preserved; and
 - iv) Non-repudiation is achieved.

- (f) Maintenance plan:
 - i) Hardware maintenance by making available parts and back-up equipment; and
 - ii) Software maintenance with (on-site/off-site) support by the vendor to fix bugs and/or resolve problems, support from a helpdesk or call centre, scalability and support for upgrades to the system software.
- (g) Business continuity plan: enabling continuous delivery of critical services or products to clients;
- (h) Budgeting/resource mobilization: developing a proper cost-benefit analysis to identify resource needs and propose different innovative strategies to mobilize resources, including allocations from the local annual budgets, private sector involvement, participation by bilateral and multilateral donors and considering participation by the “diaspora” (Batswana living abroad); and
- (i) Monitoring and evaluation mechanism: This should monitor the use of ICT in administration, parliamentary functions, learning and research in order to measure its cost-effectiveness, its impacts and the progress made. It should provide management information in order to empower MPs and Parliament as a whole; and
- (j) Risk assessment.

3.3.2 Activity 2: To organize a workshop for adopting the ISOP with emphasis on responsibilities and implementation of a monitoring and evaluation mechanism

The workshop will be organized to bring together the Clerk of Parliament, staff, MPs and other ICT experts to discuss the rationale and feasibility of the ISOP and to update it accordingly. The final document will be presented to Parliament for adoption.

3.3.3 Activity 3: To submit the ISOP to Parliament for adoption

The ISOP document will be submitted to the Parliament of Botswana for approval and adoption.

3.3.4 Activity 4: To Strengthen the Parliament ICT Committee

The main objective of the Parliamentary ICT Committee is to coordinate and ensure the effective implementation of the ICT Master Plan.

To strengthen it, the committee could consist of a core group of MPs and parliamentary staff, with an external multi-disciplinary advisory group. The composition of the Committee will be based on the rules of the Parliament, taking into consideration the national ICT policy and strategy, existing subregional ICT frameworks and other international frameworks, such as the WSIS Action Plan.

Members of the ICT Committee will be trained to give active support to awareness-raising and capacity-building activities to enhance the capacity of Parliament to monitor existing policies and to ensure that they comply with international, continental, regional and national standards and developments. ICT Committee members will also be trained in lobbying for enabling ICT policy frameworks and in interpreting regional or international ICT instruments that have been signed.

3.4 Infrastructure development

Programme 2: Pillar 2: Strengthen the ICT infrastructure, software, human capital and systems

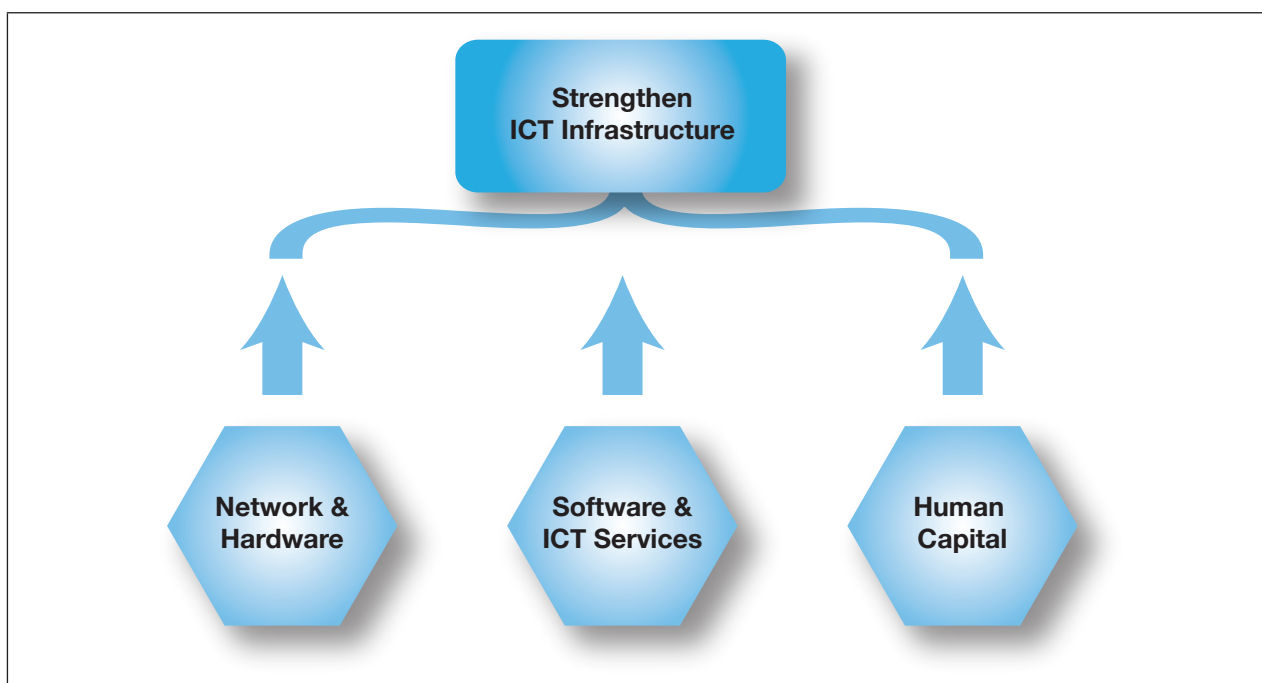
Objectives

The study highlighted that Parliament has some basic ICT infrastructure, including desktop computers, laptops, studio and security equipment, printers, heavy-duty photocopiers, scanners and Internet access through the Government's local area network (LAN). The survey process highlighted that, within the system of the Botswana Parliament, there are some pieces of ICT equipment that digitize data from various sources, however these systems are fragmented, down grading its usefulness. Systems with clearly-defined processes and automated procedures are needed to facilitate a seamless flow of information. This involves an infrastructure that needs to be maintained so it can offer full-time delivery of information whenever needed.

Human resources play a vital part in ensuring that ICT supports and fulfils Parliament's functions and values. Therefore strategies need to be developed to strengthen and increase the skills, quality and number of personnel with ICT skills, who will be able to convert their ICT knowledge and skills into goods and services for the benefit of Parliament and the country.

The activities of the infrastructure programme are depicted in the following diagram:

Figure 3: Infrastructure programme activities



3.4.1 Activity 1: To strengthen network and hardware infrastructure

The infrastructure at the headquarters building of Parliament is still fairly recent. Every MP's office within the parliament annex building has a fully-networked computer. All MPs have government e-mail addresses, although some of them do not use the addresses. Only 10 out of 57 Constituency Offices are not connected to the Internet.

Improvements required include wireless access to the Internet within the parliament annex building and the Parliament Village. There is also a need to get all Constituency Offices connected to the Internet.

Some infrastructure requirements for the parliamentary system include:

- (a) Deploy wireless broadband networks;
- (b) Equip all constituencies with ICT equipment to link them to Parliament's information systems;
- (c) Establish parliamentary radio broadcasting services;
- (d) Establish a video conferencing system; and
- (e) Establish parliamentary television broadcasting.

3.4.1.1 Local area network (LAN)

The LAN, as indicated in the survey, connects all MPs' offices in the parliament annex and all senior officers in the different departments of parliament. It also connects parliament to all other government departments and facilitates access to essential, centrally-provided services.

The ten Constituency Offices that have no Internet connection should be connected. Because these offices are outside the ADSL service area of Botswana Telecommunications Corporation, other technologies should be explored to service these areas including wireless broadband networks.

3.4.1.2 Video Conferencing Infrastructure

The establishment of a robust and all reaching parliamentary network should include video conferencing infrastructure for reducing travel costs and using time more efficiently. Some committee meetings can be held via video conferencing systems.

3.4.1.3 Broadcasting and infrastructure

There can be significant impact in terms of providing transparency to parliamentary processes when citizens wish to see or hear live broadcasts of the proceedings. Broadcasting by radio and television becomes even more attractive, because of the possibility of using terrestrial digital broadcasting technology which has higher capacity and lower cost.

3.4.1.3.1 Parliamentary radio

There is no infrastructure for radio broadcasting at the Parliament of Botswana, and the parliament should consider investing in, and setting up a radio station to provide live broadcast of parliamentary events and sessions. Radio has been proven as one of the best ways to reach the highest number of citizens because it is affordable.

3.4.1.3.2 Parliamentary television

Parliament television is very important and a useful means of giving the public a wider opportunity to play a part in a country's democratic processes.

3.4.2 Activity 2: To strengthen software and ICT services

The main goal of this activity is to strengthen the tools and applications used by both the MPs and the users to perform their functions. Challenges, inadequacies and weaknesses have been identified and should be addressed. The survey has shown that some of the major challenges faced by MPs were lack of awareness of the opportunities and benefits of ICT deployment and inadequate computer training, which limited how much they made use of the available ICT resources and resulted in a lack of integration of ICT services and applications into their office work.

3.4.2.1 Applications software

The survey found that MPs and staff use of the following MS Office programmes for a range of general purposes:

- (a) **Website design:** The Parliament of Botswana web page needs to be upgraded to a highly-interactive website with online forums and blogs, whose theme centres on the vision, mission and functions of the Parliament, with relevant content that addresses the information needs of the current consumer society. The new website would require periodic updating by relevant and qualified staff;
- (b) **Virtual library, research tools:** The Parliament of Botswana should consider improving connectivity in the library and making more research tools and online materials available. Subscription to selected international journals, parliamentary libraries and other relevant databases, including references, research services, legislative summaries, research papers and subject-based bibliographies, would open a wealth of information to support MPs, parliamentary committees, staff and other users;
- (c) **Legislative systems:** The system for legislation incorporates a workflow application for processing questions, the parliamentary agenda (order paper), bills, and committee papers. It also tracks government assurances, debates and official reports of the debates (Hansard);
- (d) **Help desk:** The increased use of ICT at Parliament will make it necessary to build an efficient and effective process to support the users. For the users to get efficient and effective help, ICT services should be equipped with ICT help-desk software, which helps to manage all help-desk requests efficiently. It becomes easier to track e-mails and phone calls because requests are managed with several automated processes, such as request routing. It is also possible to put guides, such as pages with basic information and answers to frequently-asked questions (FAQ), on Parliament's internal network (Intranet);
- (e) *File tracking system:* If a comprehensive file-tracking system is implemented, it will save time and help automate the creation of computer files and assist in searching for information. It could be expanded to include making scans and other digital copies of documents and for electronic forms. This should limit the amount of paper in the workplace, give clearly-explained benefits and lead to faster workflow;
- (f) *Travel management system:* A system could be implemented to provide access for all departments of Parliament to make arrangements for domestic and international air travel and accommodation. It can also ensure that travel complies with the organization's travel policy, that relevant approvals are supplied before travel is started, that people's travel entitlements and acquittals are tracked and that people could reconcile their expenses. Such a travel management system would provide managers with an extensive suite of travel management reports, so that individual officials will get access to a wide range of travel data that was not previously available;
- (g) *Security management system:* It is very hard to make an extensive and accurate analysis of computer and other security issues through gathering data manually. If a security management system is established in a platform for security managers, this will provide administration, configuration, monitoring and reporting on relevant issues. It will enable security officers to make timely decisions to ensure good security; and

- (h) *Document management system:* In any institution where large volumes of documents containing valuable information are produced, a system is required to manage the information systematically and securely. A document management system would bring a host of innovative features that will allow document management processes to be streamlined. It is also a powerful and easy to use solution for sorting documents and information.

3.4.3 Activity 3: Human capital infrastructure

Strengthening human resource skills and capacities (human capital infrastructure) is critical for developing, managing and using ICT applications and services. Parliament should focus on developing and implementing innovative strategies that will ensure that skilled and competent staff are retained in order to facilitate high-quality ICT governance. The human capital infrastructure would consist of the technical and administrative support staff, library and information staff, MPs and ICT Committee members.

3.4.3.1 Parliament ICT technical staff

The Parliament of Botswana does not have an ICT department. All major ICT services and applications are supported by a team of seconded personnel from DIT. There is a strong need to have an in-house Parliament ICT Department, and this department will be the channel to provide continuous training of MPs and other users.

As the use of ICT grows, the need will grow for regular maintenance of equipment, new software and upgrades, implementations of recently-developed better-performing technical equipment and many other improvements. Parliament will become increasingly dependent upon its technical staff for service delivery without blocks or constraints. Thus Parliament must be able to attract and retain good technical support staff by offering attractive terms and conditions of service and regular in-house training, and by providing new opportunities for them to develop their careers within Parliament.

3.4.3.2 Library and information staff

This department is responsible for promoting easy access to key information resources both inside the legislature, from the government and from a variety of outside sources. The department is responsible for developing and maintaining a permanent digital archive, acquiring documents and disseminating information, conducting research and preparing reports whenever they are needed, among other things. Provision should be made for regular ICT training in the different systems deployed.

3.4.3.3 Members of Parliament

The slow adoption of ICTs in parliaments can be attributed to the low levels of skills among MPs and lack of appreciation of the benefits that can be harnessed from using ICTs. In order to utilize the benefits of ICTs fully, there is need to build the capacity of parliamentarians in terms of skills and to ensure they are accessible and accessed. Effective training aimed at raising awareness within the Botswana Parliament on the practical benefits which ICT offers through supporting good governance and the role of ICT in improving democratic processes needs to be carried out

3.4.3.4 ICT Committee members

The members of Parliament's ICT Committee have a role to play which is to coordinate and ensure the effective implementation of the ICT Master Plan. They will be key in lobbying for the deployment and use of ICTs

in Parliament, providing oversight over ICT projects being undertaken by the Executive and leading in the establishment of the appropriate enabling environment, including legislative and regulatory frameworks for ICT which will harness the potentials of ICT for socio-economic development.

Therefore all members of the ICT Committee should receive special training and sensitization on all ICT services. They also should be trained and sensitized in ICT policy formulation, implementation and monitoring, including policy development stages, identification of priority development areas or “pillars”, and sectoral policies drawn from these “pillars”. They also need to learn and be aware about ICT legislation and “e-applications”, such as e-security, e-governance, e-health, e-education, e-services, e-community development, etc.

The planners should consider how to provide the financial resources for this special training, including giving special attention to what innovative financing mechanisms are required for effective national policy implementation. They should also consider the type of legislative and regulatory environment needed for promoting foreign direct investment into ICTs, harnessing the value of effective public-private partnerships, and enhancing the potential contributions of the local private sector.

If ICT Committee members are trained well, they will actively support awareness-raising and capacity-building activities to enhance the capacity of Parliament to monitor existing policies to ensure that they comply with international, regional and continental standards and developments. They will also lobby for enabling ICT policy frameworks and for making signed regional or international ICT instruments applicable in Botswana. This will also enhance MPs’ effective participation in ICT policy formulation, implementation and monitoring as part of moves towards an inclusive, people-centred, development-oriented knowledge society; they will take an active and a leading role to ensure investment in ICTs, through developing strategies that will facilitate the provision and access to ICTs and information for the country at large.

3.4.3.5 Administrative staff

The staff of Parliament should be aware of the functions of Parliament and the overall document management process. They will need specialized and continuous training to develop their skills further, ensuring that their institution – Parliament – is efficient and effective.

3.5 E-parliament and democracy

Programme 3: Pillar 3: To strengthen the representative, legislature, oversight and government formation functions.

MPs are representatives, overseers and legislators. They play a vital role in driving national, regional and international goals. They need to know how and where to access the right information and knowledge efficiently in order to make correct analysis and insightful contributions as they undertake their parliamentary functions.

ICTs can also be used to establish innovative mechanisms to facilitate information flow and enhance interactions between the public, parliament and the government.

3.5.1 Activity 1: To strengthen Parliament's oversight function (the promotion of ICT for development activities within constituencies)

The extent to which a parliament performs the oversight function will vary according to that country's constitution. ICTs can render this process more efficiently by providing different channels which allow and facilitate greater interaction between the citizens and the legislature. For instance, ICT can enable citizens to post their comments online, offering a more direct and transparent means to communicate with their parliament and elected representatives, while saving time and paperwork. In many recently-established democratic parliaments, the oversight function still remains weak and learning processes are still underway.

The committees which oversee the central government's budget can monitor and assess government expenditure through the use of applications such as databases. For example in India the availability of online information facilitates the role of MPs in assessing any shortcomings in the performance of the ministries.

Actions

The following actions will be needed to:

- (a) Strengthen transparency and accountability by using an information system which monitors and tracks government assurances and helps to hold the Executive branch of government accountable;
- (b) Enhance democratic and parliamentary institutions, mechanisms and practices through parliamentary online services, networks, information-sharing and the creation of constituency websites;
- (c) Develop information systems for monitoring and tracking major projects being undertaken by the Executive; and
- (d) Develop databases in conjunction with the relevant arms of government to monitor and track the contractual obligations that government commits itself to on behalf of the people.

3.5.2 Activity 2: To strengthen Parliament's representative and advocacy function

Their role as representatives requires MPs to be informed about issues of importance to their constituents. For this reason, appropriate channels should be set up for the public to inform MPs of their views on specific issues and to campaign for MPs to represent them. ICT tools can facilitate MPs' research tasks so they are well-informed about citizens' concerns.

ICTs can also facilitate sending information to the public on the role of MPs, using various channels including blogs, personalized websites and web-casting. Even in rural areas where large segments of the population may not have access to ICTs, web-based parliamentary outreach to public access points can ensure access at affordable cost to information, including information on the role of the Parliament.

ICTs can facilitate increased access and more effective communication between parliaments and government agencies, civil society organizations and the public, both nationally and internationally. ICT systems can enable individual MPs to establish and maintain their own networks and focus groups, coordinate research, poll people and coordinate various activities in their communities.

For constituents, this interaction facilitates informed identification and selection of appropriate MPs, and provides information on existing resources and services at the local government level.

Constituents were asked what key issues they wanted to discuss with their MPs and they cited issues such as local politics, poverty, community healthcare centres and housing. There are international examples of this dialogue:

MPs in Poland had embarked on e-democracy initiatives by prioritizing e-discussions with citizens on issues such as the preparation of various laws; and Costa Rica's parliamentary website hosted e-dialogue sessions with the public (*dialogos con el pueblo*) on issues such as fiscal reform and social capital in cooperatives around the country.

Actions

The following actions will be required to:

- (a) Enhance connectivity and accessibility to all Constituency Offices by deploying appropriate and sustainable technologies for engaging citizens in the legislative process;
- (b) Develop interactive constituency websites and other collaborative tools to strengthen and enhance interaction between MPs and their constituents;
- (c) Strengthen Parliament's radio broadcast initiative as a tool for information dissemination, due to the wide coverage;
- (d) Equip parliamentary committees with appropriate technology to undertake public hearings in the most effective and efficient manner;
- (e) Develop the capacity of MPs and parliamentary constituency staff to be champions of change through awareness-raising activities about the benefits of ICT4D in accelerating socio-economic advancement within their constituencies; and
- (f) Develop and implement special training programmes on specialized software which will strengthen Parliament's representative function.

3.5.3 Activity 3: To strengthen the legislative function

MPs' role as legislators requires them to debate issues of national concern, amend old laws and pass new ones. This requires that they have access to a wide range of knowledge and information resources such as databases, Intranets, digital libraries, World-Wide Web and digitized legislative documents such as bills and proceedings, in order to make informed decisions.

Some specific tasks that can assist in this activity include:

- (a) Equip and empower staff and MPs through regular capacity-building, awareness-raising workshops on different ICT issues and on laws and legal instruments that govern and regulate the use of ICT;
- (b) Empower MPs on new technology issues, cyber-law, Internet governance, intellectual property rights (IPR), e-security, e-governance and other matters, through relevant training programmes;
- (c) Establish databases with relevant information accessible to all MPs, develop information systems for bills and amendments and for recording and tracking legislative actions;
- (d) Design and implement an interactive Parliament of Botswana website or other resources with high-speed access and information integrity. This will enable the legislative process and parliamentary proceedings to be transparent and subject to closer public scrutiny. The website should have links to those of other parliaments;
- (e) Establish a database of information, such as legal text, reference material, decrees and statutes, accessible to staff and MPs;
- (f) Organize debates on e-strategy within Parliament and government ministries, and debate with other committees to identify priority areas;

- (g) Participate in e-parliament initiatives at subregional, continental and international levels; and
- (h) Organize study visits to countries which are examples of best practice in using ICT to promote parliament's roles and contribution.

3.5.4 Activity 4: To promote good governance

Among institutions central to promoting and consolidating good governance, parliaments are especially well-placed to advocate the use of ICT to foster democracy and help shape the Information Society, while improving their own role.

In Botswana, both the Government and Parliament can implement various mechanisms to create higher standards of accountability, transparency and participatory governance as critical elements of democracy and legitimacy. The most comprehensive is to deploy “e-governance”, which refers to the use of ICTs in the relationships between public authorities and the community and in the functioning of public authorities within the framework of democratic processes and the provision of public services. The term also refers to using ICTs to enhance the delivery of government services, thus strengthening the accountability and transparency of government actions and fostering decentralization processes.

ICTs bring together the related concepts of “e-democracy”, “public e-services” and “e-administration” (or “e-government”), as explained below. Where political will exists and parliaments are fully engaged, electronic governance can significantly catalyse the process of reforming administration towards good governance. E-democracy and public e-services should be developed as parts of comprehensive national e-governance strategies that enhance democratic processes and the provision of user-centred public services as follows:

- (a) “E-democracy” refers to the use of ICT in the democratic processes at any level, with the objectives of (i) strengthening citizens’ participation and engagement in national, regional and local decision-making processes; (ii) enabling ways they can vote in elections and referendums (e-voting); and (iii) ensuring that democratic institutions and processes are inclusive, transparent, responsive and accountable;
- (b) “Public e-services” refers to the use of ICT in the design, implementation, management and delivery of public services; and
- (c) “E-administration” refers to the use of ICT in redesigning and improving the performance of the administrative functions of public authorities. One of the main starting points of this process is to provide government information electronically to the public. Government online presence is a progressive step from a situation where even the most basic government information is confined to government bureaucrats and to departments that are inaccessible to the public for logistic and administrative reasons.

Actions

The following will be needed to:

- (a) Organize workshops to build capacity and raise awareness on uses of different ICTs to promote good governance;
- (b) Organize other relevant training programmes to empower MPs in issues of new technology, such as e-government, e-voting, e-services, e-inclusion and e-governance;
- (c) Establish databases of best e-governance practices and make them accessible to all MPs;
- (d) Organize debate on e-strategies within the Parliament and with ministries whose mandates include ICT or related matters in order to promote the effective implementation of e-governance tools; and

- (e) Organize study visits to countries where best practices can be investigated.

3.5.5 Activity 5: To strengthen parliamentary oversight over national and subregional ICT policies and strategies

Parliament is not only called to keep up the oversight of its internal duties, but it is also called to oversee the national ICT policies and strategies, as well as subregional and international policies and strategies which have national governments as signatories. This parliamentary function should be allocated the following actions in order to ensure efficient oversight over national and regional ICT policies and strategies:

- (a) An ICT Committee should be structurally-strengthened to oversee national and subregional ICT policies and strategies;
- (b) The capacity of the ICT Committee should be built to ensure efficient handling of national, regional and global challenges in the use of technology, such as cyber crime;
- (c) Develop the capacity of the ICT Committee to provide oversight over projects which are being undertaken by the Executive;
- (d) Strengthen the capacity of MPs to provide political leadership and advocacy in the implementation of the National ICT Policy; and
- (e) Equip MPs to participate effectively in crafting relevant legislation on e-commerce, e-governance, cyber security, etc., which could improve confidence in the economy and improve governance systems.

3.6 Interactivity

Programme 4: Pillar 4: Harnessing the potential of ICT to promote community/constituency development and inter-parliamentary cooperation (S.C.D.I.C.)

Objectives

Studies have shown that the use of ICTs can address one of the key challenges facing many governments: enhancing government efficiency. If ICTs are used for this purpose they can make governments accountable, transparent, effective and responsive to citizens' demands. Parliamentarians who are well informed about their constituency issues are in a better position to advocate for a people-centred, development-oriented and inclusive Information Society, thus promoting appropriate ICT applications for community development. Meaningful dialogue, where community members can freely express their concerns, experiences and expert knowledge to a responsive MP, is more likely to result in decisions that will more closely reflect the will of the people. In turn this will enhance their participation and make them more responsible for collective decisions.

The strengthening of parliamentary institutions is a central challenge in the process of promoting the rule of law and consensus-based participatory management within emerging and consolidating democracies. The outcome of a situational analysis reflected that, with reference to inter-parliamentary cooperation, a majority of MPs agreed that a well-implemented ICT programme would facilitate information flow; reinforce parliamentary control, influence and scrutiny at all levels; and promote cooperation with parliaments from other countries.

Actions

The following will be needed to:

- (a) Organize a special training session in how ICT can serve the urgent and daily needs of people living in remote, rural and urban peripheral areas (“the grassroots”);
- (b) Undertake research studies with practical examples and case studies in collaboration with ICT experts and the private sector. Develop a best-practice portal on the Parliament of Botswana website; and
- (c) Organize training for members of local executive councils and regional councils, chiefs and regional administrators.

There is a need to establish partnerships to implement some of the identified initiatives.

3.7 Sustainability

Programme 5: Pillar 5: Strengthening parliamentary oversight over national and subregional ICT policy and strategies

Objectives

The formulation of ICT policy and strategies can assist countries to deploy, harness and exploit the potential of ICT to support socio-economic development at local, national and subregional levels. Formulating plans involves a dynamic and broad-based consultative process managed through a high-level task force or commission, which should include civil society groups, the private sector, independent regulatory bodies, academia and mass media.

3.7.1 Recognizing the role of parliamentarians in the policy process

Governments need to take the lead not only in formulating ICT national policy and strategies, but also in financing them. Some of the challenges which need to be addressed after the formulation of the national strategies are: appropriate strategies for human resource development, mobilizing adequate funds and investments, and passing and bringing into effect sound legislation to ensure success in reaching the intended goals. Government cannot handle ICT funding alone, as other national priorities, such as poverty alleviation, HIV/AIDS and many others, compete for the same funds. Therefore, Government should specifically allocate a portion of the national budget to ICT activities, in order to ensure sustainability and investor confidence.

MPs are expected to lay down the fundamentals for an inclusive Information Society through enacting national legislation, good oversight over policy on ICT4D, providing adequate budget and promoting innovative financial mechanisms.

The Parliament of Botswana should have the capacity to improve the implementation of national policy and strategies through good oversight and representation.

The Botswana Parliament ICT Committee is expected to play its role by diligently executing its functions.

4. The Master Plan preliminary cost estimate and timeline

4.1 Cost estimates

Table 1: Strengthening ICT Institutional Framework and Internal Policy (IFIP)

Pillar 1 : To strengthen ICT institutional framework and internal policy (IFIP)						
Activities	Key deliverables	Indicator of success	Means of verification of these indicators	Duration	Resources /inputs	Budget (US\$)
Activity 1: Develop and implement parliamentary information system operation policy (ISOP) and guidelines	Parliamentary ISOP document available	Adoption by Parliament	Policy available	3 months	- Financial - Human resources	40,000
Activity 2: Organize a workshop for the review and adoption of ISOP, with emphasis on responsibilities and implementation of monitoring and evaluation mechanisms	Workshop organized	Reviewed ISOP documents with amendments incorporated	New ISOP report Feedback through evaluation questionnaire	3 days	- Financial -Human resources	50,000
Activity 3: Submit the ISOP for adoption in a parliamentary session	ISOP document submitted and discussed at a parliamentary session	Debate of the document during the parliamentary session, and its approval	ISOP adopted	1 week	Prior review by Speaker of the National Assembly, Clerk of the National Assembly and staff	No financial implications
Activity 4: Strengthening of ICT Committee within the Parliament	ICT Committee structure and capacity with clear expected outputs	ICT Committee meeting to debate on ICT Master Plan	Reports	1 month	Prior discussions Human resources	No financial implications

Table 2: Strengthening ICT infrastructure (Activity 1)

Pillar 2: Strengthening ICT infrastructure(S.I.I.)						
Activity 1: Strengthening networking and hardware infrastructure						
Sub activities	Key deliverables	Indicator of success	Means of verification of these indicators	Duration	Resources	Budget (US\$)
Install reliable network servers, mail server, web server, information and knowledge repository servers, printer server	Various or multi-services servers acquired	Improved network functionality and information systems services	Acquisition of equipment and user feedback	1 year	As above	80,000
Endow all MPs with individual laptops. This could be done in partnership with the private sector or through Parliament's guarantee scheme	Laptop programme developed and established	Laptops acquired for MPs	Acquisition of equipment and user feedback	As above	As above	80,000
Provide an active, secured broadband intranet/Internet connection point to all MPs, staff of parliament and parliamentary committee officers	Broadband Internet connection deployed where necessary	Access for all becomes a reality	Acquisition of equipment and user feedback	6 months	As above	50,000
Deploy wireless broadband networks	Wireless facilities installed and operational	Number of users	Statistics and feedback reports	1 year	As above	60,000
Equip all constituencies with information technology equipment to link them to Parliamentary Information systems, including community radio, voice-assisted equipment, community cyber-centre or other.	All constituencies equipped	Number of users	Statistics and feedback reports	3 years	As above	2,000,000
Strengthen network monitoring and security	Network monitoring and management tools installed	Reduction in network incidents and abuse	Reports and IT audit	1 year	As above	40,000
Establish parliamentary radio broadcasting services	Parliamentary radio transmission equipment installed and commissioned	Reception of radio broadcast	Feedback from the public and physical inspection	6 months	Involve expert services Finances	300,000
Establish a parliamentary TV broadcasting network	Parliamentary TV broadcasting equipment installed and commissioned	General public viewing live parliamentary TV broadcast	Feedback from the public and physical inspection	4 months	Equipment Financial resources	Negligible after digital switch-over

Table 3: Strengthening ICT infrastructure (Activity 2)

Pillar 2: Strengthening ICT infrastructure						
Activity 2: Strengthening software and ICT services						
Sub-activities	Key deliverables	Indicator of success	Means of verification of these indicators	Duration	Resources	Budget estimate (US\$)
General software applications						
Office suites, word processor and other	Widely installed –upgrade	Improved data management	Feedback reports	6 months	Human and financial resources	10,000
Help desk and software tutorial utilities	Installed	Improved software help-desk service and self-training	Reports	6 months	Human and financial resources	Include in the 1st activity
Administrative applications						
Travel management system	TMS installed	Improved monitoring/travel arrangements	Reports	6 months	Human and financial resources	20,000
Mail and website services						
E-mail for all implemented and tested	E-mail accounts (with Parliament domain name) created for all MPs and parliamentary staff. E-mail accounts created for users of media club and public-access points	E-mail accounts widely used	Reports and statistics tools	3 months	Human resources	Include in the above sub-activity (none)
Website upgrade	New website with new features commissioned	Increased traffic to the website	User feedback and traffic logs, web counter	3 months	Human and financial resources	50,000
Creating websites for all committees	Parliamentary committees web portal created	Widely used	Statistics and feedback reports	3 months	Human and financial resources	Include in the above sub-activity (none)
Websites for MPs	MPs website(s) developed	Well used	Statistics and feedback reports	3 months	As above	Include in the above sub-activity (none)
Interactive public website	Public access portal /space virtually configured	Well used	Statistics and feedback reports	3 months	As above	Include in the above sub-activity (none)
Installation of remote access tools and utilities	Remote access utilities/tools installed	Well used	Statistics and feedback reports	3 months	As above	Include in the above sub-activity (none)

Pillar 2: Strengthening ICT infrastructure						
Activity 2: Strengthening software and ICT services						
Sub-activities	Key deliverables	Indicator of success	Means of verification of these indicators	Duration	Resources	Budget estimate (US\$)
	E-mail accounts (with Parliament domain name) created for all MPs and parliamentary staff. E-mail accounts created for users of media club and public-access points					
	New website with new features commissioned					
	Parliamentary committees web portal created					
	MPs website(s) developed					
	Public access portal /space virtually configured					
	Remote access utilities/tools installed					
Knowledge management/document management/archiving/ library systems						
Virtual library and research tools	Web access to literature system	Improved access to information	Reduced time to access information	6 months	Human and financial resources	80,000
File tracking	File Tracking Application	Improved speed in tracking files	Reduced time to locate files	2 months	Human and financial resources	10,000
Collaboration tools	Collaborative applications	Improved exchange of information and communication	Use of blogs, instant messaging and e-discussion	3 months	Human and financial resources	1,000
Document management	Document management system	Improved information sharing	Reduced time in searching for documents	6 months	Human and financial resources	50,000
Knowledge management system	Knowledge management system	Improved information intelligence	Easy retrieval and information access	6 months	Human and financial resources	80,000
Specialized software for drafting bills, amending legislation and minutes	Applications identified and installed	Improved document management	Statistics and feedback reports	1 year	Human and financial resources	8,000
Audio-visual streaming application	Audio-visual streaming application installed	Improved audio and video streaming	Reports	6 months	Human and financial resources	10,000

Pillar 2: Strengthening ICT infrastructure						
Activity 2: Strengthening software and ICT services						
Sub-activities	Key deliverables	Indicator of success	Means of verification of these indicators	Duration	Resources	Budget estimate (US\$)
Applications for legislative, representative and oversight functions						
Legislative system	Legislative application system installed	Improved question processing, order paper formulation	Reduced time of processing	6 months	Human and financial resources	65,000
Judiciary and legal databases (planning, implementation and maintenance)	Databases created and running	Number of users	Statistics and feedback reports	6 months	Human and financial resources	5,000
Socio-economic indicators database (plan and gather statistics, implement and maintain), linking to government information system or intranet	Databases created and running	Number of users	Statistics and feedback reports on statistics	6 months	Human and financial resources	5,000
Online public surveys platform	On-line survey operational	Number of users	Statistics and feedback reports	4-6 months	Human resources	None
Electronic bulletin development and dissemination	Electronic bulletin initiated	Number of users	Statistics and feedback reports	4-6 months	Human resources	None
Other special applications	Special applications identified and implemented	Quality of improvement	Statistics/report	1 year	Human and financial resources	30,000
ICT Services						
Security management system	Security management system installed	Security management system installed	Improved management of security incidents and reporting	6 months	Human and financial resources	30,000
ICT help desk service and full e-service	e-service operational	e-service operational	Improved ICT assistance	6 months	Human resources	10,000

Table 4: Strengthening ICT infrastructure (Activity 3)

Pillar 2: Strengthening ICT infrastructure						
Activity 3: Strengthening human capital infrastructure						
Sub-activities	Key deliverables	Indicator of success	Means of verification of these indicators	Duration	Resources	Budget (US\$)
Professional training	Certification	Passing exams	Staff performance appraisal	Continuous	Finances E-learning programmes	35,000 per year
Attachments and exchange programmes	Report on attachment/exchange programme	Better ideas in undertaking tasks	From attachment report/performance appraisal	Continuous	Finances	35,000 per year
Set up knowledge database	Knowledge database data set up	Number of staff /MPs using system	Survey/visitor counter	Continuous	Finances Online manuals and publications Instructors	60,000
Establish in-house training facilities	Equipped training centre setup	In-house training being conducted from training centre	Physical inspection	6 months	Finances Equipment	65,000
Training of trainers in knowledge management	Training modules developed/available and implemented	Increased knowledge and ability to train others	Staff performance appraisal	Continuous	Outsourcing Finance Human resources	20,000 per year
Training of trainers in database development and maintenance	Training modules developed/available and implemented	Increased knowledge and ability to train others	Staff performance appraisal	Continuous	Outsourcing Finance Human Resource	20,000 per year
Training of trainers in legislative/ representative/ oversight applications	Training modules developed/available and implemented	Increased knowledge and ability to train others	Staff performance appraisal	Continuous	Outsourcing Finance Human Resource	20,000 per year
Training of trainers in document management, archiving and virtual library systems	Training modules developed/available and implemented	Increased knowledge and ability to train others	Staff performance appraisal	Continuous	Outsourcing Finance Human resources	20,000 per year
Training of trainers in help-desk services	Training modules developed/available and implemented	Increased knowledge and ability to train others	Staff performance appraisal	Continuous	Outsourcing Finance Human resources	5,000
Hands-on practical lessons on the use of the Internet, ICT applications to enhance MP's work as legislators	2 hours' training provided to each MP per week	Increased MP knowledge on IT services	MPs' performance appraisal	Continuous	Human resources	Non-financial implication

Pillar 2: Strengthening ICT infrastructure						
Activity 3: Strengthening human capital infrastructure						
Sub-activities	Key deliverables	Indicator of success	Means of verification of these indicators	Duration	Resources	Budget (US\$)
Monthly training of users (other than MPs) in the Parliamentary information system	2 hours' training provided to each user per week	Increased user knowledge on IT services	Users' performance appraisal	Continuous	Human resources	Non-financial implication
Training for MPs and staff in building a people-centred, development-oriented, inclusive knowledge society						
Implementing and training of trainers on ECA on-line platform "ICT essentials for government leaders"	On-line training modules installed and trainers trained	Increased knowledge and ability to train others	Performance appraisal of trainers	Continuous	ECA support	Non-financial implication
ICT and MDGs	Training modules developed/available and implemented	Trainees' increased knowledge	Performance appraisal of trainees	Continuous	ECA support	Non-financial implication
ICT policy and strategies formulation and implementation in Botswana	Training modules developed/available and implemented	Trainees' increased knowledge	Performance appraisal of trainees	Continuous	ECA support	Non-financial implication
e-Government, m-government and e-governance: challenge and opportunities – implementation stages	Training modules developed/available and implemented	Trainees' increased knowledge	Performance appraisal of trainees	Continuous	Outsourcing Finance Human resources	10,000
ICT and good governance: government information systems, public information systems, open access to public information system Improve public expenditure management Decentralized planning and monitoring systems	Training modules developed/available and implemented	Trainees' increased knowledge	Performance appraisal of trainees	Continuous	Outsourcing Finance Human Resources	10,000
e-Democracy applications: challenges and opportunities for Africa	Training modules developed/available and implemented	Trainees' increased knowledge	Performance appraisal of trainees	Continuous	Outsourcing Finance Human Resources	10,000/year

Pillar 2: Strengthening ICT infrastructure						
Activity 3: Strengthening human capital infrastructure						
Sub-activities	Key deliverables	Indicator of success	Means of verification of these indicators	Duration	Resources	Budget (US\$)
e-Agriculture, m-agriculture	Training modules developed/available and implemented	Trainees' increased knowledge	Performance appraisal of trainees	Continuous	Outsourcing Finance Human Resources	10,000/year
Cyberlaw: ICT legal framework	Training modules developed/available and implemented	Trainees' increased knowledge	Performance appraisal of trainees	Continuous	Outsourcing Finance Human Resources	10,000/year
e-Commerce, m-commerce, e-signature, e-transaction and legislation	Training modules developed/available and implemented	Trainees' increased knowledge	Performance appraisal of trainees	Continuous	Outsourcing Finance Human Resources	10,000/year
ICT skills/capacity for the knowledge economy and policy intervention	Training modules developed/available and implemented	Trainees' increased knowledge	Performance appraisal of trainees	Continuous	Outsourcing Finance Human Resources	10,000/year
Public-private partnership challenge and enabling environment for promoting FDI	Training modules developed/available and implemented	Trainees' increased knowledge	Performance appraisal of trainees	Continuous	Outsourcing Finance Human Resources	10,000/year
Enabling environment for ICT and R&D	Training modules developed/available and implemented	Trainees' increased knowledge	Performance appraisal of trainees	Continuous	Outsourcing Finance Human Resources	10,000/year
ICT infrastructure in general, "last-mile technology" and universal access	Training modules developed/available and implemented	Trainees' increased knowledge	Performance appraisal of trainees	Continuous	Outsourcing Finance Human Resources	10,000/year
Spam, viruses, website hijacks, cyber-security	Training modules developed/available and implemented	Trainees' increased knowledge	Performance appraisal of trainees	Continuous	Outsourcing Finance Human Resources	10,000/year

Table 5: Strengthening parliamentary oversight

Pillar 3: To strengthen parliamentary oversight, representative and advocacy functions(S.O.L.R.F.)						
Activities	Key deliverables	Success indicators	Indicator verification means	Duration	Resources	Budget Estimate (US\$)
Activity 1: Design constituency websites	Accessible websites	Ability to access website	Online inspections using search engines	6 months	Human and financial resources	200,000
Activity 2: Develop project-tracking system for government assurances and bilateral and unilateral obligations	System installed and commissioned	Ability to check, track and follow up government assurances and projects.	Reports	6 months	Human and financial resources	22,000
Activity 3: Establish corporate virtual private network (VPN) for constituency offices	Network installed and commissioned	Ability to use the network for information-sharing and communication	Reports from Constituency Offices	6 months	Human and financial resources	190,000
Activity 4: Develop capacity of constituency officers in collaborative tools and understanding of ICT4D	Certificate of accomplishment	Ability to use the collaborative tools and reports on ICT activities within constituencies	Monitoring and Evaluation Appraisal of constituency officers	6 months	Human and financial resources	80,000
Activity 5: Build online/offline discussion forums	Online/offline discussion forum	Constituents are able to engage their MPs online/offline	Number of constituents engaging their MPs	3 months	Human and financial resources	10,000
Activity 6: Initiate policy dialogue with the Executive for the deployment of e-governance applications						No financial implications
Activity 7: Implement specific applications related to the functions						Already included in capacity building

Table 6: Strengthen parliamentary oversight over national and subregional ICT policy and strategies

Pillar 4: To strengthen parliamentary oversight over national and subregional ICT policy and strategies(S.O.I.N.S.P.S.)						
Activities	Key deliverables	Success indicators	Indicator verification means	Duration	Resources	Budget (US\$)
Activity 1: Build MPs' capacity	Skills built in MPs	Attending national and international conferences on ICTs	Number of MPs and Senators able to debate effectively when passing ICT legislation	6 months	Human and financial resources	60,000
Activity 2: Establish inter-parliamentary collaborative tools	Collaborative systems instituted	MPs' ability to network online	Number of discussions conducted online	6 months	Human and financial resources	5,000

Table 7: Harnessing the role of MPs and ICT for community development

Pillar 5: Harnessing the role of MPs and ICT for community development(S.C.D.I.C)						
Activities	Key deliverables	Success indicators	Indicator verification means	Duration	Resources	Budget (US\$)
Activity 1: Build the capacity of MPs on the role of ICT for community development	Skills imparted to MPs	Increase in the number of MPs trained and activities undertaken in constituencies	Feedback questionnaire and ICT applications project from MPs	Continuous	Human and financial resources	No financial implications
Activity 2: Undertake research studies and developing a best-practice portal on the Parliament website	Comprehensive report developed	Quality reports	Report availability	6 months	Human and financial resources	25,000
Activity 3: Train the local constituency administrators	Skills imparted to local administrators and constituencies	Increased skills and knowledge imparted to the local administrators and constituencies	Feedback reports	Continuous	Human resources	No financial implications
Activity 4: Establish partnerships for the initiative	Partners mobilized	Number of partners involved in different initiatives	Feedback reports	Continuous		No financial implications

4.2 Master plan proposed timeline

Pillar 1: Strengthen ICT institutional framework and internal policy (IFIP)																				
<i>Activity number and description</i>	Year 1			Year 2			Year 3			Year 4			Year 5							
1. Develop and implement parliamentary information system operation policy (ISOP) and guidelines	■																			
2. Organize a workshop for the review and adoption of ISOP with emphasis on responsibilities and implementation of monitoring and evaluation mechanisms		■																		
3. To submit the ISOP for adoption in a parliamentary session			■																	
4. Strengthen ICT Committee within Parliament		■																		
Pillar 2: Strengthen ICT infrastructure(S.I.I.)																				
<i>Activity number and description</i>	Year 1			Year 2			Year 3			Year 4			Year 5							
1. Strengthen networking and hardware infrastructure			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2. Strengthen software and ICT services				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3. Strengthen human Capital Infrastructure	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pillar 3: Strengthen parliamentary oversight, representative and advocacy function(S.O.L.R.F.s)																				
<i>Activity number and description</i>	Year 1			Year 2			Year 3			Year 4			Year 5							
1. Design constituency websites			■	■																
2. Develop project-tracking system for government assurances and bilateral and unilateral obligations				■	■															
3. Establish corporate virtual private network for constituency offices					■	■														
4. Developing capacity of constituency officers in collaborative tools and understanding of ICT4D						■	■													
5. Building online/offline discussion forums						■	■													
6. Initiate policy dialogue with the Executive for the deployment of e-governance applications						■	■													
7. Implementing specific applications related to the functions							■	■												
Pillar 4: Strengthen parliamentary oversight over national and subregional ICT policy and strategies(S.O.I.N.P.S)																				
<i>Activity number and description</i>	Year 1			Year 2			Year 3			Year 4			Year 5							
1. Capacity-building for MPs			■	■		■	■	■	■	■										
2. Establish inter-parliamentary collaborative tools					■	■														
Pillar 5: Harnessing the role of MPs in ICT for community development(S.C.D.I.C)																				
<i>Activity number and description</i>	Year 1			Year 2			Year 3			Year 4			Year 5							
1. Building capacity of MPs on the role of ICT for community development				■	■															
2. Undertaking research studies and developing a best-practice portal on the Parliament website	■	■																		
3. Training local constituency administrators			■		■		■													
4. Establish partnerships for the initiative	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

4.3 Master plan funding options

A resource-mobilization strategy

Numerous challenges face the financing of the ICT Master Plan including: scarcity of financial resources; competition for the same funds from other national priorities such as HIV/AIDS, poverty-eradication strategies and “health for all”; lack of awareness among policymakers of the role that ICTs play in accelerating socio-economic development; lack of a consultative approach among stakeholders in the formulation of national-development strategies; lack of incentives to attract investors; and many others.

Therefore a resource-mobilization strategy can help the Parliament of Botswana to mobilize adequate and predictable financial resources to support the effective implementation of the objectives of the ICT Master Plan. Development partners have acknowledged that parliaments are institutions central to the promotion and consolidation of good governance, democracy and peace, and that they are capable of ensuring that policies, legislation and other regulatory frameworks meet communities’ development needs. As such, Parliament has the potential to attract substantial co-financing from a diversity of sources.

Efforts to mobilize resources should not only target an allocation from the budget or other national funds but should also target traditional and new funding sources, including but not limited to bilateral and multilateral organizations, international and national charitable foundations and non-governmental organizations (NGOs), and the multinational and national private sector. Bilateral contributions usually represent an important potential source of financing at the country level. In addition, a comprehensive ICT Master Plan, which has a high expected impact, can attract investors.

Some strategies to mobilize resources include:

- (a) Establish a resource-mobilization team, headed by the Speaker of the National Assembly;
- (b) Mainstream the ICT Master Plan into the Parliament of Botswana development plan and advocate higher annual allocation from the local budget;
- (c) Develop an annual spending budget and impact analysis from the ICT Master Plan for the Parliament ICT budget prior to the budget allocation exercise;
- (d) Mobilize regional and international development organisations to support the implementation of the plan through establishing effective communication mechanisms to promote the objectives, activities and impact of the ICT Master Plan to partners;
- (e) Strengthen partnership with the Ministry of Transport and Communications and advocate for budget allocation at this level for Parliament’s involvement in ICT policy and strategy processes;
- (f) Empower MPs through activities that deepen their knowledge of new technological issues with implications that could generate revenues, such as taxation laws, cyber-laws, Internet governance, intellectual property rights, e-security, Voice-over-Internet Protocol, etc.;
- (g) Take a lead role in mobilizing resources and encouraging smart partnerships between public- and private-sector operators;
- (h) Amend existing legislation where necessary to create transparent and effective legal and regulatory environments that are conducive to attract investment;
- (i) Strategically communicate the ICT Master Plan objectives and activities at constituency level and mobilize communities to give financial support to its implementation; and

- (j) Develop a special partnership with mobile telephone operators, leading private-sector companies and financial institutions.

4.3.1 Attracting FDI as a means to promote ICT4D

The global economy is becoming increasingly interdependent. Part of the development dilemma is how foreign direct investment (FDI) can be harnessed to assist and facilitate local economic development. The deployment of ICT infrastructure poses a major challenge because massive capital outlay is required and governments often cannot fund the process without support.

FDI is becoming increasingly important with reference to bridging the “digital divide” and plays a large role in boosting global economic growth rates. It is now seen as a rational financial alternative to support development. Hence the Government of Botswana should take the lead in facilitating an enabling environment to attract investments that will create job opportunities and enhance technology transfer and development. On the other hand, Parliament should actively participate in ensuring that the regulatory environment is transparent, stable, independent and consistent in order to attract potential investors and should encourage the establishment of micro-finance opportunities via domestic companies or development finance institutions.

4.3.2 Support public-private partnerships legislation and rules: An innovative ICT4D financial solution

A growing concern for effective ICT Master Plan implementation is the scarcity of funds, as Government does not have the resources to provide all the necessary tools and solutions. There is a need to apply the concept of partnerships between Government and the private sector in order to guarantee development.

The public-private partnership (PPP) concept ensures that parties strategically aggregate resources and competencies to tackle challenges effectively. They reduce duplication of efforts and wastage of available resources, share benefits, risks and cost whilst enhancing the implementation of national programmes that are structured, cost effective, long term and sustainable. Formulation or amendment of ICT PPP legislation and rules may be required.

4.4 ICT Master Plan monitoring and evaluation

A strong monitoring and evaluation mechanism is required. There should be a focus on delivering and defined objectives with measurable benefits within specified time-scales to underpin the effective and coordinated implementation of the plan. It is important that Parliament puts monitoring and evaluation mechanisms in place to support the implementation and delivery of programmes, for accountability, and to monitor and demonstrate success. The public service and Executive will not have credibility if they are responsible for monitoring themselves. A strong role for Parliament as a separate oversight institution is critically important to give integrity to the process of monitoring and evaluation and to assure that fresh thinking can respond to failures to meet targeted results. Parliament should be proactive in the monitoring process as it is the watchdog for ensuring that national ICT commitments are met.

Monitoring and evaluation of policy implementation and programme outcomes tie the policy process into a coherent, cumulative cycle of what should be improvements in performance, as the governance system identifies and attains publicly-desired targets. Monitoring and evaluation involving popular participation will be essential in ensuring that there is follow-through in implementing policy and in correcting those failures that are indicated in feedback reviews.

The monitoring process can include identifying indicators at the start of any process so that these indicators will establish a mechanism to measure progress in moving toward the targets highlighted by the indicators. This process can also include evaluating the effectiveness of policies and using the results to improve policy design and delivery.

5. Enabling factors for implementing the ICT Master Plan

Successful implementation of the plan depends on an integrated and holistic approach, underpinned by strategic synergies and partnerships between the public and private sectors, as well as civil society. Some preconditions and/or interventions that will enable sustainable implementation of the activities of the ICT Master Plan include:

- (a) **Political will** – Government’s most important role in the area of ICTs is to provide vision and leadership. A prime prerequisite is institutional willingness to make the necessary structural changes so as to create an environment appropriate for the introduction and functioning of ICT and political will and leadership are indispensable for this. Championship at the highest level, i.e. by the Hon. Speaker or the Hon. Vice-Speaker in Parliament and by leaders at similar level within the Executive, is therefore paramount;
- (b) **Institutional factors** - Institutional factors inherent in each country determine the way ICTs affect the parliament. These include factors such as: the democratic character of the country’s political system, the structure of constitutional powers (legislative scrutiny), the number of chambers, the electoral system (majority or proportional), the degree of independence of MPs in relation to their parliamentary groups, the chamber system (supported by committees and subcommittees), and the administrative structure. It is important that Botswana Parliament strengthens and empowers the ICT Committee to ensure the effective delivery and custodianship of the ICT Master Plan objectives. It is also equally important that members are equipped with relevant knowledge and skills to tackle a variety of ICT issues;
- (c) **Financial resources** - The critical lack of financial resources needed to implement most Government programmes and projects delays successfully reaching the intended goals and objectives. Funding is not always adequate to meet the demands. Therefore rigorous planning processes, which match demand to available financial resources, are desirable. In cases where the investment is made, limited budget allocations usually make provisions for the initial purchase and completely ignore later allocations for maintenance and upgrading. In cases where an institution is unable to maintain equipment on its own, this usually results in breakdown and shortened life spans for the equipment; and
- (d) **Human resources and skills** - Human technical resources are another factor that can potentially have a direct impact on the introduction and functioning of ICT tools and on the implementation of activities in the ICT Master Plan. The effective use of ICT presumes that the population is literate and able to use the tools provided by the new technologies. Insufficient training of MPs could be a significant barrier to achieving the expected outcomes. There should be programmes to enhance parliamentary human capital and skills continuously for full utilization of available technologies in the representative, legislative and oversight processes.

References

Botswana Draft National Information and Communications Technology Policy (drafted July 2006, edited July 2007) titled “*Maitlamo*” can be found here: http://www.ub.bw/ip/documents/2007_National%20Information%20and%20Communications%20Technology%20Policy.pdf. It builds on Botswana’s National ICT Vision and Objectives developed in April 2004.

Botswana Vision 2016 can be reviewed on this website: <http://www.vision2016.co.bw>.

Griffith, Jeffrey, and others (2008). *World e-Parliament Report 2008*, produced by the United Nations Department of Economic and Social Affairs and the Inter-Parliamentary Union through the Global Centre for ICT in Parliament. New York, USA.

Nash, K (2001). “Contested Power: Political Sociology in the Information Age” in Webster, Frank (ed) (2001). *A New Politics? Culture and Politics in the Information Age*. Routledge, New York, USA.

Parliament of Botswana website is <http://www.parliament.gov.bw>.

SADC Parliamentary Forum website is <http://www.sadcpf.org>.

UNDP (2006). *Empowering Parliaments through the Use of ICTs*. UN Development Programme, New York, USA.

WSIS (2003). The Declaration of Principles of the World Summit on the Information Society (Document WSIS-03/GENEVA/DOC/4-E) can be accessed here <http://www.itu.int/wsis/docs/geneva/official/dop.html>.

Republic of Zambia: Fifth National Development Plan http://www.mofnp.gov.zm/index.php?option=com_content&task=view&id=91&Itemid=118

The Zambian Parliament, Constitution and Laws

http://www.parliament.gov.zm/index.php?option=com_content&task=view&id=21&Itemid=49

Annex 1: Parliament of Botswana Survey Report

July 2010

Executive Summary

The United Nations Economic Commission for Africa (ECA) has embarked on assisting SADC parliaments in developing and implementing an ICT framework, in accordance with the strategy of the Southern African Development Community Parliamentary Forum (SADC PF). The Parliament of Botswana is one of the parliaments participating in this initiative. One of the key tasks in this initiative is to conduct an “As-is” baseline review of Parliament in order to identify areas and types of need. This would assist the development of the ICT Master Plan by identifying the actions required to address the situation.

The Parliament of Botswana engaged a consultant through the ECA to assist them in determining the current state of their ICT services and their requirements. The consultant conducted a survey to assess the level of information skills of MPs which enabled them to advocate for development and use of ICT in Parliament. The survey was also intended to assess the skills level of parliamentary staff and staff members in the constituency offices. The survey revealed that, although the Parliament of Botswana has taken some steps, within the surveyed groups there were limited penetration levels of ICT usage and skills.

There was evidence that the Parliament of Botswana is providing MPs, staff and constituency offices with computers, but in the Constituency Offices they were not sufficient. The Parliament of Botswana does not have its own radio station nor a dedicated programme on the state-owned radio station (Radio Botswana). The same applies to television services.

Most crucially, the survey found out that the Parliament of Botswana does not have an ICT Committee. This committee is vital to the success of the ICT Master Plan being developed, since the plan would need an official committee to push its agenda.

It is on the basis of the findings of this report that an ICT Master Plan for Botswana Parliament will be developed and an implementation plan suggested which will facilitate in equipping MPs and users with ICT skills to effectively perform their duties and enable engagement of MPs in ICT issues in the country and in regional and international environments.

I. Introduction and background

1. In May 1996 the United Nations Economic Commission for Africa (ECA) launched the African Information Society Initiative (AISI). This was in response to the realization of how important the role of ICTs can be to helping attain development goals. The vision for AISI is not only to bridge the “digital divide” between Africa and the rest of the world, but also to create effective digital opportunities to be developed by African partners, and bring the continent into the global economy of information and knowledge. To this end, ECA has been supporting member States to develop national information and communication infrastructure (NICI) policies, plans and strategies.

2. As part of its assistance towards the implementation of AISI, the ECA has been undertaking activities to raise awareness and build capacity on key aspects of Africa's Information Society among policymakers and decision makers. Particular emphasis has been placed on parliaments and parliamentarians (MPs) and their pivotal roles in mobilizing resources, passing laws, debating issues of national concern and holding governments to account for commitments they have made.

1.1 Parliament of Botswana

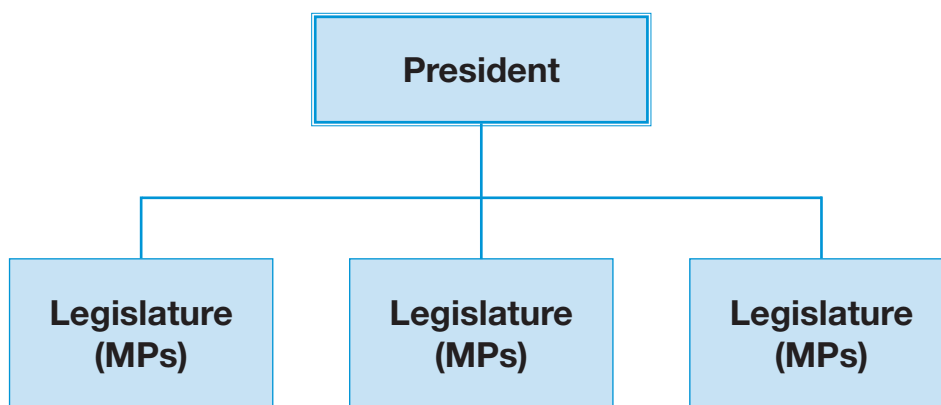
3. MPs in Botswana are elected to Parliament through a system whereby the parliamentary candidate who wins the majority of votes during an election campaign automatically becomes an MP. The President is elected from the winning party. In Botswana, elections are held every five years.

4. The Parliament of Botswana comprises two houses: the National Assembly (NA) and the House of Chiefs. However, only the NA has the powers to make laws to govern the country. The House of Chiefs is an advisory body and can only advise the NA on constitutional, customary and land issues. The main functions of the NA are:

- (a) To examine government policies;
- (b) To approve government spending; and
- (c) To discuss national and international issues.

5. According to the Constitution of Botswana, there are three arms of the government, namely: (a) The Executive (Cabinet), (b) The Legislature (Parliament) and (c) The Judiciary (Courts). Each of these arms of state has its own functions which are independent from others. However, these three arms ensure that power is divided so that no arm has all the powers. This division of power is enshrined in the constitution and it is called "the separation of powers." See figure 1.1.

Fig A.1: Organogram: The Three arms of the Government



1.2 National ICT Policy (Maitlamo)

6. Botswana's national ICT policy is titled "*Maitlamo*". It provides Botswana with a clear and compelling roadmap that will drive social, economic, cultural and political transformation through the effective use of ICT. The *Maitlamo* Policy complements and builds upon Vision 2016 and provides many of the key strategies essential for achieving Botswana's national development targets.

7. 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". This will be achieved through:

- (a) Creation of an enabling environment for the growth of an ICT industry in the country;
- (b) Provision of universal service and access to information and communication facilities in the country; and
- (c) Making Botswana a regional ICT hub, so as to make the country's ICT sector globally-competitive.

8. 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. These sites will be far more than simple Internet cafés as they 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. Local companies and entrepreneurs will also be provided with training in business start-up and e-business;
- (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. A "Government on Line" programme has been designed within a broader public-sector reform initiative and this will make all appropriate government information and services available electronically;
- (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 to succeed 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;
- (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 will provide rapid benefits, such as a health-care portal and improving the health-related information delivered over radio and television. Over time, more sophisticated solutions will be introduced, such as telemedicine (curative services provided through telecommunication technologies, including telephone, video conferencing and Internet) and telehealth (wider healthcare advice provided through telecommunications);
- (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 investments into business process outsourcing

(BPO) investment. In addition, traditional industries such as agriculture, mining, manufacturing and tourism will benefit from introducing ICTs into their operations. This programme, in conjunction with the Connecting Communities and Government on Line initiatives will also focus on training and assistance to Small and medium enterprises (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;

- (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 will be a key focus of the programme as it is of particular importance to ensure equity and universal access; and
- (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 to develop the necessary legal environment for increased levels of competition within the telecommunications space. In addition, an 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.

1.3 Other National ICT Initiatives

1.3.1 Botswana Global Libraries Project

9. The Bill & Melinda Gates Foundation has awarded a grant to African Comprehensive HIV/AIDS Partnerships (ACHAP) to develop a strategy aimed at providing free computer and Internet services in public libraries for all residents of Botswana. This is to cover the whole country. It will be based on lessons derived from pilot sites, which will indicate the best ways to involve other players and partners in delivering broadband Internet access, the cost implications and costs involved, critical community needs to be addressed by the programme, as well as the ICT skills required for librarians to be able to execute the complementary roles of training or helping the public to use the computers and the Internet.

10. The primary aim of this project is to allow meaningful access to computers and the Internet by communities that might otherwise have missed out on the benefits of modern ICT and information services. It will also modernize public libraries and allow them to provide the full range of information services and have a measurable positive impact, both socially and economically, on the lives of users.

11. The Botswana public library system, as covered by the project, is composed of 23 (traditional) public libraries, 4 community libraries and 66 village reading rooms (VRRs). The VRRs are community-initiated mini-libraries of varying sizes and are run in community-owned buildings, which are sometimes local council buildings, but are equipped, maintained and managed by the Botswana National Library Service BNLS. Some of the libraries were built by the Bob and Sarah Rothschild Foundation, an American family-run foundation that has pledged to build and donate to the Botswana Government two new libraries a year over a ten-year period starting in the year 2007

1.3.2 Radio and TV Coverage Master Plan

12. In June 2004, the Government of Botswana engaged consultants to draft a “Radio and Television Transmitter Network Coverage Master Plan”. The main objective of the plan was to propose the extension of the FM radio and TV transmitter network so as to cover 95–100 per cent of the population. This plan is currently going through the implementation stage.

1.4 Summary

13. These initiatives have been outlined to highlight how seriously the Government of Botswana has taken ICT as a driver to improve the lives of its citizens. The Government has set infrastructure targets to reach most of the country. Projects such as *Ntelelsa II* (a fast-tracked telecommunications project) will make sure that telecommunications infrastructure reaches as many Batswana as possible. The project to expand radio transmitters will make radio available to about 99 per cent of the country.

14. The focus of the Parliament of Botswana on ICT should therefore be more on building capacity and ICT services to make use of the infrastructure already being developed.

2. Approach and Scope of Work

2.1 Objectives

15. The purpose of the survey was to assess the status of ICT integration and the contribution of MPs, staff and other users towards implementation of the Information Society and to evaluate their skills and infrastructure for advocating ICT for development as well as the use of ICTs in Parliament.

16. The survey aimed to assess the capacity of Parliament to use ICTs effectively and efficiently in order to enhance its activities and improve its transparency and connection with the electorate. The survey was also intended to assess how far Parliament has progressed in establishing the legislative frameworks required for development of sustainable ICT policies and building a conducive environment for dissemination and development of secure use of ICTs at national level.

2.2 Needs assessment and skills gap

17. Survey instruments were developed for three sets of respondents: (a) technical staff, (b) users and (c) MPs. The sample that was decided upon was to cover 100 per cent of the MPs and 80 per cent of the users. The survey forms were distributed to respective participants and the response was very slow. Out of 61 MPs who received the questionnaires, 43 have managed to complete them and 121 users completed the questionnaires.

18. The survey team conducted face-to-face interviews with both the Parliament ICT Section and the management of the Ministry of Transport and Communications to clarify and verify some issues about the ICT infrastructure and possible future plans for Parliament’s ICT department.

19. The analysis tool was developed so that data can be captured and analyzed as the questionnaires are being submitted.

20. Extensive desktop research was conducted to assess all other possible ICT initiatives which are supported both by the Government and by NGOs.

3. Summary of the survey findings

3.1 ICT Section

21. One of the questionnaires administered during the survey period targeted the ICT Section within the Parliament of Botswana. This was designed to determine and analyze the current status of the ICT infrastructure within the Parliament of Botswana.

22. The assessment covered five sections of the WSIS action lines, specific to the following areas:

- (a) ICT vision, strategy and leadership;
- (b) Capacity, infrastructure and applications;
- (c) ICT services: document management and interaction with citizens;
- (d) Contributing to an inclusive Information Society in Botswana; and
- (e) Inter-parliamentary cooperation.

3.1.1 ICT vision, strategy and leadership

23. Currently the Parliament of Botswana does not have an ICT Strategic Plan. However a task force was set up in 2008 to identify initiatives that can strategically position Parliament for success through effective appreciation and use of information and communication technology (ICT). The survey highlighted that currently all the funding for ICT initiatives comes from the Government. This implies the political leadership is willing to champion ICT development within Parliament.

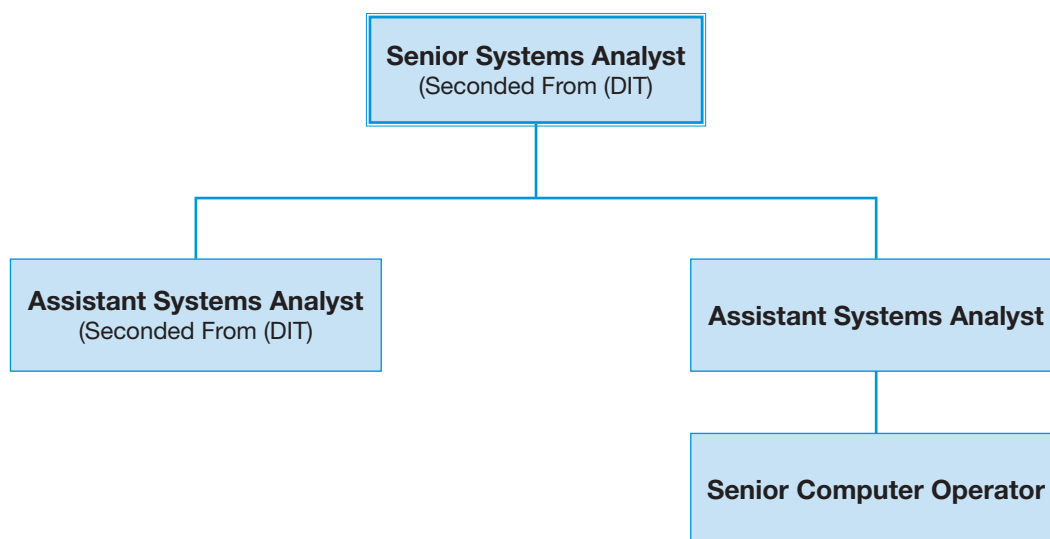
3.1.2 Capacity, infrastructure and applications

24. The survey highlighted that all the staff members within the ICT Section have personal access to and use of computers with a shared network connection. All staff members have official e-mail addresses as well as personal cellphones for the purposes of communication.

25. Despite having formal training in other areas of ICT (MSCE, CISCO, ITIL, Website Content Management), staff of the section still need to receive training in critical areas aimed at raising more ICT awareness within Parliament and enhancing skills in web-portal development and maintenance and in e-security. Training is also needed to improve awareness of Botswana ICT Policy and its priority areas for both staff and MPs in building the Information Society in the country as well as in fostering their particular roles in the processes of implementing ICT-related strategies.

26. In terms of resources, the ICT Section comprises of four technical staff who perform various functions, including network operations, user support, system administration and installation of personal computers (PCs). The organization chart of the Section is depicted in Figure 3.1.

Fig A.2: Organization chart: existing ICT Section



27. The tables below show the number of users, the number of computers and the numbers of various computer operating systems and MS Office Suite versions, as well as the peripheral equipment currently used within the Parliament.

Table A.1: Number of computers/laptops by Operating System and by MS Office Suite version

MS XP	MS Vista	Mac OS	Total
235	1	2	238

Ms Office 03	MS Office 07	MS Word X	Total
65	171	2	238

Table A.2: Number and types of peripheral equipment for computers/laptops

	Users	Computers	UPS	Printers	Scanners
Constituency Offices	237	67	35	56	
HQ	191	171	2	106	3
Total	428	238	37	162	3

28. Several possible applications are not in place, such as for drafting bills and amendments and for preparing plenary minutes, as well as systems for general knowledge management.

29. Out of 57 Constituency Offices, 10 are not connected while 47 are connected using ADSL and can access the Internet and webmail. They are not connected to the government data network and so they have no access to the government intranet. The headquarters (Main building, annex 1 and annex 2) is connected to the government data network. There are four servers and each has a particular purpose (mail server, file server, domain controller and group update provider server to run and update Symantec endpoint protection antivirus programme).

3.1.3 ICT services: document management and interaction with citizens

30. All ICT services are available and are supported by both contractors and the ICT Section. System administration is exclusively supported internally. This suggests that the ICT Section needs both more personnel and training to be able to handle other services internally.

31. The ICT Section is in the process of planning to procure a document management system which will create and manage bills in digital format. Already bills are available in digital formats, but there is no complete automated system that comprehensively manages the process. The ICT Section is also in the process of planning for an automated library resource management system and intends to have “e-resource management capabilities”.

32. The survey highlighted that there is a need to develop websites for MPs.

3.1.4 Contributing to an inclusive Information Society in Botswana

33. The staff within the ICT Section are fully aware of the status of the *Maitlamo* ICT Policy and strategies. They have clearly indicated that *Maitlamo* is currently going through the implementation stage and they are also fully aware of the priority areas of the policy, including e-government.

34. The staff members are well aware that the *Maitlamo* ICT Policy will have a “quite high impact” in contributing to achieving the MDGs, including poverty reduction, alleviation and sustainable development, if it is implemented correctly.

35. The ICT Section felt that there is a need to improve awareness-raising and capacity-building on the Information Society in order to enhance MPs’ role in the processes of ICT strategies and their involvement in the *Maitlamo* Policy, including scrutiny and oversight. This can be achieved by organizing awareness-raising campaigns on the *Maitlamo* Policy as well as training in the priority areas of the policy framework.

36. The survey concluded that the Government has been “quite successful” in terms of approving ICT bills and enacting legislation related to the development of the Information Society.

37. To fund the implementation of an inclusive Information Society in Botswana, the staff of the ICT Section felt that there is a need to ensure that ICT funds are allocated per development and also ensure that partners should allocate a budget during bilateral and multilateral negotiations for integration of ICT into the areas of cooperation and as a tool to accelerate the expected achievements. Recommendations included advocating legislation in favour of both foreign direct investment and local investment in ICT as well as promoting tax incentives on relevant ICT4D programmes.

38. Because most constituency offices have Internet and are connected, the ICT section felt that the Government has been “quite successful” in promoting ICT for constituency development.

3.1.5 Promoting inter-parliamentary cooperation through ICT

39. In assessing the impact of inter-parliamentary communication using ICTs, staff of the ICT Section felt that there has been “quite high impact” in reinforcing parliamentary control, influence and scrutiny by the Parliament of Botswana. They also felt that the promotion of inter-parliamentary communication using ICTs was “quite successful”.

40. The survey concluded by asking for evidence of the benefits of a well implemented ICT programme on inter-parliamentary cooperation, including establishing innovative mechanisms to facilitate information flow between

parliaments at subregional, regional and global levels. Benefits of a well-implemented ICT programme could include promotion of information exchange and best practices between parliaments with a view to reinforcing parliamentary control, influence and scrutiny at all levels, including accessibility of best practices elsewhere on pro-poor ICT applications.

3.1.6 Parliament website

41. This section reviews the Parliament of Botswana website (www.parliament.gov.bw) and compares it to the websites of some other parliaments. The Botswana website is up-to-date. It has various pages such as “About Parliament”, “History” and “Members”. The Members section gives contact details of the MPs, although not all listings contain e-mail addresses. The same section has a “Contact your MP” facility where a visitor can enter a query, but it appears that the form is routed to a central point, from where it is manually routed to the appropriate MP.

42. Many parliamentary websites, such as the UK (www.parliament.uk), have video clips of parliament proceedings. The website of the US House of Representatives (www.house.gov) has a list of representatives and when the visitor selects one she or he is redirected to the website of the appropriate representative. The South African Parliament website (www.parliament.gov.za) has an interesting section “Participate in Parliament” which encourages the public to follow and join parliamentary debate on any sector of their choice.

3.2 Members of parliament survey

3.2.1 Capacity, infrastructure and applications: access and use of computers

43. In general, 79 per cent of the surveyed MPs do work on a personal computer. A very high percentage of 86 per cent have access to the Internet. However, in terms of web presence, only 9 per cent of MPs have web pages (see table 3.3).

Table A.3: ICT use and Web presence (MPs)

Assessment area	Availability/usage (per cent)		
Work on computer	79		
Availability of ICT services/facilities	Personal	Shared	Cumulative
PC	71	07	78
Laptop	52	07	59
Printer	64	19	83
Fax	23	47	70
Parliament Intranet	39	23	62
Internet	72	14	86
Remote data access	16		
Cellphone	88		
PDA	09		
Office e-mail	74		
Personal e-mail	61		
Office web page	09		
Personal web page	02		

44. The survey responses indicated that 74 per cent of MPs had e-mail available at their offices. The ICT Section have forwarded information which states that all MPs have government e-mail addresses and have the Internet connected in their offices. The lower result from the responses could be due to information not reaching the MPs about what they have in their offices. Based on the information that all MPs' offices are equipped with computers, it could be due to lack of training that only 79 per cent of MPs say they work on the computers.

3.2.2 Capacity, infrastructure and applications: knowledge/skills

45. The survey indicated that some 65 per cent of MPs said that they had been through some level of training, over the period 1980-2007. Only 41 per cent of the MPs indicated "adequate" skills in basic word-processing applications. The adequacy level dropped significantly for other applications, and the lowest was presentations where only 19 per cent rated their skills "adequate" (see table A.4).

Table A.4: Applications usage and adequacy level (MPs)

Assessment Area	Adequacy/Usage (per cent)				
Capacity	Word processor	Spreadsheet	E-mail	Presentation	Web browsers
Applications used	79	37	72	40	51
Applications training	65				
Adequacy (rated "adequate")	41	28	31	19	19

46. The "knowledge/skills" section of the survey covered IT knowledge in depth. For example, the sections on Internet use sought to find out to what level the respondent can browse the Web using links and URLs (web addresses), and his or her use of search engines and commands such as "download" and "print". The survey also sought to find out if the users can participate in online discussions and whether they can recognize which chat rooms (areas on the Internet or other computer network where users communicate, usually on specific topics) might be appropriate. The table summarizes results of respondents who rated their skills as "good" and "very proficient". The remaining percentage would require training to bring their knowledge level at least to "good".

Table A.5: Applications knowledge/skills (MPs)

Assessment area	Knowledge (per cent) (Average of "good" + "very proficient")
E-mail use • send/receive e-mails, attach and detach documents	41
Internet Use • browse Internet, use links, URLs and search engines • download and print, chat rooms	31
Word-processing • basic typing, save and print docs, "print preview" command • cut & paste, delete, insert, spell and grammar check • fonts, margins and tables	34
Spreadsheets • labels, values, headings, formulas, insert, delete	18

47. The findings suggested that there is very low knowledge of spreadsheets, as only 18 per cent of respondents indicated that their knowledge of using spreadsheets was "good" or "very proficient". This implied that 82 per cent of MPs require some basic training in the use of spreadsheets. Skills could also be upgraded in other areas

that demonstrated low levels of proficiency. The highest skill levels were shown in using e-mail, where about 41 per cent of the MPs indicated that they were fairly comfortable with e-mail usage (see also table A.6).

48. This section checked to find out if the Parliament of Botswana has a standing programme to train MPs regularly on ICTs. Only 28 per cent of the respondents indicated a clear “no”. This difference between those who said “no” and those who said “yes” could be attributed to the fact that the large majority of the current MPs are new entrants.

Table A.6: Applications and other areas training needs (MPs)

Assessment area	Training Needs (per cent) (“yes” response)
Word-processing	49
Spreadsheet	72
E-mail	51
Presentations	77
Web browsers	63
Awareness of benefits of ICT for good governance and improving democratic processes	67
Capacity of MPs to utilize ICT as a tool for institutional development and efficiency	77
Information access by Parliament to enable effective debate	67
Sharing and enhanced public participation in the legislative and policymaking process	65
Strengthen the capacity of Parliament to use ICT to access information, document and package knowledge	63
Provide platforms for Parliament for sharing experiences of good practices among MPs and parliamentary staff	65
Improve inter-parliamentary cooperation through ICT	67

49. This section of the survey asked about the basic training needs in ICT and sought to find out if the MPs would like training on awareness of the benefits of ICT usage in general for good governance and improvement of the democratic process and for cooperation with other parliaments. The representation in table A.6 shows the percentage of respondents who clearly indicated that they did not want training in that assessment area. This was prompted by the fact that a significant number of respondents chose not to fill anything on this section, and it was assumed that a missing entry implies that the responded does require training on that aspect.

3.2.3 Contributing to an inclusive Information Society in Botswana

50. Only 41 per cent of the surveyed MPs indicated that they are aware of the current status of the National ICT Policy and Strategies. This low level of awareness of the state of the policy is closely linked to the 95 per cent who said they lacked awareness of the priority areas of the policy. However 38 per cent of the MPs believed that the policy, if implemented, will have a “high impact” on the attainment of the MDGs.

51. The survey asked how successful Parliament had been in terms of providing effective parliamentary scrutiny and oversight over the National ICT Policy and Strategies, and 19 per cent of respondents indicated that it had been “quite successful”. This low rate could be from the fact that 60 per cent of the respondents either did not respond to this question or their response was “don’t know”. A convincing 84 per cent of MPs indicated that more

needs to be done in terms of raising awareness and building capacity on the Information Society to help MPs take a stronger role in “e-strategy” processes.

Table A.7: Initiatives needed to improve MPs’ scrutiny and oversight (MPs)

Assessment area	Initiative required (per cent) (yes)
Awareness campaign on Maitlamo	67
Training on priority areas of policy framework	63
Establish ICT Committee to foster linkages between MPs, ministries and other institutions in charge of ICT policy	51
Periodic debates/questions to executives related to harnessing ICT for development	40
Continuous hands-on practice for MPs to equip them with ICT literacy to allow them to undertake research on issues of harnessing ICT for development	53
Involve MPs in the baseline study and stakeholder validation workshop	47

52. In table A.7, the percentage shown is for those who are clearly not opposed to the idea of the suggested initiatives. On average 30 per cent of the respondents had chosen not respond to the question and this could suggest that an explanation was required in order for them to respond adequately to the section.

3.2.4 Contributing to an inclusive Information Society in Botswana: oversight

53. Asked how successful has the Parliament been in terms of approving ICT bills or enacting legislation related to the development of the Information Society, 30 per cent of the respondents have indicated that it has been “quite successful”. This low rate could be from the fact that 56 per cent of the respondents either did not respond to this question or responded “don’t know”.

Table A.8: Initiatives required to improve Parliament’s effectiveness in enacting legislation related to the Information Society (MPs)

Assessment area	Initiative required (per cent) (yes)
Awareness campaign on cyber-laws, creating and enabling legal and regulatory environment	21
Periodic debates with support from external cyber-law experts	16
Specific hands-on ICT practice sessions for MPs to allow them to access best practices and databases on the issue	21
Involve MPs in the baseline study and stakeholder validation workshops	19

54. In table A.8, the percentage shown is for those who are clearly agreeable to the idea of initiatives as suggested. It should be noted that a very large number (72 per cent) of respondents left this section unanswered.

3.2.5 Contributing to an inclusive Information Society in Botswana: funding

55. MPs were asked what strategy they would propose for ensuring more funds for implementing an inclusive Information Society in Botswana. An average of about 44 per cent did not respond to this question (see table A.9).

56. The last question on this section was structured to find out if MPs have been promoting ICT for development in their constituencies. Only 16 per cent of the MPs indicated some level of success. The conclusion of this result was that MPs would like an awareness-raising campaign on ICT for community development.

Table A.9: Initiatives to ensure funding for the Information Society in Botswana (MPs)

Assessment area	Initiative required (per cent) (yes)
Ensuring that ICT funds are allocated for development sectors in the national budget	58
Ensuring that partners allocate budget during bilateral and multilateral negotiations for integration of ICT in the areas of cooperation, as a tool to accelerate the expected achievements	35
Advocating legislation in favour of both FDI and local investment in ICT	42
Advocating legislation in favour of PPP	35
Advocating tax incentives on relevant ICT4D programmes	30

3.2.6 Promoting inter-parliamentary cooperation through ICT

57. The impact was assessed of inter-parliamentary communication using ICT to reinforce parliamentary control, influence and scrutiny at all levels. Only 19 per cent of MPs felt that inter-parliamentary communication will have some level of impact. According to MPs, the Parliament of Botswana has had limited success (11 per cent) in promoting inter-parliamentary communications using ICT.

Table A.10: Initiatives to promote inter-parliamentary cooperation (MPs)

Assessment area	Benefit (per cent) (yes)
Establish innovative mechanisms to facilitate information flow between parliaments	44
Promote information exchange and best practices between parliaments; reinforce parliamentary control, influence and scrutiny at all levels	49
Access best practice on pro-poor ICT applications elsewhere	27
Promote cooperation with parliaments from other countries	33

58. This section was mostly left blank in the questionnaire, which could suggest that an awareness campaign should be mounted about the benefits of inter-parliament cooperation. The results of the limited response are shown in table A.10.

3.3 Parliamentary staff survey

3.3.1 Capacity, infrastructure and applications: access and use of computer

59. In general, 74 per cent of the surveyed parliamentary staff (users) replied that they did work on a personal computer and a significant percentage (71 per cent) that they had access to the Internet. However, 11 per cent of Parliament staff said they had web pages. There was a question about this figure for staff web pages, since the ICT Section revealed in discussion that no official web pages were available at that time.

Table A.11: ICT use and web presence (users)

Assessment area	Availability/usage (per cent)		
Work on computer	74		
Availability of ICT services/facilities	Personal	Shared	Cumulative
PC	45	30	75
Laptop	05	19	24
Printer	23	63	86
Fax	03	75	78
Parliament intranet	08	56	64
Internet	27	44	71
Remote data access	11		
Cellphone	73		
PDA	03		
Office e-mail	71		
Personal e-mail	52		
Office web page	11		
Personal web page	09		

3.3.2 Capacity, infrastructure and applications: knowledge/skills

60. Some 62 per cent of staff users said they had been through some level of training, and this training had been over the period 1989-2010. There was quite a high level of adequacy in basic word-processing applications, as 77 per cent of users indicated they rated their skills in word-processing as “adequate”. The level dropped for other applications and the lowest skill level was for using presentations, where 36 per cent described their skills as “adequate”.

Table A.12: Applications usage and adequacy level (users)

Assessment area	Adequacy/usage (per cent)				
Capacity	Word-processing	Spreadsheet	E-mail	Presentation	Web browsers
Applications used	77	40	74	36	41
Applications training	62				
Adequacy (“adequate”)	77	49	77	48	45

3.3.3 Capacity, infrastructure and applications: knowledge/skills

61. The “knowledge/skills” section of the survey covered IT knowledge in depth. For example, the sections on Internet use sought to find out to what level the respondent can browse the Web using links and URLs (web addresses), and his or her use of search engines and commands such as “download” and “print”. The survey also sought to find out if the users can participate in online discussions and whether they can recognize which chat rooms might be appropriate. The table summarizes results of respondents who rated their skills as “good” and “very proficient”. The remaining percentage would require training to bring their knowledge level at least to “good”.

Table A.13: Applications knowledge/skills (users)

Assessment area	Knowledge (per cent) (Sum of "good" + "very proficient")
E-mail use • send/receive e-mail, attach and detach documents	57
Internet use • browse Internet, use links, URLs and search engines • download and print, chat rooms	39
Word-processing • basic typing, save, print docs, print preview • cut & paste, delete, insert, spell and grammar check • fonts, margins and tables	68
Spreadsheets • labels, values, headings, formulae, insert, delete	37

62. Table A.13 shows that 37 per cent of respondents indicated their skills with spreadsheets were “good” to “very proficient” and above. The Parliament of Botswana is doing enough when it comes to training its staff in basic computing fundamentals.

63. This section aimed at finding out if the Parliament of Botswana has a standing programme to train users regularly on ICTs. A high percentage of 94 per cent of the respondents indicated a clear “yes”. This also suggests that the Parliament of Botswana is doing enough when it comes to training its staff in basic computing fundamentals.

Table A.14: Training needs in applications and other areas (users)

Assessment area	Training needs (per cent) (yes)
Word-processing	52
Spreadsheet	70
E-mail	61
Presentations	76
Web browser	77
Awareness on benefits of ICT, good governance and improvement of democratic processes	80
Capacity of MPs to utilize ICT as a tool for institutional development and efficiency	75
Information access by parliaments to enable effective debate	83
Sharing and enhanced public participation in the legislative and policymaking process	79
Strengthen the capacity of parliaments to use ICT to access information and to document and package knowledge	82
Provide platforms for parliaments to share good practices among MPs and parliamentary staff	82
Improve inter-parliamentary cooperation through ICT	84

64. In addition to surveying the basic training needs in ICT skills, this section of the survey also tried to find out if the users would like training on awareness of the benefits of ICT usage in general for good governance and improvement of the democratic process, in cooperation with other parliaments. Table A.14 shows the percentage of respondents who indicated that they wanted training in this area.

3.3.4 Contributing to an inclusive Information Society in Botswana: oversight

65. Only 18 per cent of the surveyed users indicated that they are aware of the current status of the National ICT Policy and Strategies. However 41 per cent of the users said they believed that, if it is implemented, the policy will have a “high impact” on the attainment of the MDGs.

66. The response to the question on how successful the Parliament had been in providing effective parliamentary scrutiny and oversight over the ICT Policy and Strategy, 20 per cent of the respondents indicated that it has been “quite successful”. A very high 87 per cent of staff respondents indicated that more needs to be done in terms of raising awareness and building capacity on the Information Society to foster MPs’ role in processes linked to e-strategy.

Table A.15: Initiatives needed to improve MPs’ scrutiny and oversight (users)

Assessment area	Initiative required (per cent) (yes)
Awareness campaign on <i>Maitlamo</i>	87
Training on priority areas of policy framework	84
Establish ICT Committee to foster linkages between MPs, ministries and other institutions in charge of the ICT Policy	83
Periodic debates/questions to the Executive related to harnessing ICT for development	75
Continuous hands-on practices for MPs to equip them with ICT literacy to allow them to undertake research on issues of harnessing ICT for development	84
Involve MPs in the baseline study and stakeholder validation workshop	84

3.3.5 Contributing to an inclusive Information Society in Botswana: Funding

67. To the question asking how successful Parliament had been in terms of approving ICT bills, or enacting legislation related to the development of the Information Society, 17 per cent of the respondents have indicated that it has been “quite successful”.

Table A.16: Initiatives required to improve Parliament’s effectiveness in enacting legislation related to the Information Society (users)

Assessment area	Initiative required (per cent) (yes)
Awareness campaign on cyber-laws, creating and enabling legal and regulatory environment	47
Periodic debates with support from external cyber-law experts	41
Specific ICT hands-on practices for MPs to allow them to access best practices and databases on the issue	45
Involve MPs in the baseline study and stakeholder validation workshops	43

68. On the table provided, the percentage shown is for those who clearly agree to the initiatives suggested.

Table A.17: Initiatives to ensure funding for the Information Society in Botswana (users)

Assessment area	Initiative required (per cent) (yes)
Ensuring that ICT funds are allocated for development sectors in the national Budget	81
Ensuring that during bilateral and multilateral negotiations, partners allocate budget for integrating ICT into the areas of cooperation as a tool to accelerate the expected achievements	71
Advocating legislation in favour of both FDI and local investment in ICT	66
Advocating legislation in favour of PPP	66
Advocating tax incentives on relevant ICT4D programmes	57

69. Users were asked how they see the strategy for ensuring more funds for implementing an inclusive Information Society in Botswana.

3.4 Conclusions

70. In terms of infrastructure, the Parliament of Botswana has taken significant steps towards providing computers to all MPs and users. There is a computer in all Constituency Offices and only a handful of these are not connected to the Internet. However, there is need to improve the automation system for the parliamentary process, including digitization of the proceedings. An information system also needs to be procured for the library. It would add value if the proceedings in Parliament were broadcast live through various media, such as radio and TV.

71. More work needs to be done in order to bring users to a level of skills where they can manipulate basic computing applications. The weak points were presentations and spreadsheets.

72. There is a lot that needs to be done in terms of getting users and MPs to be aware of the Information Society and inter-parliamentary cooperation through ICT. The survey clearly shows that there should be awareness workshops for the respondents on this issue.

73. The Parliament of Botswana needs an ICT Committee as a matter of urgency so that they can start to assist in the process of making sure that ICT has proper representation within the legislative processes.

Annex 2

Report on Workshop on “The Role of the Members of Parliament in Building an Inclusive Information Society towards Accelerating the Millennium Development Goals (MDGs)”

28 – 29 June 2010
Gaborone, Botswana

Executive Summary

In the context of the multi-year programme of the Southern African Development Community (SADC) and United Nations Economic Commission for Africa (ECA), the ECA-Southern Africa office (ECA-SA), in collaboration with the ECA’s ICT, Science and Technology Division (ISTD), supports the South African Development Community Parliamentary Forum (SADC PF) to implement its Information Communication Technology (ICT) Strategy for SADC Parliaments. The workshop on the “role of Members of Parliament (MPs) in building an inclusive Information Society towards accelerating the Millennium Development Goals (MDGs)” was undertaken in response to a request from the Botswana Parliament for assistance to develop its ICT Master Plan in line with Botswana’s national ICT initiatives.

The workshop was convened during the period 28–29 June 2010 at Mokolodi Nature Reserve in Gaborone, Botswana. The attendees were 37 MPs and members of staff of the Parliament.

The objectives of the workshop were: to sensitize the MPs on the important role they are expected to play to support policies and strategies on ICT for development at national, subregional and global levels; to enable MPs to advocate for development and use of ICTs in Parliament; and to assist them to be fully engaged in national ICT issues.

The ECA presented the workshop with information on its work and the implementation of the Africa Information Society Initiative (AISI). SADC PF presented the global and regional ICT programmes for parliaments, the modalities of moving towards harmonized model ICT legislatures, and the role of parliaments and parliamentarians in facilitating the establishment of an enabling policy and regulatory environment to support the use of ICT.

The Ministry of Transport and Communications presented the overview of the current status of ICT in Botswana, the current policy and future trends. Botswana Telecommunications Authority briefed the MPs on telecommunications reforms for promoting and facilitating a competitive ICT environment. Another presentation to the workshop contained an overview of the ICT status at the Parliament of Botswana and a briefing on the progress of the ICT Master Plan under preparation, and it included a case study from the National Assembly of Zambia (NAZ). These presentations influenced the workshop to include establishment of radio and television in the Botswana ICT Master Plan, among other objectives.

The workshop expressed support for the institutionalization of the ICT Committee in the Parliament. Terms of reference and a plan of action for the ICT Committee were provided to speed up the process.

1. Background and objective

1. In response to the Botswana Parliament request's to ECA-SA for assistance in developing an ICT Master Plan in line with the SADC PF ICT Strategy, the ECA-SA office in collaboration with the ECA's ISTD organized a workshop on the "The Role of Members of the Parliament in building an Inclusive Information Society towards Accelerating the Attainment of the Millennium Development Goals (MDGs)". This Workshop for the Parliament of Botswana was held at Mokolodi Nature Reserve in Gaborone, on 28-29 June 2010.
2. Before the workshop, ECA had held preliminary consultative meetings with the Parliament of Botswana to discuss and finalize the terms of reference for developing the ICT Master Plan, including revision of survey questionnaires as well as modalities for undertaking surveys of MPs and the Parliament of Botswana as an institution. In addition, ECA provided financial support for the orientation of the new Parliament of Botswana, which was held in November 2009, and was also present to provide technical support to the workshop, whose overall objective was to provide the new Parliament with an overview of the purpose and business of the Parliament.
3. ECA organized the workshop with the overall objective of enabling MPs to advocate the development and use of ICTs in the Parliament and to facilitate them to be fully engaged in national ICT issues. This is because it is important for them to understand that MPs, as officials elected by the public and lawmakers, are expected to play significant roles in supporting policy and strategies for ICT for development at national, subregional and global levels.
4. The aim of the workshop was that it would enhance MPs' understanding of the issues and they would later be involved in lobbying effectively for policies underpinning the importance of ICTs to development. Activities could include:
 - (a) Promoting national ICT policy frameworks;
 - (b) Lobbying for domestication of the regional instruments on ICT that had been signed previously; and
 - (c) Building capacity of Parliament to monitor existing policies to make sure they comply with international, regional and continental standards and developments.

2. Attendance

5. The meeting was attended by the Speaker of the Parliament, the Deputy Speaker, two Ministers, one Assistant Minister, 23 MPs, nine staff responsible for ICT in Parliament, representatives from the Ministry of Transport and Communications and from Botswana Telecommunications Authority, representatives from the ECA, SADC PF and NAZ, consultants and media (see appendix I).

3. Opening session (Session I)

Chairperson: Hon. Isaac Mabiletsa

3.1 Opening statements

6. Welcome remarks were delivered by Dr. Munorweyi Dhliwayo on behalf of the Executive Secretary of the United Nations Economic Commission for Africa and the Director of the Southern Africa Office. In delivering these welcome remarks, he outlined the objective of the workshop as follows:

- (a) To familiarise MPs with ECA's mandate for building the Information Society;
- (b) To strengthen the role of MPs in building the Information Society and enhance their awareness and use of ICT in the Parliament;
- (c) To involve MPs to participate actively in the processes of e-strategies through the establishment of a parliamentary ICT Committee; and
- (d) To involve MPs in the development of the ICT Master Plan.

7. The workshop was officially opened by the Speaker of National Assembly, the Hon. Dr. Margaret Nasha. She expressed her apologies for the delays experienced in earlier attempts to convene the workshop, which were due to the challenges of assembling legislators who, in turn, needed to consult their constituency timetables. She said that she hoped however that the choice of venue away from the city would ensure full participation with limited distractions.

8. The Hon. Speaker expressed delight that, despite the delays, the long-overdue workshop had finally been convened and that the expectation of MPs had been heightened. She noted that as all those present live in a global village, the participants in the workshop, as leaders, are required to be fully literate in all areas of ICTs. She stressed that as parliamentarians they had to be accessible and had to take the Parliament to the people, as well as improve their oversight role.

9. The Hon. Speaker hoped that the workshop would leave them with a working plan and strategy that they could put into action. She further expressed the hope that the workshop would provide guidance on the establishment of an ICT Committee in the Parliament as it did not exist at that time. She said the Parliament would like to be accountable, accessible and knowledgeable in ICTs, so as to improve its oversight role.

3.2 Election of chairpersons

10. The meeting elected the chairpersons of the sessions, as shown in the adopted agenda.

3.3 Adoption of agenda and the work programme

11. The agenda shown below was adopted for the meeting.

Session I: Opening session

Session II: Information for development

Session III: Understanding Botswana's ICT environment

Session IV: Enabling environment – information, science and technology for all

Session V: Institutionalizing ICT for development within the Parliament

Session VI: Way forward

Session VII: Closing session

4. Account of proceedings

4.1 Information for development (Session II)

Chairperson: Hon. Isaac Mabiletsa

4.1.1 Presentation of the ECA work programme, implementation of AISI at national and regional levels, the National Information and Communication Infrastructure (NICI) process, and the role of the Parliament.

12. The ECA's Chief of ICT Section presented the work programme of the ECA and provided the background of AISI, which was launched in 1996 as a vision of ICT development in Africa and a cooperation framework for partners supporting ICT development in Africa. He outlined the activities of AISI, which entailed policy development for the National Information and Communication Infrastructure (NICI), development of sectoral applications, infrastructure and Internet connectivity, as well as training and capacity-building.

13. He further explained the policy process of deliverables, including the baseline scenario of a framework which answers the question why a policy is required, the policy itself which outlines the government's commitments on those things that need to be done, and finally formulating a plan to translate the commitment to the policy into concrete programmes which answer the question of how the policy will be delivered.

14. He informed the workshop that almost all African countries had developed their NICI policies using the AISI framework but had not formulated plans to translate their commitments into concrete programmes. The presenter explained that, for example, ICT is under-budgeted in most sectors of national economies in Africa, even though policies exist in most countries, and that demonstrated that national governments are committed to ICTs for development.

15. He further depicted the pillars of e-government as: public access to ICT, customs and immigration, e-parliament, e-health, e-banking, e-procurement, e-commerce, e-tourism, ICT in education, communication and infrastructure. He informed the workshop that an e-government index measure had been created to estimate the performance of governments in the promotion of more efficient and effective government activities, which facilitated accessibility to government services, allowed greater public access to information, and made government more accountable to citizens. He demonstrated that data on readiness for e-government (measured by governments' use of the Web, infrastructure, human capital and e-government readiness indices) put most African countries at the bottom of scale as compared to the rest of the world.

16. In summary, the representative of ECA explained the importance of ICTs in parliaments and how they can be utilized in promoting democracy by improving the provision of information for citizens and for public and private information institutions, as well as enhancing interaction between parliamentarians and citizens.

17. His presentation also acknowledged the challenges of MPs' lack of ICT skills and the poor access to infrastructure within parliaments and constituencies and/or lack of strategic plans resulting in implementation of "islands" of ICT solutions, which have no clear definitions of "need" and "problem".

18. The presentation concluded by urging the development of e-strategies and master plans which focus on the core functions of the parliament and mainstream ICTs into the roles of parliaments and MPs, in order to enhance communications, dissemination and information management, interaction with constituents and the general public. ICTs could also help improve the parliaments' scrutiny of the executive branches of government and could be used to contribute to national, regional and global debates on the Information Society.

4.1.2 Presentation of the global and regional perspective of ICT programmes in parliaments.

19. The SADC PF representative told the workshop about SADC PF's mandate of supporting the global programme for strengthening parliaments through global, regional and national programmes intended to enhance the institutional capacity of parliaments.

20. The presenter informed the meeting about the *World e-Parliament Report 2008* (Griffith, Jeffrey, and others, editors. 2008). This called on parliaments to have a clear vision for the effective use of ICT in parliaments. He emphasized that introduction and use of ICTs can help transparency and accountability in order for parliaments to be representative institutions.

21. He further informed the workshop that SADC PF had surveyed in 2002 the problems encountered by the SADC parliaments as they attempted to utilize ICTs and had found that some initiatives had proved unsustainable.

22. The following observations were made in the ensuing discussion:

- (a) The meeting observed that the statistical graphs that were presented which suggested that some countries had no ICT policy may misrepresent that fact that countries are implementing ICTs but not through national ICT policies, and this indicated that their parliaments should intervene and help create enabling environments;
- (b) The workshop also observed that ICT budget estimates obtained from the ministries responsible for ICT may not be accurate because ICTs are implemented through and are part of the mandate of several ministries. It was however agreed that even if ICT budgets were mainstreamed the levels were far too low to suggest that ICTs were playing an important role in development;
- (c) It was also observed that the existence of several ICT operators may not necessarily mean that free competition exists, and it could also indicate the existence of corruption and lack of scrutiny and oversight; and
- (d) The meeting raised issues of maintaining and updating information on websites. Participants inquired about the stage of development of the website of Parliament of Botswana and were informed that an overview of the ICT status of the Botswana Parliament was to be presented in the next session.

4.2 Understanding Botswana ICT environment (Session III)

Chairperson: Hon. Odirile Motlhale

4.2.1 Overview of ICT status in Botswana, status of policy, current and future trends

23. The representative of the Ministry of Transport and Communications presented an overview of the current ICT status in Botswana, as well as the status of ICT policy and outlined current and future trends. She first told the workshop about the background and the presence of ICT in the country by explaining that ICTs in Government date back a long time. She said many ministries had ICTs and were on line, but there were many challenges such as lack of inter-operability among ministries; lack of interfacing and integration; as well as limited or missing security within the systems. She said these challenges brought duplication and inefficiencies and rendered the systems ineffective if they were self-serving, inconvenient and too insular, as well as costly.

24. She said it had become apparent from the above challenges that service delivery and customer service were the main casualties and therefore participants needed to rethink government service delivery in order to provide services more efficiently. She added that this led up to the formulation of the national ICT policy, which became

a high-level vision for service delivery in the light of the increased potentials of ICTs and the opportunities they offered to be transformational. She added that the national ICT policy was also driven by the Government's Vision 2016 document, but had seven focus areas as follows:

- (a) Connecting communities;
- (b) *ThutoNet*;
- (c) e-health Botswana;
- (d) ICT and economic diversification;
- (e) e-legislation (connectivity laws and policy);
- (f) Connecting Botswana (telecommunications); and
- (g) Government on-Line.

25. The presenter shared some ICT statistics on Botswana which showed a low level of Internet users and penetration (6 per cent) but a high level of mobile penetration and usage in the country. Statistics showed the IT industry contributed 4 per cent to gross domestic product (GDP), ADSL/Broadband penetration was very low at a mere 1 per cent and personal computer penetration was also low at 2-3 per cent.

26. She informed the workshop that the Telecommunication Policy has been amended and liberalized and a regulator has been created. There are two mobile operators and one fixed-line operator, but further liberalization would lead to three private telecommunications operators, Voice Over Internet Protocol (VOIP) as well as licences to provide the international gateway and unlimited Value Added Networks Service (VANS). She further said that the Government of Botswana intends to sell its 40–49 per cent shares in key businesses to the public and the private sector. It is planned to boost internal ICT growth including plans to connect 197 villages by December 2010 and connect Botswana externally through the East Africa Submarine Systems (EASSy) cable by August 2010 and through the West Africa Festoon Systems (WAFS) by August 2011.

27. She concluded by emphasizing her Ministry's approach to e-government and said this was being undertaken through three streams:

- (a) Legislation, undertaken under the Attorney General's Chambers (AGS) to facilitate proper and effective use of e-technologies;
- (b) Change management, including capacity-building undertaken by the Department of Public Service Management, communication by the Botswana Government Communication Information System (BGCIS), business process reengineering and mindset change and strategy by the Public Service Reform Unit (PSRU) at the Office of the President; and
- (c) Technical, undertaken by the Ministry of Transport and Communications.

4.2.2 Brief on Botswana ICT regulatory perspectives

28. A presentation about regulatory perspectives on ICT in Botswana was made by a representative of the Botswana Telecommunications Authority (BTA), who updated participants on telecommunications reforms that have been made in the ICT sector to promote and facilitate a competitive ICT environment and advance the knowledge society and economic diversification in Botswana through innovation and fair competition.

29. He talked about BTA's role in creating an environment that is conducive for all stakeholders, including the political leadership, *dikgosi* (chiefs), government media, industry and others, to contribute fully to the

attainment of the MDGs, the National Development Plan, the National Policy for ICT Development (*Maitlamo*) and Vision 2016. He cited as examples the provision of licenses for various ICT applications to consumers and the establishment of ICT centres at various postal offices as some of BTA's efforts to liberalize and support ICT for development in the country.

30. The presenter also informed participants that BTA had further demonstrated its commitment to uphold the principles of the Information Society by improving access to information, communications and infrastructure through creating a Universal Service Fund to implement the *Nteletsa* project; emphasizing a technology-neutral licensing regime; encouraging infrastructure sharing by regulated entities; reserving certain portions of the spectrum for use by Value Added Networks Service (VANS) and small ICT players; and monitoring tariffs to make them affordable to subscribers.

31. He said that BTA was building capacity by supporting government initiatives through donations of ICT requirements to schools and communities. It had also sponsored university students to attend the International Telecommunication Union youth forum, introduced a graduate development programme, contributed to the CRASA (formerly the subregional ICT regulators' association and now the Communication Regulators' Association of Southern Africa) initiative, which was linked to the NetTel@Africa project, and actively participated in regional and international regulatory organizations.

32. The BTA was diligently registering prepaid mobile phone subscribers in order to increase confidence and security; it educated the public on electromagnetic radiation; it promoted a cyber-security act; and it collaborated with public telecommunications operators and security agencies to deal with issues of blacklisting.

33. He concluded by informing the workshop of the challenges in introducing BTA as a converged regulator and providing a law that would allow BTA to apply administrative sanctions in order to address other operational challenges such as opening access to all international connectivity initiatives and lowering access charges so as to increase Internet penetration.

4.3 Overview of Parliament of Botswana ICT status/draft ICT Master Plan

34. The consultant on the Parliament of Botswana ICT Master Plan presented the ICT status of Parliament of Botswana by first informing the workshop of the objectives:

- (a) Strengthen ICT governance;
- (b) Strengthen Parliament's information and knowledge infrastructure;
- (c) Strengthen Parliament's oversight, legislative and advocacy functions;
- (d) Strengthen Parliament's involvement in national and subregional ICT policy and strategies;
- (e) Strengthen MPs' involvement in activities relating to ICT for community development;
- (f) Strengthen MPs' capacity and advocacy on e-government, e-governance and e-democracy;
- (g) Assess the risks contained in the ICT Master Plan and suggest risk mitigation strategies, as well as systems for tracking indicators on the implementation of the ICT Master Plan;
- (h) Develop a comprehensive detailed budget and project plans with time charts for activities covering a three-year period;
- (i) Develop and implement a strategy to mobilize resources to speed up the implementation of the Master Plan; and

- (j) Enhance inter-parliamentary cooperation, collaboration and knowledge-sharing through use of appropriate technology.
35. He also presented the methodology undertaken and the responses obtained from the Parliament, which was 70-80 per cent for MPs, when 100 per cent coverage was expected.
36. He provided national and regional perspectives in order to link the efforts being undertaken at Parliament with those being undertaken nationally and regionally to bring an understanding of why the Parliament of Botswana should develop its ICT Master Plan.
37. The Consultant outlined the framework of the ICT Master Plan as comprising of four areas, namely:
- (a) Applications Training: training in MS Office Suite, Internet browsing and social networking, library information systems (LIS), document management systems (DMS);
 - (b) Awareness Workshops: covering ICT and governance (e-government, e-governance and e-democracy), Parliament's involvement in national and subregional ICT policy and strategies, ICT for community development, and Parliament's oversight, legislative and advocacy functions;
 - (c) Infrastructure and support systems: computers, Internet, website enhancement, DMS, LIS, radio and TV; and
 - (d) Capacity-Building for Parliament's ICT Section using the Enterprise Architecture methodology (People, Process, Technology).
38. He finished by applauding the Parliament of Botswana for having taken significant steps towards providing all MPs and users at Parliament with computers, but pointed out that the constituency offices were under-equipped, with only a handful of computers and inadequate connections to the Internet. He further pointed out that there was need to improve automation systems for the processes of the Parliament, including digitizing the proceedings and capacity to broadcast them live through various media, such as radio and TV. The requirements included procurement of an LIS.
39. The following observations and questions were voiced about the presentations of this section:
- (a) It was asked who really benefited from ICTs since they seemed to benefit outsiders. This was answered by assuring the workshop that the *Ntelelsa II* project would ensure that benefits accrue to Botswana since telecommunications would connect 197 villages by December 2010;
 - (b) It was observed that the rollout of computers in primary schools was low as it currently stood at 88 out of 760 primary schools in the country. It was pointed out that this should be corrected as education was pivotal to ICTs and that it should be ensured that all levels of education were automated and that monitoring systems were put in place. It was also observed that industries should be part of computerization; and
 - (c) It was observed that there were constraints at the Attorney General's Chambers as processes of connectivity laws and policy were taking long and required to be fast-tracked. It was suggested that drafters should be engaged to speed the process up. Fears were expressed about ICT promoting crime and the workshop was assured that, although this could not be completely prevented, an Act on cybercrime and computer crime had been put in place.

4.4 Enabling environment – information, science and technology for all (Session IV)

Chairperson: Hon. Bagalatia Arone

4.4.1 Presentation of modalities of moving towards harmonized model ICT legislature and the role of parliaments and parliamentarians in facilitating the establishment of an enabling policy and regulatory environment supporting the use of ICT.

40. The SADC PF representative informed the workshop that SADC PF, as a focal point for national parliaments in the SADC subregion, draws its documentation from various programme areas, such as:

- (a) Norms and standards for elections in the SADC subregion in order to strengthen electoral institutions;
- (b) Modern law on HIV/AIDS in SADC to provide a comprehensive framework for harmonization of HIV and human rights laws in the SADC subregion;
- (c) Forum for SADC regional consultative initiatives on protocols on gender and development; and
- (d) Benchmarks for democratic parliaments in the SADC subregion, which were being developed at that time.

41. He also said that SADC PF had identified ICT as cross-cutting and was using it to harness the efforts of various stakeholders to accelerate its potential to attain a holistic and coordinated approach for optimum utilization of resources. ICT had been singled out as an enabling tool for socio-economic development and regional integration and was being used as a key instrument in:

- (a) SADC Protocol on Transport, Communication and Meteorology;
- (b) SADC ICT Declaration;
- (c) Regional Indicative Strategic Development Plan (RISDP); and
- (d) African Information Society Initiative (AISI).

42. The presenter then informed the MPs that, as elected representatives of the peoples of the SADC subregion, they could play an important role towards the realization of the objectives of the SADC instruments mentioned above.

43. The following was also observed during the discussion.

44. Security fears about MPs' presence on the Web were allayed as MPs were assured that passwords gave enough security to prevent intrusions. It was agreed that it was good that MPs had personal computers as they were working tools and not status symbols.

4.5 Institutionalizing ICT for development within the Parliament (Session V)

Chairperson Hon. Moiseraele Master Goya

4.5.1 Overview of the ICT Master Plan for the National Assembly of Zambia (NAZ)

45. The overview of the ICT Master Plan for NAZ was given by the IT Manager, who informed the workshop that the introduction of reforms pushed NAZ to adopt ICTs as a tool for the actualization of the reform agenda and that resulted with the creation of the ICT Department.

46. He also informed the participants that the adoption of ICTs required that an ICT Master Plan be developed to address the issues contained in the reform agenda in a more holistic manner. He said that the ICT Master Plan had a vision that it would “harness ICT potentials towards a REAL Parliament” where “REAL” stands for Representative and Responsive, Efficient and Effective, Accountable and Accessible, Legitimate and Linked.

47. The presenter also gave an overview of the ICT objectives targeted and the methodologies used. He highlighted the pillars of the plan as well as the institutional framework for its implementation. In addition, he outlined an overview of the ICT infrastructure, its network and hardware, software and ICT services, as well as human resources.

48. The ICT Manager presented the functions of the parliament and how MPs can be involved in reinforcing the e-strategy processes and concluded by reinforcing the need for MPs to spearhead the harnessing of the potentials of ICTs to accelerate socio-economic development and regional integration.

4.5.2 The role of the parliament ICT committees and developing a plan of action to create an ICT Committee

49. The representative of the ECA presented the objectives of an ICT committee and the responsibilities of committee members. He explained the structure and composition of an ICT Committee in Parliament and said it could have an external multidisciplinary advisory group, if required. He also reported that the ICT Committee would lead in the development and implementation of the ICT Master Plan for the Parliament.

50. He presented to the Parliament for consideration the terms of reference for the ICT Committee and a strategic plan of action to implement it. The workshop then deliberated on:

- (a) It was observed that it was important for the Parliament to have a standing ICT Committee as MPs realized that their standing orders did not include ICT issues;
- (b) It was also agreed that the Rwandan experience could be used as a benchmark as it had become obvious that MPs in Botswana lacked knowledge of issues faced by their communities;
- (c) It was generally agreed that the Parliament of Botswana needed an ICT Master Plan, which should include a requirement for radio and television for the Parliament as well as hardware and infrastructure at constituency level. It was concluded that the costs involved in establishing radio and television broadcasts were not extraordinarily high, taking into account the experience of NAZ;
- (d) Concern about technology failure was allayed as the meeting was informed that backup and alternative routers existed which could take over connectivity in cases where certain routes failed; and
- (e) It was also established that NAZ is autonomous and therefore able to make quick institutional decisions, such as establishing the ICT Department, and there were no conflicts between MPs and the Executive.

5. Way Forward

51. The participants of the Workshop made the following:

- (a) It was recommended that an ICT Committee should be included in the Parliament’s standing orders;
- (b) The workshop gave its support for the establishment of an ICT Department; and

- (c) It was proposed that members of a Task Force should find out from the NAZ about the institutional arrangement with regard to the relationship between MPs and the Executive.

6. Closing Session

52. The workshop was closed with appreciation for the wisdom of selecting the venue, because it meant fewer distractions for MPs. In closing remarks, the Parliament of Botswana expressed its commitment to follow up on including an ICT standing committee in Parliament and to follow up on other institutional matters.

Appendix I: List of Participants

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| 30. Mrs Stella Moroka | Acting Parliamentary Counsel |
| 31. Mr Thebenala Thebenala | Senior Assistant Clerk |
| 32. Mr Christopher Lebekwe | Deputy Manager, Corporate Services |
| 33. Mr Dominic Mogwe | IT Manager |
| 34. Mr Elliance Mosweu | Assistant Systems Analyst |
| 35. Ms Kgakgamatso Monnaesi | Assistant Systems Analyst |
| 36. Mr Josiah Redman | Principal Public Relations Officer |
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