# A COMPARATIVE ANALYSIS OF THE IMPLEMENTATION OF THE E-PASSPORT SYSTEM IN BOTSWANA AND LESOTHO

by

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**DEDICATION**

This dissertation is dedicated to my late grandmother, nkhono Mats'iu Chabeli who inspired and persuaded me since I was a teenager to study hard and further my education to the highest possible level. Her encouraging words still live vividly in my mind. May her soul rest in eternal peace.

To my loving dad, ntate Mohlaoli Phate, who persuaded me to further my studies and supported me throughout this study, thank you.  I am truly blessed to have a loving and supporting dad. A special dedication is also extended to my mother, mme Mampe, Mamoloiatsana Phate, who also encouraged me to do well in my studies and looked after my daughter whenever I needed help. Words fail to express my gratitude to her. An exceptional dedication is also extended to my 'star' daughter, Khabiso Shata, who is the primary reason for the hard work I put in my studies. I love her so much that I endeavour to compensate the time I missed with her while focusing on my studies.

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## ABSTRACT

Public administration is concerned with the implementation of governmental policies to enhance efficient and effective service delivery to the public. Delivery of efficient and effective public services is not only the objective of government but a compulsory endeavour. Therefore, public administration is an indispensable aspect of any government to achieve governmental goals, including the execution of governmental policies and policy implementation. Policy implementation is the process whereby governmental plans, programmes or policies are executed in practice. However, classical public administration, which was primarily paper based, did not only retard delivery of services but in certain instances, impeded the governments' role to deliver public services effectively and efficiently. This was evident in the Department of Passport Services in Lesotho prior to 2013 when the process of issuing passports was laissez-faire. Nevertheless, the introduction of Information Communication Technology (ICT) has made it easier for governments to deliver effective and efficient services.  The utilisation  of ICT does not only enhance efficient and effective public service delivery but regular upgrading of ICT systems and even vigilant migration to the latest ICT developments, which  also equally vital in a contemporary, dynamic, and technologically advanced world. Most African countries still lag behind in ICT due to, among other, – lack of technological skills. To improve and align service delivery globally through ICT, African countries should take critical steps towards developing technological policies. This is prevalent in Botswana and Lesotho. Policies, notably the Maitlamo ICT Policy and the ICT Policy for Lesotho were developed that led to the implementation of the e-passport system in Botswana and Lesotho in 2010 and 2013 respectively.

The dissertation explains the legal framework that provided a foundation for policy implementation, which led to the implementation of the e-passport system in Botswana and Lesotho. The rationale for the adoption of the e-passport system in Botswana and Lesotho is expounded upon in this dissertation. The benefits and the challenges facing the implementation of the e-passport system in Botswana and Lesotho are elaborated upon and the recommendations which identify the challenges are outlined. A qualitative research approach was adopted and document analysis was utilised as the research

instrument to gather data from scholarly articles, government publications, notably the Department of Passport Services and the Department of Citizenship and Immigrations' documents, the *Lesotho Passports and Travel Documents Act*, 2016, (Act of 2016), Maitlamo ICT Policy as well as credible websites. Primary data was also collected through interviews which were conducted at the Department of Passport Services in Lesotho. The study revealed that the benefits of implementing the e-passport system in Lesotho included reduced turnaround time and internal corruption while financial, technological and organisational challenges; poor policy dissemination, lack of political and leadership will, poor infrastructure as well as poor communication between stakeholders were highlighted as further challenges. The suggested recommendations to remedy identified challenges included: engaging initiatives to disseminate the e-passport system policy to e-passport system policy beneficiaries and implementers; approval of the country's traditional norms and values; political and leadership will; intergovernmental and inter-organisational relations; enhance infrastructure and monitor the progress of the e-passport system.

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| | |
|---|---|
| **BTC** | BOTSWANA TELECOMMUNICATION BILLING SYSTEM |
| **E-ETD** | ELECTRONIC EMERGENCY TRAVEL DOCUMENT |
| **EAC** | EXTENDED ACCESS CONTROL |
| **G&D** | GIESECKE AND DEVRIENT |
| **ICT** | INFORMATION AND COMMUNICATION TECHNOLOGY |
| **IC** | INTERGRATED CIRCUIT |
| **IFMIS** | INTERGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEM |
| **ICAO** | INTERNATIONAL CIVIL AVIATION ORGANISATION |
| **LGDN** | LESOTHO GOVERNMENT DATA NETWORK |
| **LITS** | LIVESTOCK INFORMATION TECHNOLOGY SYSTEM |
| **MRTD** | MACHINE READABLE TRAVEL DOCUMENT |
| **MRZ** | MACHINE READABLE ZONE |
| **MNIG** | MINISTRY OF NATIONALITY, IMMIGRATION AND GENDER AFFAIRS |
| **NICR** | NATIONAL IDENTITY AND CIVIL REGISTRATRATION |
| **NEPAD** | NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT |
| **NPM** | NEW PUBLIC MANAGEMENT |
| **NIP** | NIKUV INTERNATIONAL PROJECTS |
| **RFID** | RADIO FREQUENCY IDENTIFICATION TECHNOLOGY |
| **UN** | UNITED NATIONS |
| **USA** | UNITED STATES OF AMERICA |

# CHAPTER ONE:    A COMPARATIVE ANALYSIS OF THE E-PASSPORT SYSTEM IN BOTSWANA AND LESOTHO

## 1.1    INTRODUCTION

Public administration is concerned with ensuring efficient and effective service delivery to the citizenry.  It is the basic role of government to ensure the provision of goods and services effectively and efficiently. The utilisation of information and communication technology (ICT) in the public sector, referred to as e-government, has simplified the achievement to ensure improved service delivery.  ICT was introduced in the public sector in the 1980s by developed countries. Carstens and Thornhill (2000:177-178) posit  that in the 1980s, Western developed countries initiated public sector reform and introduced a public management doctrine (implement values of  the private sector) in their governments, which led to, among other things, a  shift or transformation from paper based to electronic based public administration to improve service delivery through ICT. African countries also adopted ICT in the public sector to improve service delivery.

ICT does not only enhance efficient and effective  public service delivery but regular ICT upgrades and  vigilant migration to the latest technological developments are also equally fundamental in a contemporary, dynamic, and technologically advanced world. However, implementation of ICT systems is relatively costly, especially on the developing African continent. Despite Africa being rich in natural mineral resources, it remains the poorest continent in the world, and faced with various challenges, *inter alia,* political instability, poverty, inequality, underdevelopment and lack of skills (New Partnership for Africa's Development, 2001). Consequently, public administration on the African Continent is central for the promotion of political, social, economic and technological development. Technological development in Africa is faced with challenges which include: regular upgrading and maintenance of ICT systems, which is relatively costly. According to Thornhill, Van Dijk and Ile (2014:350), African countries are lagging behind in the introduction and utilisation of ICT compared to developed countries.  To address the aforementioned challenges, governments in Africa take the

necessary steps to formulate and more significantly, implement relevant policies to improve service delivery. As other African countries, Botswana and Lesotho also adopted the ICT system in the public sector to improve public service delivery. The International Records Management Trust (2006:1-23) states that Lesotho undertook extensive reforms in public administration which includes the introduction of computers and the internet to improve lengthy and paper based information to inhibit the loss of vital information as well as ensure smooth work flow. Among the initiatives taken since the introduction of ICT in the Botswana and Lesotho governments, the Departments of Immigration and Citizenship as well as Passport Services advanced the use of ICT, which led to the shift from traditional systems and the resultant upgrade to the e-passport system in 2010 and 2013 respectively. The implementation of the e-passport system within these countries was the first ever 'venture' into e-government and policy implementation. This study focuses on the comparative analysis of the implementation of the e-passport system in Botswana and Lesotho from 2010 to the current instance. The purpose is to determine lessons that Lesotho can learn from her neighbouring country for the successful and sustainable implementation of the e-passport system. Botswana was the first country to implement an e-passport system in Southern Africa.

## 1.2    LITERATURE REVIEW

Since the 1950s, most African countries have formulated policies to meet the needs and the interests of their inhabitants. As other African countries, the Botswana and Lesotho governments have also prioritised policy development and implementation to ensure improved services for its citizenry. According to Hill and Hupe (2002:4), policy refers to a purposive course of action intended to address a certain public concern or problem. Nzimakwe (2013:122) views a policy as the mechanism through which all government activities take place. Furthermore, a policy does not take place in a vacuum or haphazardly, but is formulated and implemented because there is a perceived need originating from the society. A policy exists when there is a problem that needs government's intervention to resolve. To inhibit identity fraud, secure travel documents are issued to citizens through the e-passport system and enactment of its policy such as the enactment of the *Lesotho Passports and Travel Documents Act*, 2016 (Act of 2016).

Whenever the government decides to take particular action, it does it though a policy. A policy serves as a supporting document for every country or institution. To achieve intended goals, a policy has to be executed and implemented. Koma (2014:43) identifies policy implementation as the process whereby programmes or policies are executed and plans are translated into practice. It can be deduced that policy implementation is the execution of the policy, which is to execute the intentions and activities planned or outlined in the policy. The implementation of the e-passport system in Botswana and Lesotho is aimed to provide an effective and efficient service as well as inhibit identity fraud.

Brynard (2009:558) asserts that the desired outcome of policy implementation is success. Successful policy implementation is a strategic action adopted by governments to deliver both the intended policy decisions and achieve the outcomes. Success in terms of policy implementation implies achieving the expected goals or results required by the identified policy-makers. A policy may fail to meet intended objectives. There are various aspects which influences policy implementation. These can either lead to successful policy implementation or failure to address expected goals if all concerns have not been considered. Bhuyan, Jorgensen and Sharma (2010:3) identify seven primary factors which influences policy implementation. The first one is the policy; its formulation and dissemination; secondly, social, political and economic context; thirdly, leadership for policy implementation; fourthly, stakeholder participation in policy implementation; fifthly, implementation planning and resource mobilisation; followed by operations and services; and lastly, feedback on progress and results. These factors determine the success of policy implementation. Therefore, the policy implementers must comprehend and be able to interpret these factors. It is the government's role to ensure that policies are implemented successfully to meet the expected needs of society. The factors are further illustrated in a tabular form below.

**Table 1.1:    Factors influencing policy implementation**

| The policy, its formulation and dissemination | Implies the policy content, nature of the policy formulation process, and extent of policy dissemination. Here the policy analysis focuses on the policy goals, objectives, and strategies to analyse whether these are clear and appropriate given the concerns intended to be addressed by the policy. This factor also attempts to establish whether key stakeholders agree on the goals and strategies and the policy has been disseminated to and understood by those responsible for its implementation. |
|---|---|
| Social, political and economic context | Entails various social, political, and economic factors outside the policy process that can either improve or impede effective policy implementation. Depending on the nature and scope of the policy, social norms such as gender inequality and governing processes, for example, decentralisation and other factors can affect policy implementation. This factor attempts to analyse the effects and consequences of social, political and economic factors in policy implementation. |
| Leadership for policy implementation | Identifies that strong leadership and commitment are crucial prerequisites to ensure adequate resources, and accountability needed for actual execution |

| | of the policy. However, the leaders responsible for policy formulation in most instances find their attention preoccupied elsewhere once the policy has been adopted or the responsibility for leading implementation might shift to new individuals and groups. This factor analyses the effectiveness of leadership commitment in policy implementation. |
|---|---|
| Stakeholder involvement in the policy implementation | Implies that policy implementation is increasingly a multisectoral endeavour. Consequently, it is crucial to consider the extent of stakeholder participation in policy implementation and the nature of the relationships and collaboration among different stakeholders - intergovernmental relations. |
| Implementation planning and resource mobilisation | Involves planning, resources, and capacity required to facilitate policy implementation. Identifying whether the policy implementation plan exists; organisations need new skills and training to implement the new policy including funding to ensure as well as determine the reliability of the resource flow. |
| Operations and services | Entails the coordination mechanisms, operational systems, and capacity of individuals and organisations responsible for delivering services delineated in the policy. Identify positive changes resulting from policy implementation as well as |

| | challenges impeding effective implementation of the policy. |
|---|---|
| Feedback on progress and results | Implies the significance of frequently gathering, disseminating, and using feedback to assess progress towards accomplishing intended results. Ensuring sound information dissemination of the policy implementation process; utilising gathered information and considering policy beneficiaries or clients perspectives. |

Source: adapted from Bhuyan *et al.* (2010:6)

The implementation of the e-passport system emanated as a result of the implementation of ICT in the public sector. Proponents of New Public Management (NPM) embrace the utilisation of ICT in the public sector with the purpose to dissipate traditional bureaucratic boundaries and deliver services effectively and efficiently to the public with relative ease. Homburg (2008:64) asserts that NPM adopted a market orientation by reengineering the public sector through the utilisation of ICT in the public sector. This has dissipated bureaucratic boundaries and ensured the delivery of effective and efficient services with enhanced accountability. The Lesotho government implemented the ICT Policy in the public sector following the approval thereof to improve service delivery (2005:37). Furthermore, the e-passport system was implemented to facilitate e-passport processing and issuance following the approval of the relevant policy as stated in the *Lesotho Passports and Travel Documents Act,* (Act of 2016). The government of Botswana also implemented an ICT policy to facilitate effective and efficient service delivery as posited in the Maitlamo ICT Policy (2004:7). The latter Policy was formulated in 2004 to delineate Botswana's National ICT Policy vision and objectives. According to Thornhill *et al.* (2014:342), the role of the contemporary state is to formulate policies and deploy ICT to compete globally and enhance efficient and effective service delivery to the public. Maphephe (2013:60) asserts that the ICT Policy for Lesotho is intended to make the country a competitive member of a global community in the utilisation of technology.

ICT in the public service is referred to as e-government, which is valued to dissipate bureaucratic boundaries. Maphephe (2013:61) posits that e-government includes the execution of governmental activities through ICT such as the internet. Ahmed (2007:36-37) provided an in-depth explanation of e-government and perceives it as the utilisation of ICT to enhance the capacity of public administration to improve the quality of life of its citizenry through high quality service delivery. According to Kalam (2015:114), theoretical concepts of e-government and ICT initiatives have improved accessibility to services and lessened corruption. The Lesotho government  committed itself to ensure improved, efficient and cost-effective services within the public sector, as illustrated in its the ICT Policy for Lesotho (2005:37). Thornhill *et al.* (2014:339) mention that the goal of e-government is to achieve a better government. The ICT Policy for Lesotho (2005:37) states  that the government is determined to enhance the use of ICT as a tool to improve service delivery, encourage information sharing, transparency and accountability in the public service and promote good governance in support of its mission to reform public administration. The implementation of the e-passport system in Botswana and Lesotho is a concerted endeavour to implement e-government to facilitate effective, efficient and secure issuing of travel documents to its citizens.

An electronic passport (e-passport) which is also referred to as biometric passport looks like an ordinary traditional passport but has added security features stored in a contactless chip that can only be read through the reader or scanner. Datta (2016:572) defines an e-passport as a biometric passport using radio frequency identification technology (RFID) with an embedded finger print. Radu and Polkowski (2014:197) posit that the e-passport has random access, rewritable and large memory capacity. Moreover, Radu and Polkowski (2014:197) assert that RFID technology in the e-passport improves security and lessens passport forgery. It can be deduced that e-passports have profound security features.

The e-passport or biometric system processes the e-passport. There are different techniques employed in the e-passport system which vary in countries according to available technological skills. Therefore, the e-passport system in Botswana may differ from that utilised in Lesotho. The e-passport system was established in the Department

of Passport Services in Lesotho, which is referred to as the biometric system in the *Lesotho Passports and Travel Documents Act,* 2016 (Act of 2016). However, for the purpose of this study, it is referred to as the e-passport system. Kumar, Zaidi, Srivasta and Jain (2015:25) highlight that the e-passport system was adopted with the purpose of delivering passport services to citizens conveniently and reliably.

Advantages of e-passports, as indicated by the Department of Homeland Security includes: secure identification of the traveller and protection against identity theft. Other advantages include: guarantee protection of privacy and difficult to falsify the e-passport. It can be concluded that the e-passport is reliable and easy for citizens to access because the ICT process which issues it has sound built-in security. The disadvantages of e-passport as revealed by Computing News (2009) is that it is costly to issue due to the ICT system as well as potential abuse of private information by government because this information is contained in the e-passport system. However, countries develop laws that protect this information to guarantee its protection such as *Cybercrime and Computer Related Crimes Act,* 2007(Act 22 of 2007) that ensures protection of personal electronic data in Botswana. Lastly, the e-passport is prone to hacking due to the embedded chip that can be read from a short distance. It can be concluded that although e-passports have advantages and been recommended by the ICAO, the disadvantages cannot be ignored, especially the high cost of the ICT systems. This poses a crucial question of affordability by governments (especially developing countries such as Lesotho and Botswana) for the successful and sustainable implementation thereof. Thornhill *et al.* (2014:351) also assert that in most developing countries, ICT projects fail. Table 1.2 below illustrates identified challenges that can result in unsuccessful implementation of ICT projects:

**Table 1.2:    Challenges facing the implementation of ICT projects**

| Organisational issues | Technological issues | Other issues |
|---|---|---|
| Lack of senior management support | Lack of technical knowledge and expertise | Budget and time overruns |
| Behavioural problems/resistance to change | Technological inadequacies and shortcomings | Lack of user participation |
| Inadequate project management | Satisfying existing or emerging technology | Over-ambitious scope |
| Organisational problems (culture, structure etc) | Technology focused development | Poor communication between users and development staff |
| Inappropriate implementation strategy | Inexperienced staff to develop systems | Political pressures, influential outsiders, external and internal power struggles |
| Staff turnover and competency | | Under-estimating complexity |
| Poor consultation and poor user training | | |

Source:  Adapted from Shehry, Rogerson, Fairweather and Prior (2006:3).

It is evident from the above illustration that there are challenges, which need to be considered for the successful and sustainable implementation of ICT projects like the e-passport system.

Specific role players who are included in the policy process or policy-making are responsible for its implementation. The participants / role players that influence policy implementation include, but are not limited to: international, domestic, societal structures, think tanks and mass media. International participants may be individuals working as advisors or consultants to governments or members of international organisations with authority under agreements to regulate and influence their members' behaviour in policy formulation and implementation (Roux, 2002:429-430). In the case of passports, the International Civil Aviation Organisation (ICAO) regulates the management of passports globally for its member states. There are 188 member states - Botswana and Lesotho are among the members.

The ICAO sets universal standards which require member states to adhere to when producing and processing passports. In 1995, the ICAO pursued the probability implementing biometrics in travel documents as the best alternative to link such travel document to its rightful owner, that is, the person to whom it was legitimately issued (International Civil Aviation Organization, 2007:1). According to the International Civil Aviation Organization (2007:1), to achieve this goal, the ICAO conceded that  to store more data in a machine that reads a travel document, the assessment of data storage technologies (biometric technologies) led to the implementation of the e-passport system.

According to Computing News (2009), the ICAO introduced a global plan in 2003 for the implementation of the e-passports following global security concerns encountered with traditional passports. 2015 was set as a deadline to issue e-passports by the member states. Since Botswana and Lesotho implemented the e-passport system in 2010 and 2013 respectively, they met the requirements and the goal of the ICAO. According to Vaudenay (2007:5), the ICAO selected the technology used to produce e-passports because the private information it comprises is limited to a machine readable zone (MRZ) and digital picture.

As mentioned, e-passport was initiated by the ICAO, however, this concept did not take place in a vacuum but as a result of security concerns at the boarders. The latter was of grave public concern after the 2001 terrorist attacks in the United States of America

(USA). The Western countries believed that e-passport was a solution because of its extreme security features. Malaysia issued e-passports long before the Western countries. According to Kharif, Robertson and Tan (2014), the first country to issue e-passports was Malaysia in 1998. The sole purpose was to inhibit immigration fraud. Kharif *et al.* (2014) also assert that the Malaysian e-passport security has not been compromised. However, Mohamet, Hamid and Mohamet (2009:1) mention that the first Malaysian e-passport did not meet all the ICAO specifications. The first initiative comprised of an image of a thumbprint of a passport holder while the second generation e-passports contained only extracted fingerprint information which was developed in 2003.

Since 2003 numerous countries embarked on the introduction, process and issuance of the e-passports. Australia introduced e-passports following the ICAO specifications in 2005 (Pasupathinathan and Pierzyk, 2008:187). According to the Department of Homeland Security, the USA issued diplomatic e-passports in 2005. However, the actual processing and issuance thereof to the general public began in August 2007.Canada introduced e-passports in 2013 and has not recorded security problems linked to its e-passport (Radu and Polkowski, 2014:198). Since limited if any impediments have been recorded in Canada, their inhabitants can visit many countries without visa requisition (travel restrictions). It can be inferred that the e-passports have improved security features in comparison to the traditional passports.

The introduction of e-passports is a new phenomenon, especially in Southern Africa. The Lesotho Embassy announced in 2013 that it had introduced the e-passport. The *Lesotho Passports and Travel Documents Act*, 2016 (Act of 2016) regulates the issuance and revocation of e-passports and travel documents in the country. Moreover, this Act repealed the *Lesotho Passports and Travel Documents Act*, 1998 (Act 15 of 1998) which regulated traditional passports.

Although e-passports are highly recommended, literature has revealed that the implementation thereof may face challenges, especially in developing African countries such as Botswana and Lesotho. Among other challenges, the issuance of e-passports could prove costly due to the ICT system including processing the documents. The e-

passport system is an ICT project and according to Thornhill *et al.* (2014: 315), these are extremely expensive. Furthermore, Heeks (2003:2) states that ICT projects fail in most African countries due to financial constraints. Furthermore, the e-passport system requires favourable infrastructure and technological skills for effective and efficient operation, which is generally costly to implement and for the citizens to access the service (e-passport). Due to the lack of technological skills, Lesotho hired an Israeli company, Nikuv International Projects (NIP) to supply e-passports, as well as maintain the full operation of the e-passport system. According to Ntaote (2014), the Ministry of Home Affairs suspended the production of passports several weeks after the NIP withdrew its services because the government had failed to pay maintenance costs. Ntaote (2014) also highlighted that the NIP had threatened to terminate the contract. Moreover, Mohloboli (2014) pointed out that the Ministry of Home Affairs had claimed that the NIP had failed to meet its contractual commitment because Lesotho had not received training on the e-passport system. However, the NIP argued that the agreement was explicit because they are only responsible for the maintenance and management thereof. Lesotho faces challenges to implement the e-passport system, therefore, the study intended to explore the problems as well as provide recommendations of how to lessen these.

## 1.3    MOTIVATION FOR THE RESEARCH

Societal needs are dynamic, therefore, governments need to adopt initiatives to address their citizens' needs as they change with the advent of time. Public policy is formulated to respond to societal needs. Public policies must be monitored, evaluated and analysed regularly to ensure its relevancy to address the citizens' needs as well as address any challenges that may impede successful implementation of a policy timeously. Where necessary policies are amended or concluded. New policies are formulated with the purpose of addressing citizens' needs. ICT in the public sector has made it easier for policy-makers to address the needs of their citizens effectively and efficiently. However, societal needs are dynamic in nature. Consequently, ICT systems require regular upgrading to enhance effective and efficient service delivery to respond

to current societal needs. The implementation of ICT systems such as the e-passport system, especially in Lesotho, is perceived as a significant innovation in the public sector to ensure improved public service delivery. The e-passport system ensures secure issuing of travel documents. The motivation to undertake this study is based on the historical developments of passport issuance in Lesotho. The implementation of the e-passport system is viewed as a significant improvement in the Department of Passport Services in Lesotho. The study attempts to develop a framework to execute the e-passport system effectively and efficiently to ensure successful and sustainable implementation thereof with the purpose to secure issuance of passports in Lesotho, lessen identity fraud as well as inhibit unnecessary delays in the delivery of passports. Aspiring for successful policy implementation is based on the notion that the desired outcome thereof is success. Therefore, successful policy implementation is a practice worth pursuing (Brynard, 2009:558). The background to the motivation of this study is outlined below.

Prior to 2013, passports were utilised in Lesotho to travel and as a form of identification. For this reason, there was a high demand for passports. According to Maphephe (2014:37), because of this demand for passports, the Department of Passport Services came under close public scrutiny for the almost pedestrian delivery of passports. A backlog of passport applications form date back from 2007 to 2012. The delays processing passports and the issuance thereof resulted in acts of corruption among public officials. Officers accepted bribes from desperate applicants for speedy issuance of their passports. It was revealed that in certain instances officials at the Department of Passport Services would refuse to issue processed passports until the applicants paid a bribe. A female passport officer and her accomplices were arrested in 2011 for soliciting a bribe from a client to have the passport issued (Lesotho Times, 2011:1). There was also criticism from abroad for issuing easily fraudulent passports (Maime, 2014:37). Among other recorded fraudulent crimes, Mohloboli (2014) states that a Kenyan was deported from Namibia to Lesotho and accused of altering and forging a traditional passport and for contravening section 15 (e) of the *Lesotho Passports and Travel Documents Act,1998* (Act 15 of 1998).  Tale (2011:1) asserts that to resolve the corrupt acts, the Lesotho government considered the introduction of e-passports.

It can be inferred that since Lesotho experienced challenges in issuing traditional passports, an urgent need arose to introduce the e-passport system. This study endeavoured to make a comparative analysis of the implementation of the e-passport system in Botswana and Lesotho. The primary objective was to reveal lessons for Lesotho to ensure successful and sustainable implementation of the e-passport system.

## 1.4    PROBLEM STATEMENT

The literature demonstrated that an e-passport system enhances processing and issuing of e-passports. Furthermore, e-passports are secure and cannot be falsified easily. Despite the significance of the e-passport system, ICT projects face challenges as identified by Shehry *et al.* (2006:3). These include: technological and organisational, while Bhuyan *et al.* (2010:3) identified factors which influences policy implementation namely: policy, its formulation and dissemination; social, political and economic context; leadership for policy implementation; stakeholder involvement in the policy implementation; implementation planning and resource mobilisation; operations and services; and feedback on progress and results. Based on the aforementioned author's theories, this study sought to establish the challenges facing the effective and efficient implementation of the e-passport system in Lesotho. The study aimed to identify challenges faced with the implementation of the e-passport system in Lesotho as well as factors which influences the e-passport system as well as provide recommendations to ensure the successful and sustainable implementation thereof. The e-passport systems in Botswana and Lesotho were compared. It was assumed that the comparative analyses of the two countries would reveal significant lessons for Lesotho that would not only ensure successful and sustainable implementation of the e-passport system but also inhibit unnecessary delays.

## 1.5    RESEARCH OBJECTIVES

The research objectives proposed for this study included:

i.     To conceptualise e-passport policy implementation within the discipline, Public Administration.

ii.    To explain how the e-passport system is implemented and why it was introduced in Lesotho.

iii.   To compare and analyse the opportunities and challenges facing the implementation of the e-passport system in Botswana and Lesotho.

iv.    To provide recommendations pertaining to successful and sustainable implementation of the e-passport system in Lesotho.

## 1.6    RESEARCH METHODOLOGY

Research methodology provides a reflection of planning, structuring and technique to collect data as well as execute the research to comply with the demands of objectivity of the research in pursuit of precision (Bryman, 2012:46). Kumar (2014:122) states that a research design is a plan a researcher decides to employ to collect information, select respondents and analyse the information found when conducting a study. The research methodology adopted for this study is discussed below:

### 1.6.1  Qualitative research

Qualitative research methodology provides narrative explanation of a phenomenon and is concerned with accentuating words rather than quantification. Kumar (2014:14) defines qualitative research as an explanatory approach to research that explores diversity, emphasises description and narration of feelings, perceptions and experiences of the respondents. According to Mason (2005:1), qualitative research methodology allows the research process to proceed with the view to generate an array of dimensions in a social world, which includes an experience of everyday life, understanding and  imagining social participants;  approaches social processes, institutions, discourses or relationships work and the significance of the meaning they

generate. In qualitative research, methods such as case studies, in-depth interviewing of key informants, questionnaires and perusal of documents are utilised. The qualitative research methodology was selected to provide an analysis and a better understanding of a comparative analysis of the implementation of the e-passport system in Botswana and Lesotho.

Qualitative research enables the researcher to acquire first-hand information and peruse the situation under study with the same eye as the people being studied or providing information (Bryman, 2012:399), while Kumar (2014:14) states that qualitative research is based on the philosophy of empiricism. Secondary data gathered from various documents was perused to provide an analysis for the implementation of the e-passport system in Botswana. Primary data was collected in Lesotho with the primary aim to establish from the respondents the challenges faced with the implementation of the e-passport system in Lesotho, and their experiences without bias.

### 1.6.2  Research instruments
The following research instruments were utilised for the purpose of this research.

### 1.6.3  Document analysis
Bowen (2009:26) defines document analysis as a systematic procedure to review or evaluate documents that are either printed and/or electronic. Document analysis is an analytical method used in qualitative research that requires the examination and interpretation to elicit meaning, gain understanding and develop empirical knowledge (Bowen, 2009:26). Relevant documents included, *inter alia,* official reports, policies and legal framework for the implementation of the e-passport system in Botswana and Lesotho.

### 1.6.4 Interviews

Interviews were conducted to collect data from the respondents in Lesotho because the approach is a flexible method to collect data that allows a researcher to explain the questions to the respondents if required (Brynard and Hanekom, 1997:40). Kumar (2014:177) mentions that interviews are flexible and allow the researcher to change the format where necessary or probe deeper following a response as well as establish its authenticity. The interview questions were based on factors which influence policy implementation and adapted from Bhuyan *et al.* (2010:3) namely: the policy, its formulation and dissemination; social, political and economic context; leadership for policy implementation; stakeholder involvement in the policy implementation; implementation planning and resource mobilisation; operations and services and lastly, feedback on progress and results.

Open ended questions were posed to encourage or probe challenges faced with the implementation of the e-passport system. The interviews were conducted face-to-face. Kumar (2014:183) posits that interviews have disadvantages such as: the value of data depends on the quality of interaction and excellence of the interviewer; the findings may vary as different interviewers may be used and there is a potential of researcher bias. Despite these disadvantages, the reason for adopting interviews to collect data included: interviews generate rich data from respondents and interviews provide for interviewer flexibility as the interviewer may change the format of questions where necessary. Certain questions may require clarity by the interviewer therefore, this methodology is a significant research instrument.

### 1.6.5 Target population

The study focused on the targeted population, which included the Passport Services officials in the Ministry of Home Affairs in Lesotho, the e-passport system service provider officials who are responsible for the management and maintenance of the e-passport system as well as e-passport applicants who are beneficiaries of the policy. The study also explored relevant literature such as scholarly articles, accredited

journals, government publications, credible newspapers and websites to analyse practices in the implementation of the e-passport system in Botswana.

### 1.6.6  Sample

Neuman (2003:213) asserts that sampling "…uses the judgement of an expert in selecting cases or it selects cases with a specific purpose in mind". Purposive sampling was utilised to target the well- informed officials about the operation, management and maintenance of the e-passport system.  Reported complaints available at the passport offices were accessed to gather the beneficiaries' perceptions of the e-passport system. Kumar (2014:244) notes that in purposive or judgemental sampling, the researcher utilises his/her own judgement of who can provide the best information to achieve the objectives of the study. The sample comprised of the following respondents who occupy a position in operations: 10 managers in the Department of Passport Services; 20 passport officers; 12 assistant passport officers and the four IT officials within the Ministry of Home Affairs. Relevant literature was reviewed to analyse the opportunities and the challenges which Botswana faced in the implementation of the e-passport system. To analyse the challenges the e-passport system policy beneficiaries faced in Lesotho (e-passport applicants), the Department of Passport Services reports were utilised.

### 1.7    CLARIFICATION OF CONCEPTS

The concepts below have been identified as the foundation for the purpose of this study.

### 1.7.1  Public Administration and public administration

Public Administration, according to Thornhill *et al.* (2014:4), is the discipline which studies a particular occurrence in the public service. Based on this definition, it can be inferred that pursuing a study on comparative analysis of the implementation of the e-passport system in Botswana and Lesotho is an investigation of particular service (implementation of the e-passport system) in the public institutions. Public administration is concerned with the goal of advancing management and the government's policies (Reddick, 2012:4). Public administration refers to the work done

by officials within government institutions to achieve its objectives. Thornhill *et al.* (2014:4) posit that public administration an activity undertaken by public officials in their designated posts, that is, execute functions such as policy-making, coordinating, determining work procedures and exercise control within the work environment they are responsible for. Consequently, the activity to implement the e-passport system policy is executed by public officials within their respective departments - Department of Immigration and Citizenship in Botswana and the Department of Passport Services in Lesotho.

### 1.7.2  Public management

Noordegraaf (2015:20) posits that public management is the execution of organisational resources by public or private organisations to coordinate social effort to achieve organisational goals and meet the needs of the public. Meier and O'Toole (2011:3) add that public management deals with organisational governance and performance. Thus public management manages the performance and management of the organisation, public or private. The rationale for implementing the e-passport system was, among other reasons, to reduce the waiting period for the delivery of passports as well as inhibit delays in the issuance thereof. It can be inferred that the e-passport system was implemented to improve performance to issue passports, which is one of the objectives of public management.

### 1.7.3  Policy

According to Hupe and Hill (2012:104), a policy may be defined as the programmatic activities involving policy maker's plans for carrying out the wishes or objectives expressed by a legitimate organisation being a legislative, judicial or an executive body, formulated with the purpose to an authoritative decision. Policy is thus a guiding document for every institution. A policy may also be described as a facilitator for all governmental activities. The governments of Botswana and Lesotho have promulgated legislation which is the policy to facilitate or accomplish the intention or goal of to implement the e-passport system. Examples of such legislation includes the Maitlamo

ICT Policy, ICT Policy for Lesotho and the *Lesotho Passports and Travel Documents Act*, 2016 (Act of 2016).

### 1.7.4 Policy implementation

"Policy implementation entails those actions by public or private individuals or group of individuals that are directed at the achievement of objectives set forth in prior policy decisions, (Van Meter and Van Horn in Brynard, 2005:650)". Policy implementation includes implementing the intentions or decisions made by private or public institutions. Koma (2014:43) defines policy implementation as the process whereby programmes or policies are executed and plans are translated into practice. Policy implementation includes implementing government policies. Therefore, it can be deduced that the implementation of the e-passport system is to execute government policy to issue secure travel documents as well as inhibit identity fraud.

### 1.7.5 Public service

Gerston (2010:11) views the public service as a vehicle through which public policies are formulated and executed. According to Thornhill *et al.* (2014:4), the public service is a sector responsible for the provision of services to the citizens and operates within the mandate of a Minister in either the national government or Executive Council of municipalities. In this context the Ministry of Home Affairs functions under the national government.

### 1.7.6 E-passport

E-passport which is also referred to as biometric passport looks like an ordinary traditional document but has added security features stored in a contactless chip that can only be read through the reader or scanner. Datta (2016:572) defines an e-passport as a biometric passport using RFID with an embedded finger print.

## 1.8    LIMITATIONS OF THE STUDY

One of the limitations was certain respondent's reluctance to be interviewed. Moreover, access to the service provider IT officials in Lesotho was futile because they were unavailable, too busy or inaccessible on the telephone. However, information needed from them was obtained from other respondents such as their capacity to execute the e-passport system and their extent of involvement in the implementation thereof. Although they did not participate in the study, the purpose of the research was not compromised. In addition, efforts to acquire departmental permission to conduct interviews in Botswana proved unsuccessful and this delayed the progress of the study. Consequently, the research in Botswana focused primarily on secondary data, which fortunately, did not compromise the purpose, that is, investigate the implementation of the e-passport system in Botswana and Lesotho.

Moreover, the study intended to reveal the best practices in the implementation of the e-passport system in Botswana to enhance effective implementation thereof in Lesotho through primary data to generate rich data. Cognisance should be taken that having focused only on secondary data in Botswana limited the scope of the research to a certain extent because the comparative analysis of the opportunities and the challenges facing the implementation of the e-passport system in the two identified countries. However, valuable lessons were established from Botswana for the effective implementation of the e-passport system in Lesotho. Furthermore, the primary data was collected from Lesotho to establish the challenges facing the implementation of the e-passport system in the country. Therefore, the objective of the study was accomplished.

## 1.9    FRAMEWORK OF THE RESEARCH

Chapter one introduces the topic and clarifies the concepts used in the study. The chapter also outlines the limitations of the study; problem statement; research objectives; and research methodology adopted for the purpose of the study. Chapter two focuses on a theoretical foundation of the study which includes a discussion of Public Administration (discipline) and public administration (activity) as well as conceptualisation of the e-passport system public policy implementation within the

discipline. Chapter three focuses on the implementation of the e-passport system as an ICT programme as well as the challenges facing its implementation in Botswana and Lesotho with the purpose to establish the current situation in both Botswana and Lesotho.  Chapter four draws a comparative analysis of the implementation of the e-passport system in Botswana and Lesotho. Chapter five focuses on data collection, recording the findings as well as data analysis. Chapter six provides recommendations to establish probable solutions for identified challenges followed by the conclusion.

## 1.10   CONCLUSION

The study highlighted the development in the public sector from paper based to electronic based public administration which led to e-government. The study clarified the concepts utilised in the study such as policy and policy implementation, as well as the implementation of the e-passport system in Botswana and Lesotho which led to the introduction thereof. The study also highlighted the development and introduction of e-passports in other countries as well as the challenges faced in the implementation thereof.  The study also provided a preliminary.

**CHAPTER TWO:          CONCEPTUALISING OF AN E-PASSPORT SYSTEM**

## 2.1     INTRODUCTION

A brief discussion of Public Administration as the discipline of this study is provided, followed by the conceptualisation of policy implementation. Furthermore, public administration as a practise deals with the execution of governmental policies to enhance service delivery to the public, which is the primary focus of the study. Public administration remains an integral part of any government to achieve governmental goals. Governmental policies are developed to respond to societal needs that are ever-changing.  For the policies to be relevant to the current needs, these are amended, which redefines the practice.  Since Weber to the current period, the conceptualisation of public administration has become dynamic due to the environment within which it operates. Furthermore, the dynamic nature of societal needs, social environment, unpredictable economic and political environment as well as the ever-changing technological environment has to be addressed within the capacity of a regime. The public sector of the 1970s is different to that in the current Botswana and Lesotho, especially technological advancement.

Due to various environments within which public administration operates, the discipline (PA) borrows from other disciplines such as politics, economics and sociology. Thus public administration, according to Thornhill *et al.* (2014:4) is an *eclectic science* (borrows from other disciplines). Consequently, it does not have a distinct body of knowledge. Furthermore, Janssen, Wimmer and Deljoo (2015:2) assert that public administration in the digital world borrows from other ICT disciples such as information systems, complex systems, and computer science. The current digital era as a result of advancement in the technological environment, has complicated public administration and public policy even further.  The primary focus of this study is on the influence of the technological environment on public administration and public policy.  Botswana and Lesotho adopted the ICT policy in 2004 and 2007 respectively. Thornhill *et al.* (2014:340-341) assert  that the adoption of e-government has led to popular use of the 'e'-prefixed words such as e-decision making, e-administration, e-consultation, e-

democracy, e-participation, e-procurement and e-services - "e" representing electronic. The e-prefixed terms this study focuses on makes reference to e-passport and e-passport system which are e-services. E-government has simplified policy-making and improved the role of governments to deliver effective and efficient services. Janssen *et al.* (2015:1) posit that ICT helps to improve the quality of policy-making particularly the extreme rapid growth in data, computational power, and social media that creates new opportunities for innovating the processes and solutions to ICT-based policy-making. This is evident in Botswana and Lesotho where e-passport systems have been implemented to enhance processing and delivery of passports effectively and efficiently.

## 2.2    PUBLIC ADMINISTRATION

Public administration can be perceived as a discipline and as an activity. These perspectives are discussed below.

### 2.2.1   Public administration as a discipline

Public is defined by Birkland (2016:9) as something relating to people in general thus affecting all or a large number of people in the area, country or state such as a legislation or something that is  of service to  the community, for example, the e-passport system. Therefore, it can be deduced that public relates to anything that has to do with general, national and generates common good or interest.   Administration is derived from the Latin word *administare* which means to serve. Thornhill (2005:180) states that administration is the establishment of an enabling framework for the execution of public affairs as distinguished from policy-making. Therefore, it can be inferred that public administration translates to serve for common good.

Public Administration, according Thornhill *et al.* (2014:4) is the discipline which studies a particular occurrence in the public service. Cloete (1995:61) asserts that the discipline focuses on the study of the functions and activities collectively known as public administration. According to Raadschelders (2011:i), Public Administration is an academic study concerned with the internal structure and functioning of the government and its interaction with citizens. A study of the implementation of the e-passport system in Botswana and Lesotho can be perceived as studying a particular occurrence in the

public service. Furthermore, through this study, internal structures and functions of the governments in Botswana and Lesotho in relevant departments will be realised.

### 2.2.2 Public administration as an activity

Public administration - as an activity refers to the work done by public officials within government institutions to achieve the objectives of the government. Thornhill *et al.* (2014:4) posit that public administration are activities undertaken by public officials in their designated posts and contribute towards functions such as policy-making, coordinating, determining work procedures and exercising control within the work environment for which they are responsible. The implementation of the e-passport system in Botswana and Lesotho is perceived as the activities executed by public officials in public institutions. The objective is to issue secure passports and lessen identity fraud. Public administration is recognised as a distinctive field of work because of the requirement that those who practice public administration (for example, the political and public officials in a democratic state) are expected to respect specific guidelines that govern their conduct when executing their work. These guidelines, which are derived from the body politic of the state and the prevailing values of society, form the foundation of public administration. According to Cloete (1998:91), the guidelines should provide the values that inform the ethos and culture of government and public administration in a democratic state. For example, in South Africa, public administration is guided by chapter nine principles in the Constitution of South Africa 1996, 195(1) namely;

- Maintenance of high standard of professional ethics.

- Promotion of efficient, economic and effective use of resources.

- Development-oriented public administration.

- Impartial, fair, equitable and unbiased provision of services.

- Encouraging public participation in policy-making.

- Accountable public administration.

- Transparency be able to provide accessible and accurate information.

- Good human resource management and career management practices.

- Representative public administration reflecting all South Africans.

Every country as a sovereign entity has its own guidelines and principles that guide its public sector. The stated guidelines and principles established in the Constitution of South Africa accentuates  the universal values, morals and ethics expected from South African public officials in their daily  activities  to deliver services impartially, effectively and efficiently to the public. In the case of Lesotho, the values expected from their public officials include: customer-oriented, caring, courteous and empathetic, excellence, patience, impartiality and integrity as stipulated in the Lesotho Public Service Regulations, 2008 and the Lesotho Public Service Code of Conduct. On the one hand, the values expected from the Botswana public officials include:  maintain high stands of ethical conduct, equitable, accountable, refrain from questionable or unlawful activities and honesty as stipulated by the Botswana Public Service Regulations. It can be concluded that public administration includes activities undertaken by public officials in public institutions, which involves policy-making and implementing these in practice. This study focused on the e-passport system, and public policy implementation by public officials in Botswana and Lesotho.

Since the study focuses on public policy which is the sub discipline of Public Administration, public policy is conceptualised below.


## 2.3   PUBLIC POLICY

A policy is defined by Birkland (2016:9) as a statement of intent by the government of what it chooses to do thus, a course of action selected from among various options and taking in to account given conditions with the purpose of determining present and future decisions. Cloete and Thornhill (2012:124-125) define a policy as a statement intended to perform an action(s) or to establish particular institutions or functionaries undertake an action(s) in a stipulated manner  to reach a specific goal, for example, the policy to eradicate identity fraud would be to issue secure identity documents. Chelechele

(2010:51) asserts that a policy is a purposeful, intentional and goal-directed statement designed by the government or governmental institutions proposed to accomplish one or more specific objectives. Policy is thus a guiding document of every country or institution. The governments of Botswana and Lesotho established guiding documents such as the Maitlamo ICT Policy and other legislation to implement ICT in the public sector and issue e-passports. Policy must meet the interests and benefit the majority of its citizenry to be considered 'public'. According to Birkland (2016:10-11), a policy becomes a public document only if it affects a greater number of people than the private sector, when adopted and implemented, and it is enforced by certain government institutions. Public policy is defined by Gerston (2010:7) as the combination of basic decisions, commitments and actions made by those who hold or influence governmental positions of authority involving the arrangements resulting from interactions among those influencing for the policy change, decision-makers and the beneficiaries of the policy in question. Public policy as a discipline is a sub-discipline within Public Administration and Political Science that studies what government chooses to do including policy process, implementation, impact and evaluation (Brikland, 2016:15).

There are four types of policy according to Hill (2013:142) namely: regulatory policy, which exerts control and regulates certain activities; constituency policy, which establishes or reorganises institutions; distributive policy, that involves governmental benefits and redistributive policy that changes the distribution of existing resources such as policy on social grants. The *Lesotho Passports and Travel Documents Act, 2016* (Act of 2016) is a regulatory policy that regulates revocation and issuance of passports in Lesotho while the e-passport project is intended to benefit the public - distributive programme.

For a policy to be executed, it must proceed through specific stages or processes. These are discussed in the following paragraphs.

## 2.3.1 Public policy process

There are six processes or stages that policy undergoes namely; problem identification, agenda setting, policy formulation, policy adoption, policy implementation and policy evaluation Hill (2013:161). Although the stages are mentioned by (Hill 2013:161) they (stages) are further explained by Hill (2013:161) and other scholars outlined in the following paragraphs.

- **Problem identification**

Problem identification refers to diagnosis of the public problem or concern. It is important to distinguish a real issue rather than symptoms of the problem in order to formulate an appropriate public policy that will solve a public problem. For an issue to qualify as a public problem, it has to be regarded unsatisfactory by a significant number of the people. This will require government intervention. However, if there is no solution to the identified public problem, no policy would bring about any change. Therefore, initiatives to propose a policy would be unnecessary and may lead to wasteful expenditure of public funds. In most instances this stage (problem identification) in the policy process, is undermined or overlooked. However, it is the most vital stage because improper analysis of the problem will result in an inappropriate policy. Dye (1995:13) posits that public policy may not convey solutions to problems if there is no general consensus of the problem faced by the public. Problem identification could be complicated by the fact that one's problem might not be another's. The high price of e-passports only affects poor citizens not the entire citizenry. Moreover, what may be considered as a problem now may not be such in the future due to change in the environment affecting policy implementation. Perceptions of a certain problem or a problem itself may change over time. Therefore, when formulating policies it is crucial for policy-makers to ensure that the policy is relevant when implemented. Furthermore, it is crucial to monitor and evaluate policy regularly to ensure its relevancy to address a certain problem. If the policy is no longer relevant, it has to be concluded and succeeded by a relevant policy. This scenario is evident in Lesotho. Legislation on traditional passports was evaluated, repealed and replaced by legislation regulating e-passports when the implementation thereof came into effect. It is also evident in

Botswana the service, express rate which paid for speedy production of passports was abolished following the implementation of the e-passport system.

- **Agenda setting**

Agenda setting can be described as a process whereby a problem reaches the attention of the government - policy-makers (Chapman, McLellan and Tezuka, 2016:3). There are many problems in society that need to be addressed; however, not all make it to the public policy agenda. Chapman *et al.* (2016:3) state that only successful public opinions make it to public agenda setting. For an issue to make it to the public agenda, it must be a matter that the policy-makers may respond to. Generally, the media, interest groups and influential persons (politicians) in society play a critical role in advancing certain issues to be placed on the public agenda. Anderson (2000:98) posits that individual members of Parliament, agency representatives and citizens who advance policy proposals also serve as policy entrepreneurs in the agenda setting process. Certain problems are placed on the agenda because an immediate solution is required, for example, natural disasters or a major crisis. The implementation of the e-passport system policy was a response to; *inter alia,* a crisis to process passports timeously because applications dated as far back as 2007 to 2013.

- **Policy formulation**

Policy formulation refers to efforts and initiatives taken to draft an appropriate and relevant action or policy to address a public problem. Policy formulation is an aspect of policy process whereby proposed actions are communicated, debated and drafted into legislation or other policy statements (Mthethwa, 2012:40).  This stage ideally follows agenda setting. During this stage, the government (through public officials) strategises a suitable solution to the identified public concern.  A solution could be positive and lead to governmental intervention - implementation of a new or amended public policy or possibly negative leading to inaction -to maintain the *status quo*. Not all problems are addressed through a public policy because it is impossible to address all public problems (Chapman *et al.,* 2016:3).

- **Policy adoption**

Policy adoption refers to accepting or gaining support on a specific policy from policy-makers, that is, the government. During this stage a selected policy, once formulated, is legitimised and formalised by a relevant department. In democratic countries such as Botswana and Lesotho, the legislature lends authority to a selected policy. Cloete and De Coning (2011:121) state that policy adoption is particularly connected to decision-making in deciding on an appropriate policy alternative. Policy adoption includes the following methods utilised by the policy-makers to decide on a specific policy; command, persuasion, bargaining and negotiation (Fisher, Miller and Sidney, 2007:49-51). A command method takes place when a policy is authorised by decision-makers and is implemented without consulting or seeking public consent. Persuasion involves efforts and attempts taken by decision-makers to convince the public and other stakeholders to conform to a certain policy. Finally, bargaining entails negotiation and compromise taken by decision-makers with the purpose of attaining a mutual consensus to accept a certain policy.

- **Policy implementation**

This stage entails the translation of decisions into action. Policy implementation may include the following basic components: specifications and details of a programme to be deployed such as stakeholders engaged for policy execution and activities that will be utilised; generate common understanding of the policy to be executed; general interpretation of the policy among policy implementers; resources such as capital and human; and the institution(s) responsible to implement the policy (Brynard and De Coning, 2011:183); for example, selecting the Department of Passport Services to deploy the e-passport system.

- **Policy evaluation**

Policy evaluation entails an assessment of all the effects of the policy including policy beneficiaries, future and immediate conditions, direct and indirect costs. Auriacombe (2011:36-37) posits that policy evaluation includes learning about the consequences - both positive and negative effects of the policy, which is to assess whether government input addressed the problems intended to and how these can be improved to address perceived problems effectively and efficiently. Evaluations can be conducted through providing reports, site visiting, measuring programme effectiveness, conducting public hearings, and evaluating opinions and complaints of the citizens. Policy evaluation is not literally, the last stage of the policy process. Auriacombe (2011:39) asserts that policy evaluations can be undertaken on any aspect of the policy. Thus, evaluation can be conducted at any time even after problem identification to possibly determine the feasibility of the policy. The processes are illustrated below.

**Figure 2.1:    Public policy process**
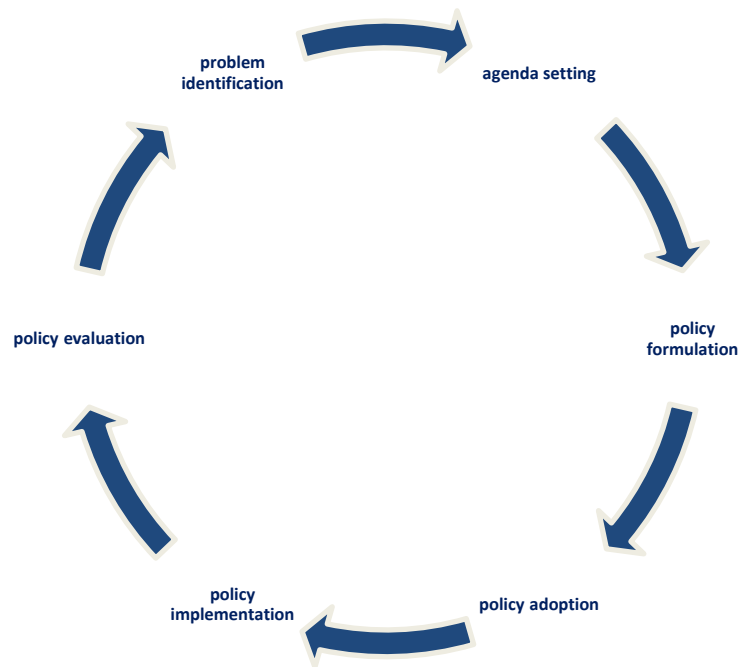


Source:  Adapted from Hill (2013:161)

Figure 2.1 above illustrates ideal processes that a policy undergoes from problem identification to policy evaluation. However, it should be noted that the processes or stages are in cyclical order and do not follow a linear pattern, thus do not necessarily move from step A to step B in that particular order. Therefore, in practice the stages of the policy process do not necessarily follow each other in linear format due to, *inter alia*, factors that influence public policy.

The focus of this study is on the policy implementation stage. Below, a discussion of policy implementation follows.


### 2.3.2  Policy implementation

To implement is defined by Hupe and Hill (2012:3) as to fulfil or complete. Mthethwa (2012:37) defines implementation according to what it does which is to "carry out, accomplish, fulfil, produce and complete". Brynard (2005:657) describes implementation as a noun and as a verb and states that implementation as a noun is the state of having achieved the policy goals while as a verb it is a process that involves all activities engaged in order to accomplish the objectives of the policy. It can be inferred that implementation includes actual execution of a plan, thus executing a government plan or policy. The implementation of the e-passport system in Botswana and Lesotho involves actual execution of the plan of the governments to deliver passports effectively and efficiently to inhibit identity fraud. However, not every implementation (noun) achieves intended goals although all the processes (verb) have been deployed.

Policy implementation involves implementing the intentions or decisions made by policy-makers in private or public institutions to achieve a specific predetermined purpose. Koma (2014:43) defines policy implementation as the process whereby programmes or policies are executed and plans are translated into practice. Koma (2014:43) further asserts that policy implementation is a process following a policy decision intended at resolving a specific need or purpose that necessitates policy implementers to successfully execute it in practical manner within the broader policy sphere. It can be concluded that the implementation of the e-passport system in Lesotho and Botswana

followed a policy decision to be implemented. Thus, the implementation of the e-passport system in Botswana and Lesotho is the evident endeavour thereof.

### 2.3.3  Values in policy implementation

In the daily execution of the policy, policy implementers are expected to follow the following values and norms: accountability, timelessness, reliability, flexibility, efficiency and robust, (Janssen *et al.*, 2015:5). Public officials are responsible to identify public values as well as ensure that the correct procedures are followed. Janssen *et al.* (2015:6) also mention that the role of policy implementers is not only to ensure that procedures are adhered to but they should also be custodians of public assets as well as maximise public values. Figure 2.2 below illustrates values in policy implementation.

**Figure 2.2:   Values in policy implementation**
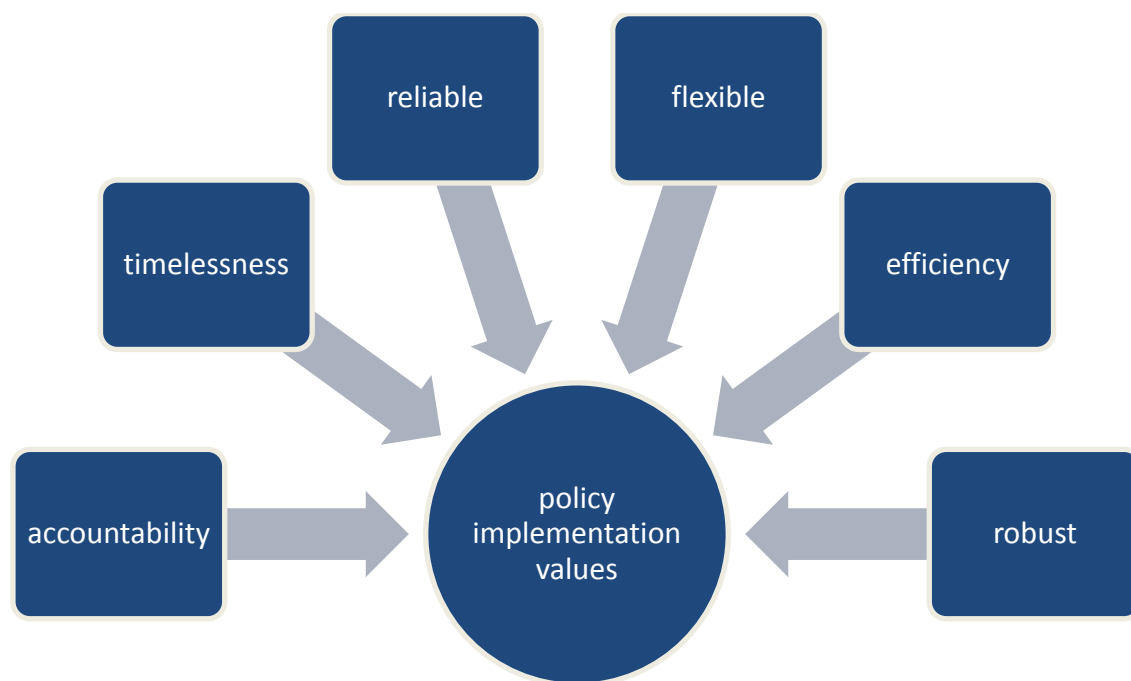


Source:  Adapted from Janssen *et al.* (2015:5)

Figure 2.2 above illustrates values expected from policy implementers. Policy implementers are answerable to policy-makers, stakeholders and the beneficiaries of

the policy. Therefore, policy implementers must be held accountable at all times. Furthermore, policy implementers should provide feedback, reports and account for resources utilised in the implementation of a policy as well as conform to the mentioned values and norms. Younis and Mostafa (2000:7) assert that accountability is answerability for the execution of duties that requires satisfactory reasons and acknowledgement of responsibility for one's actions.

It can be inferred from above discussions that policy implementation is a complex phenomenon. Many aspects can go wrong during this stage due to a number of factors of which some are explained in the following paragraphs.


### 2.3.4  Factors influencing policy implementation

Certain factors influence policy implementation that must be considered by policy implementers for successful implementation of the policy. Policies might become obsolete, not work and result in unintended outcomes (for example: create bureaucracy) or  lose support among elected officials or the public, or other alternatives that are better to resolve  an identified problem (Janssen *et al.*, 2015:4). The e-passport system was an improved alternative to process and issue passports effectively and efficiently as opposed to the traditional system. Therefore, the latter was concluded and succeeded by the former in Botswana and Lesotho. According to Koma (2014:43), every implementation programme must take into consideration the financial, organisational and administrative requirements. For every policy to be implemented successfully, financial, organisational and administrative factors need to be carefully considered. According to Brynard (2010:194), there are four primary factors which influence policy implementation. The first is the policy process: the policy design and resources are assigned for policy implementation.  Institutional setting: organisations must work together to implement the policy - intergovernmental organisation. Thirdly, implementers and agents interests and leadership capabilities may shape policy results. The last factor is circumstances within which the policy exists, such as economic, public, and social conditions within the policy environment. These factors determine the success of policy implementation. Therefore, policy implementers must be able to

comprehend and interpret these factors. Figure 2.3 below illustrates the factors influencing policy implementation.

**Figure 2.3:    Factors influencing policy implementation**
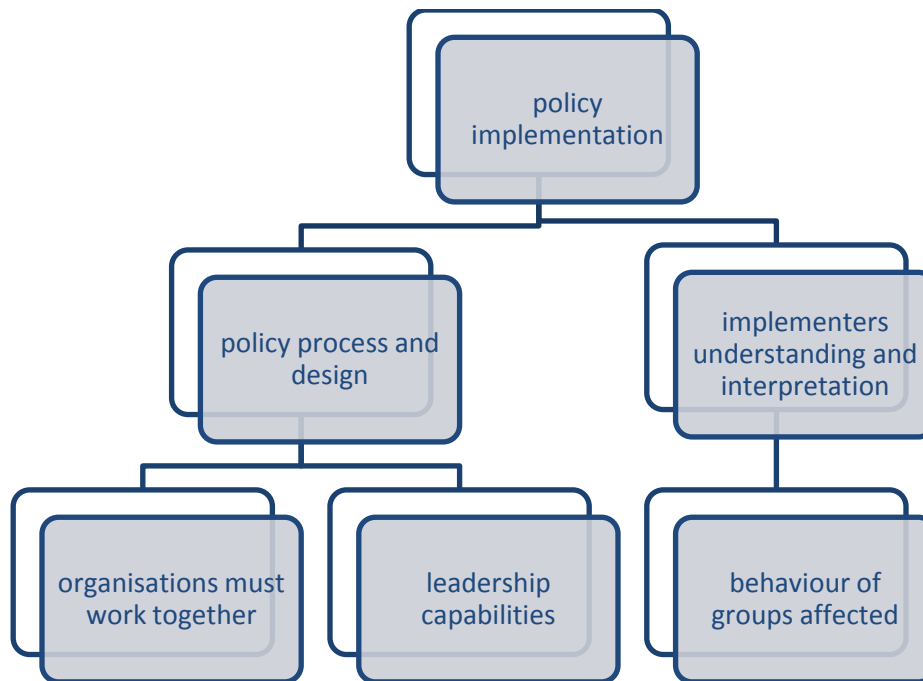


Source: Adapted from Brynard (2010:195)

The figure above is an illustration of how to determine the factors which flow within the policy implementation process as explained in the paragraph above: for successful implementation of the e-passport system, there must be adequate and access to required resources; sufficient; the environment within which the system operates also has to be conducive and accommodate the proper functioning of the e-passport system. Moreover, departments, for example, Ministry of Foreign Affairs and the Ministry Public Service working with the Department of Passport Services on implementation of the e-passport policy need to work together coherently.

Furthermore, beside the factors which influence policy implementation, there are also actors that shape and have an impact on policy implementation. These role players, participants or actors in policy implementation are discussed below.

### 2.3.5 Role players in policy implementation

Lane in Brynard (2010:35) asserts that policy implementation entails three logically separate activities namely: the goal function - clarification of the objectives involved; the causal function - statement of the relationship between outputs and outcomes in terms of causal effectiveness; and the accomplishment function - clarification of the relation between objectives and outcomes to affirm the extent of goal achievement. These activities imply the complexity of policy implementation. Probable difficulties can emerge due to; *inter alia,* various stakeholders' involvement in policy implementation who may have different expectations thereof. Policy implementation is a complex process within which many stakeholders play a role, various actors are involved, others play a dominant role, while certain individuals a minimal role (Janssen *et al.*, 2015:4). The actors or role players who influence policy implementation include: international, domestic, societal structures, think tanks and mass media (Koma, 2016:31-39). The role players who influence policy implementation are illustrated in Figure 2.4 below.

**Figure 2.4:    Role players influencing policy implementation**



Source: Adapted from Koma(2016, 31-39)

The above Figure illustrates actors who may be involved and influence the implementation of the policy. The international and domestic actors' role in the implementation of the e-passport system in Botswana and Lesotho will be discussed in the following paragraphs.

International actors may include individuals who work as advisors or consultants for governments or are members of international organisations with authority to regulate and influence their members' behaviour in policy formulation and implementation. In the case of passports, the role of international players is played by the ICAO. The ICAO is the United Nations (UN) agency that was established to promote an understanding of aviation, facilitation and security through cooperative multilateral regulation (International Civil Aviation Organization, 2007:1). According to the International Civil Aviation Organization (2007:1-4), these responsibilities the ICAO established international standards for travel documents, for example, specifications and guidance for the layout of the passport data page, size and shape of travel documents, including security features, as well as other aspects of travel document production and issuance in accordance with the Chicago Convention. According to International Civil Aviation Organization (2007:1), the ICAO began to explore different approaches for machine readable travel documents (MRTDs) in 1969, and concluded with Document 9303 in 1980 that provided for passports with machine readable capability. Since 1980 the ICAO has been working to enhance machine readable travel documents, broaden the use thereof to improve the latter with the purpose to accomplish prime goals to facilitate international and national travel as well as international border security.

Domestic players include the legislature that holds the power to formulate policies or legislation to control or regulate within their jurisdiction, while the executive is responsible to implement the policies. The legislature in Botswana and Lesotho enacted legislation to regulate the implementation of the e-passport system and issuance thereof such as the *Lesotho Passports and Travel Documents Act,* 2016 (Act of 2016); implemented by the executive and - established the e-passport system and issued the document. Among the domestic role players in Lesotho, the Ministry of Communications, Science and Technology, for example, are mandated with, *inter alia,*

responsibilities to enhance both ICT infrastructure and provide support including service delivery through ICT opportunities such as community access points. Therefore, the ICAO (international role player), the legislature and executive (domestic role players) played a vital role in the implementation of the e-passport system in Botswana and Lesotho.

Policy implementation in the current digital world has advanced to the efficient and effective delivery of e-services such as e-passports which are issued through the e-system. Policy implementation in the digital era is discussed hereunder.

### 2.3.6  Policy implementation in the digital era

The basic role of a government is to deliver services to its citizenry effectively and efficiently, and securely through the public sector. However, governments have been criticised for delays in service delivery due to, among other things, rigid bureaucratic procedures. The adoption of ICT in the public sector has improved the delivery of services. ICT exemplifies scientific rationality and offers a framework of meaning through which machines particularly software applications and computer hardware produce the necessary knowledge contributing towards enhancing public decision-making, policy implementation and effective governance (Janssen, Scholl, Wimmer and Tan, 2011:51).

According to Reddick (2012:5), there are three ICT theories in public administration based on examining the impact of technology on social and organisational change, which includes:  technological determinism, which implies that when new technology emerges it creates a change and will be adopted in the public service. This theory implies that old technology is replaced by the new and public officials adapt thereto. This has been evident in Botswana and Lesotho, that is, the new e-passport system was adopted and replaced the old system. Secondly, the reinforcement theory implies that public officials adopt ICT if it supports their view of organisational transformation. The reinforcement theory is based on the notion that public officials will adopt technology that is relevant for their organisation. Various technologies are utilised, therefore, every institution adopts technology that is relevant for their institution. The

Department of Roads may adopt relevant technology for e-tolling while the Department of Home Affairs to issue e-passports.

The third theory is the socio-technical theory which assumes that organisations comprise of people in the social system that utilises techniques, tools and knowledge to shape organisational change. This theory reveals that technology may be influenced by external forces and public officials need to learn and adapt thereto. The analysis can be drawn that ICT in the public sector is based on these theories and the e-passport system is the evident innovative development from the theories discussed. The role of ICT advancement to increase productivity and ensure easy access to services has been evident in the Department of Home Affairs and Labour in Botswana through the implementation of the e-passport system. In Botswana the e-passport system has significantly reduced passport processing to 20 minutes, while in Lesotho, the waiting period was drastically reduced from four years to four days. The use of ICT in the public sector is known as e-government.

## 2.4    E-GOVERNMENT

E-government is a generic term for web-based services from agencies of local or national governments whereby the government uses information technology, especially the internet to support government operations, engage citizens, and provide government services (Palvia and Sharma, 2014:1).

There are two primary paradigms of e-government, according to Grande *et al.* (2002:8), namely: New Public Management (NPM) and public governance. NPM is a reaction against traditional public administration, also known as Weberian Public Administration characterised with rigid bureaucratic rules and red tape. NPM advocated for the deployment of techniques and technologies used in the private sector to the public service to improve service delivery - e-government.  Public governance entails the exercise of public authority by governments to establish rules and regulations to deliver goods and services to the citizenry effectively and efficiently (Grande *et al.,* 2002:8)*.* The crucial role of the government is to ensure that services are delivered and societal needs are met. The role of ICT in Grande *et al.* (2002:8) the public sector has eased the

role of the government not only in delivering services but also encourage citizen participation through dissemination of information via the internet. Moreover, Thornhill *et al.* (2014:340) accentuate that modern technologies, especially ICT plays a critical role in the function of governments with reference to concepts of e-government, e-governance and mobile government. These ensure that governments play a crucial role in delivering services efficiently and effectively. Grande *et al.* (2002:9-10) state that e-government can be perceived as an autonomous power, which implies the application of ICT in the public sector as held in NPM. Classification of e-government development is discussed below.

### 2.4.1  Classification of e-government development

E-government has undergone phases and it is currently on phrase three.  Table 2.1 below illustrates the phases of e-government.

**Table 2.1:    E-government classification**

| Phases | External: G2C | External: G2B | Internal: G2G |
|---|---|---|---|
| Phase 1: Information | Local/departmental/ national information (mission statements and organisational structure), addresses, telephone numbers, laws, rules and regulations, government glossary and  news | Business information, addresses, telephone numbers, laws, rules and regulations | Knowledge base (static intranet) knowledge management |
| Phase 2: Interaction | Downloading forms on websites, submitting forms, online help with | Downloading forms on websites, submitting forms, online help with | E-mail, interactive knowledge databases, complaint handling |

| | | | |
|---|---|---|---|
| | filling in forms (permits, birth or death certificates) Intake processes for permits, e-mail, newsletters. E-democracy - polls, personalised web pages | filling in forms (permits), intake processes for permits, e-mail | tools |
| Phase 3: Transformation | Personalised website with integrated personal account for all services | Personalised website with integrated business account for all services | Database integration |

Source:  Adapted from Palvia and Sharma (2014:5)

The table above illustrated the development in e-government. The first phase illustrates when the government created websites for the ministries and departments, their structure, missions and objectives and the minimal interaction with the public. The public accesses the website for information. However, certain scholars argue that the first phase started before the introduction of the internet. Gutenberg invented the printing press, while the next technology advancement was realised in the 19th century with the development of electricity, which resulted in the telegraph, radios and television sets. Citizens could receive information through telegraph, radio and television (Weaver, 2016). The second phase reveals that the public could also access documents such as government policies, receive information and send e-mails. Thus interaction between the government and the public is enhanced at this phase. Furthermore, the public could also download official documents, complete these online and submit, for example, online application for e-passports. In Lesotho citizens still queue at passport offices to apply for e-passports though the applications can be completed online. Finally, phase three reveals e-government at an advanced stage. Interaction is between the citizens and the government. It can be concluded that phase three is the current phase which

enable the public to access e-services, and participate and interact with the government through the internet thereby breaking rigid bureaucratic procedures. However, not all citizens are able to interact with the government through the internet due to lack of access thereto including mobile phones. This is referred to as the digital divide, especially in the rural areas of Botswana and Lesotho. The majority of the population is poor and can neither afford mobile phones nor internet. The digital divide is a term used to explain the apparent disadvantaged people who are either unable or to or choose not to make ICT part of their daily lives. According to Thornhill (2014:339), the digital divide describes a gap between those who have access to ICT tools such as the internet and those who do not.

## 2.4.2  Challenges facing e-government in Africa

The adoption of e-government resulted in the delivery of e-services such as e-passports through the e-passport system, that is, ICT programme. The adoption of e-government, especially in Africa is faced with challenges. Thornhill *et al.* (2014:351) assert that in most developing countries ICT projects fail. These challenges reveal the complexity to implementation policy through ICT programmes. The challenges which African countries face to implement e-government is illustrated in Table 2.2 below.

**Table 2.2:     Challenges facing e-government in Africa**

| Challenges | Description |
|---|---|
| Financial challenges | Financial constraints including: costs of internet, structure and e-services |
| Organisational challenges | Senior management support, change management, leadership role, deficiency and implementation guidelines, recruitment of ICT personnel, human capital development, lifelong learning, organisational motivation, information management, internal efficiency, non-contextualisation of e-government |

| | practices, partnership between private and public sector, ability and commitment, disintegrated projects, e-government vision, evaluation framework, transparency, citizen engagement |
|---|---|
| Political challenges | Political situation (e.g. political instability), leadership, political administrative system, public administration reforms, legal framework, ICT roadmap, fiscal policy resources, procurement regulation, e-government policy execution, freedom of press, political will, data privacy legislation, e-government strategy, regulatory issues, data standards, national policy on the use of ICT |
| Socio-economic challenges | Illiteracy, economic development, cultural constraints, demography, digital culture, poverty, corruption competition environment, language barriers, permanent availability and preservation or sustainability, appreciation of perceived ICT value, benchmarking, communication, unemployment rate, e-literacy, accessibility |
| Human challenges | Awareness, human resources, attitude, learning content or resources, accessibility, trust, public support, skilled personnel, gender inequality, low citizen participation, training and capacity building, e-record readiness |
| Infrastructural challenges | ICT infrastructure, security, privacy, |

| | information sharing, interoperability, data possession, explicit reference to ICT access, power supply, internet access and connectivity, scarcity of computers, digital divide, cyber security, collaborating systems, maintenance of government websites, tele-density, data systems |
|---|---|

Source:  Adapted from Nkohkwo and Islam (2013:258)

It can be deduced that there various challenges face the implementation of e-government projects, especially in developing African countries such as Botswana and Lesotho. This study analysed, in particular, the challenges facing the implementation of the e-passport system in the aforementioned countries.


## 2.5  CONCLUSION

The chapter illustrated the relationship between public administration and public policy in delivering services to the public. Public administration encompasses work done by public officials in the public institutions, thereby conveying the mandate decided by political officials through Legislature - policies - to deliver services to the public. It is the public officials who execute the policies, undertake the actual daily work to render services to the public on behalf of the political officials. Consequently, public officials are accountable to political officials who provide them with a mandate and the public they serve. Whatever the government decides to do, it does so through policy and it is the public officials who execute that policy to address the public needs. Public needs are dynamic as they are influenced by the ever-changing and unpredictable social, political, economic and technological environment. The technological environment influences the change in the needs of the public that resulted in the adoption of e-government. E-government has led to provision of e-services which are provided through the implementation or establishment of e-systems that facilitate the delivery of e-services. The primary focus of this chapter discussed the implementation of the e-passport system policy and conceptualise the latter in the discipline.

**CHAPTER THREE:     IMPLEMENTATION OF THE E-PASSPORT SYSTEM AS AN ICT PROJECT**

## 3.1     INTRODUCTION

Taking into account contemporary challenges in the current technological world, ICT has become significant in accomplishing better, efficient and effective delivery of public services. The literature explored in the previous chapters highlighted that since the adoption of ICT in the public sector, service delivery has improved. However, challenges facing the utilisation of ICT in the public sector have to be considered. Shehry *et al.* (2006:3) and Heeks (2003:2) assert that most of ICT projects fail, especially in developing countries.

The purpose of this chapter is to analyse the implementation of the ICT project, that is, e-passport system, highlight the opportunities and challenges that face the implementation thereof in Botswana and Lesotho.

## 3.2     E-PASSPORT SYSTEM

A discussion on passports follows which precedes the discussion on the e-passport system because the latter is designed to process and issue the former.

### 3.2.1  Passport

Issuance of passports can be traced as far back as during biblical times (years BC) when kings issued letters to evangelical messengers permitting them to enter places beyond their jurisdiction to spread the good news, (Nehemiah, 2:7-9). Since then the development in the issuance of passports has evolved from official letters to secure machine readable booklets. According to International and Civil Organization (2007:6), passports have been used over the centuries as a basis to establish the bearer's identity and to provide civil and diplomatic protection when crossing borders or travelling in foreign jurisdictions. The word passport is derived from a word *porte,* which means a gate and referred to a document that was used to allow a holder to pass through a gate in European states. Africa inherited passports from colonial rule.  Movement of Africans

within their areas was restricted to travel documents. A passport comprised crucial confidential information of the bearer namely: bearer's name(s), facial photo, date and place of birth, date of issue and expiry, nationality of the bearer and authority of the issuing body. A passport is a document issued to a person by his/her State of citizenship, which identifies his or her citizenship entitlement and is used by the issuing country to grant re-entry into the country (International Civil Aviation Organization, 2007:7).The passport may be defined as a travel document issued to citizens in any country by a respective department within a public institution, usually the Department of Home Affairs that approves the holder's identity and nationality for purposes of identification and travelling in and out of the bearer's country of origin. According to Merriam-Webster Online Dictionary, a passport is a formal document issued by an authorised official to citizens within a certain country for purposes of exiting and re-entering into the country abiding with the laws and regulations of countries in transit, also requiring protection of citizen while abroad. It can be summarised that a passport refers to a document that permits citizens to travel beyond boarders of their own country while ensuring their identity and safety abroad.  The basic functions of a passport are to identify and verify the holder's identity.

### 3.2.2  Traditional passport

A traditional passport comprises of typed or handwritten personalised information, which may be altered easily (International Civil Aviation Organization, 2007:4). The traditional passport is a paper based passport limited to machine readable zone (MRZ). However, not all traditional passports are machine readable; for example, in Lesotho, a machine readable traditional passport was only introduced in 1998. The information on this passport was only limited to the paper, that is, physically visible and could be read with the naked eyes. According to Meng, Tandra and Agrawal (2010:5), using a traditional passport posed the following problems:  identity can be exposed to anyone who can access the passport physically; traditional passport does not offer privacy; passport can be used by anyone besides the owner; identity can be easily forged; data on the passport can be altered easily because it is accessible and readable with the naked eye; and finally, the passport can be duplicated. Due to these problems, e-passport was

introduced to address these challenges. E-passport was also the focus of this study. Below, e-passport is discussed.

### 3.2.3 E-passport

An e-passport is a contemporary travel document that has been recommended by ICAO. According to Mohamet *et al.* (2009:1), the ICAO is issued with the mandate to delineate organisation, communication protocols and biometric specifications used in passports. The major objective of the ICAO is to ensure that secure documents that clearly identify bearers are implemented. The ICAO's mandate to develop travel document standards is provided by Articles 22, which provides for the facilitation of formalities; 23 provides for customs and immigration procedures and 37, provides adoption of international standards and procedures of the Chicago Convention (International Civil Aviation Organization, 2007:6).

The e-passport, which is also referred to as a biometric passport because it uses such security features, looks like an ordinary traditional passport but it has added security features stored in a contactless chip that can only be read through the special reader or scanner called extended access control (EAC). According to the International Civil Aviation Organization (2007:7), e-passport refers to the passport with enhanced machine readable travel document (MRTD) containing embedded integrated circuit (IC) chip encoded with biometric information conforming to the ICAO specifications. The biometric data allows the travel document examiner to verify whether such information collected from the person presenting the travel document is from the rightful holder (International Civil Aviation Organization, 2007:4). The following figure illustrates the features of the e-passport.

**Figure 3.1:   Features of e-passport**
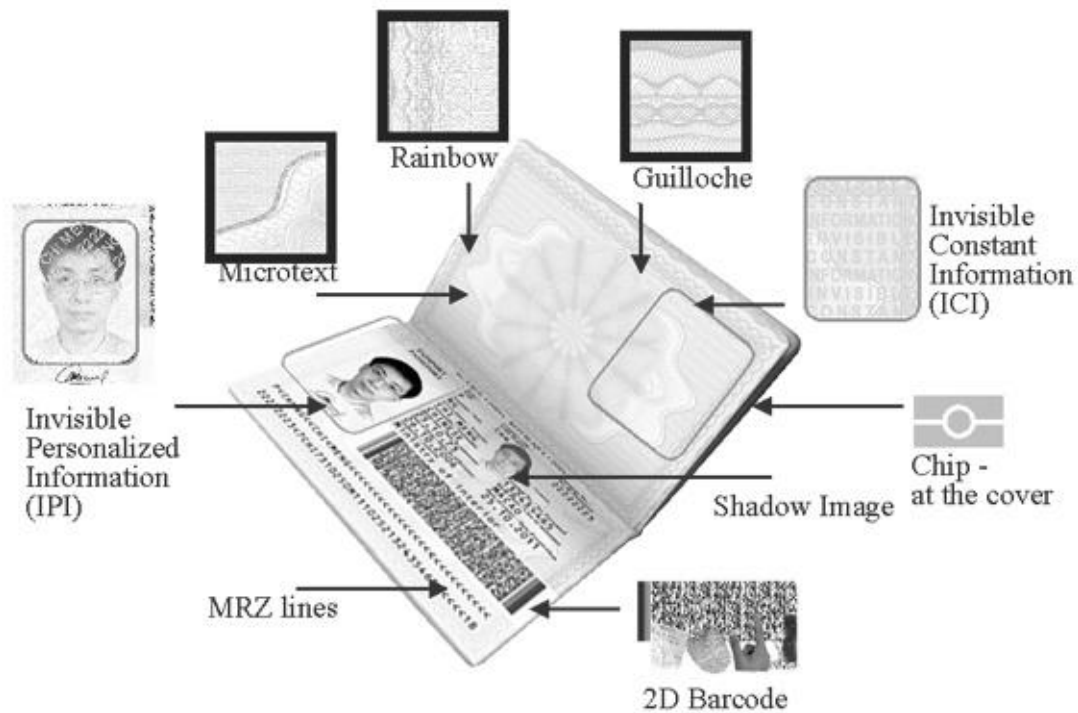


Source:  Adapted from Vung (2014:3)

Figure 3.1 above illustrates the features of the e-passport. The MRZ illustrates the features of the e-passport that can be seen with the naked eye and is machine readable. The chip contains the features illustrated in the MRZ but cannot be seen with the naked eye and cannot be altered. Even if the MRZ can be altered, the data in the MRZ will not match the one stored in the chip.

### 3.2.4  E-passport system

The system that processes the e-passports is the e-passport or biometric system. The e-passport system is defined by the International Civil Aviation Organisation (2007:55) as an automated system capable of performing the following functions: capturing a biometric sample from an e-passport applicant for an MRTD; extracting biometric data from the biometric sample; comparing specific biometric data value(s) to data contained in one or more reference templates; deciding how well compared data match, which is executing a rule-based matching process specific to the requirements of the

unambiguous identification and person authentication of the e-passport applicant with respect to the transaction involved and finally; indicating whether or not an identification or verification of identity has been achieved. Various techniques are employed in the e-passport system that differs in countries according to available technological skills such as facial recognition, fingerprint or iris biometrics. Hereunder, examples are provided of the e-passport system using different technologies.

**Figure 3.2:   E-passport system using fingerprint biometric**
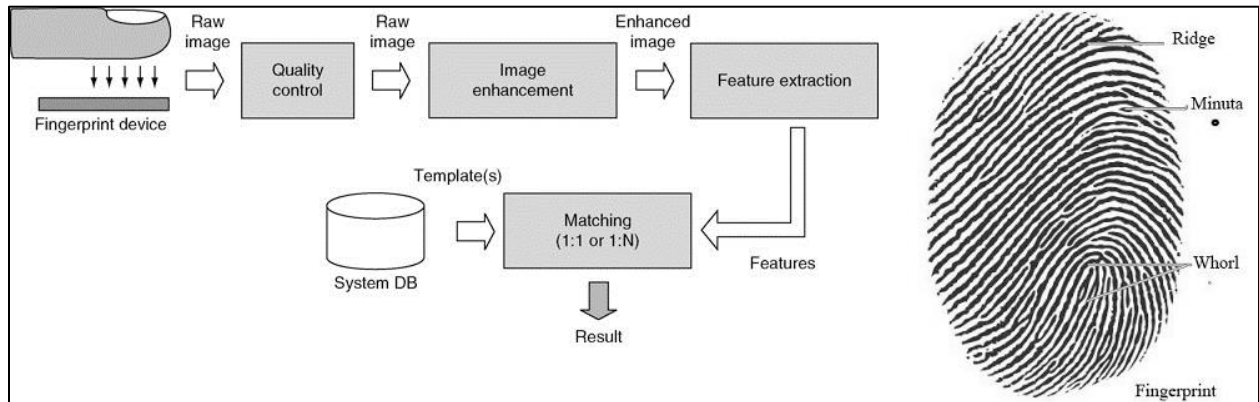


Source: Adapted from Ashtopus Technologies

Figure 3.2 above illustrates the e-passport system using fingerprint biometric which is similar to e-passport systems utilised in Botswana and Lesotho although face biometric which is used in conjunction with fingerprint biometric is not included in the figure.

Below is an example of the e-passport system that uses iris recognition.

**Figure 3.3:    E-passport system using iris biometric**
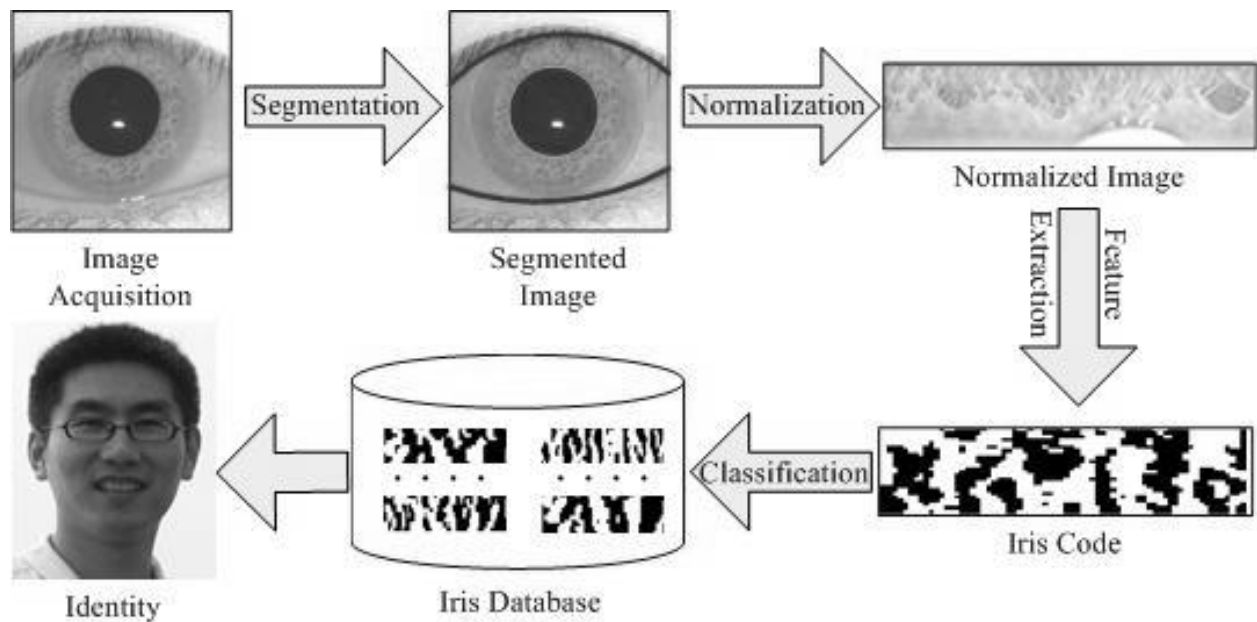


Source: Adapted from Kumar, Srinivasan and Narendran (2012:21)

Figure 3.3 above illustrates capturing iris identity into the e-passport system. Kumar *et al.* (2012:21) posit that the scanner captures data from the outer iris inwards to pupil edge. Thereafter, it arranges distinct markings on the iris and records a unique shape. After arranging various marks within the iris, all the data is saved onto a data base. Finally, individual identities are compared to verify the data.

### 3.2.5  Characteristics of the e-passport system

There are four general features of the e-passport system as indicated by Meng *et al.* (2010:7) namely: structure, behaviour, interconnectivity and combination of functions. These characteristics are illustrated as follows. The structure of the e-passport system exemplifies the composition of the e-passport system. Thus, the e-passport and different parts are implemented to identify an individual. The behaviour of the e-passport system describes how the system works, which is on a specific input and information processed at different portions at different times. Interconnectivity explains that the e-passport system works like a set of interrelated systems whereby each part thereof is dependent upon each other. Thus, the work of each part of the system affects the other

and if one part does not perform its function properly, the other will also be affected. For example, if data is not entered correctly, then incorrect data will be validated. Consequently, the e-passport will be produced with data mismatch. Finally, the combination of functions illustrates that although the major purpose of the e-passport system is to authenticate an individual, various other functions are also encompassed in the e-passport system notably; the image processing and facial recognition. These characteristics are assumed to be a feature of every e-passport system regardless of the technology it may employ.

### 3.2.6 Challenges facing the implementation of the e-passport system

Even though the e-passport system is recommended by the ICAO, no system is wholly perfect. The e-passport system is also faced with the following challenges. According to Meng *et al.* (2010:8), there are four issues of concern in the implementation of the e-passport system: performance challenges, which can also be referred to technical challenges. It is a general expectation that e-passport system should perform effectively and efficiently but that is not always the case. Meng *et al.* (2010:8) assert that to measure performance of the e-passport system, three performance factors are used namely: false accept rate or false match rate, which measures the percentage of invalid inputs which are accepted incorrectly. This kind of performance error is considered the most serious because it provides unauthorised users access to the e-passport system. The other performance factor is false reject rate or false non-match rate that measures the percentage of valid inputs which are rejected incorrectly. This error is not entirely dependent on the e-passport system but also on other external factors. The last factor is failure to enrol rate that measures the rate at which attempts to create a proper template from an input is unsuccessful. As previously mentioned, no system is perfect but its faults must be within an acceptable rate.

The second challenge is security issues which are a major concern on any system that deals with information management. Meng *et al.* (2010:8) posit that according to three principles of control in a cybernetic system, security should be built-in a system so that constant contact and communication to exercise control and also be activated if anything extraordinary happens in the system. Security is a vital concern because of

confidential information which is a potential to abuse by those who have access. The third challenge is privacy, which is a limitation to the e-passport system. According to Meng *et al.* (2010:9), the primary privacy concerns in the e-passport system includes but is not limited to authenticity, storage, linking and vulnerability. Vulnerability of the system may allow hackers to access the e-passport system and alter stored data in the system, thereby placing confidential individual stored in the chip at risk. Biometric data stored in the system also allows access to individual's confidential information such as marital status. Finally, cultural challenges with the implementation of the e-passport system must also be considered. Certain cultures or religions, such as the Islamic faith, women are not allowed to reveal their faces. This inhibits correct capturing of facial recognition in the e-passport system. The other challenge highlighted by the International Civil Aviation Organisation (2007:4) is global interoperability, which is to ensure that the e-passport produced by any country is readable by system when checking the e-passports in foreign countries. These challenges affect effective and efficient implementation of the e-passport system.

The literature highlighted that most ICT projects fail, especially in developing countries such as Botswana and Lesotho. The following discussion is based on the analysis of the ICT projects in the aforementioned two countries.

## 3.3  AN OVERVIEW OF THE ANALYSIS OF THE IMPLEMENTATION OF ICT PROJECTS IN BOTSWANA AND LESOTHO

An analysis of the implementation of ICT projects in Botswana is outlined hereunder.

### 3.3.1  An analysis of the implementation of ICT projects in Botswana

Following the adoption of the Maitlamo ICT Policy in Botswana, the government implemented ICT projects in the public sector. However, as previously mentioned, most ICT projects, especially in developing countries tend to fail.  Table 3.1 illustrates the status of selected ICT projects implemented in Botswana including the e-passport system.

**Table 3.1:    Status of the ICT projects in Botswana**

| PROJECT | PURPOSE | STATUS | COMMENTS |
|---|---|---|---|
| Malepa Examination Processing System | Process and release primary to secondary examination results | Failed | Skipped policy formulation stage to implementation stage |
| Livestock Information Technology  System (LITS) | Facilitate tracing and identification of livestock | Failed | Poor understanding of project requirements |
| Botswana Telecommunication Communication Billing       System (BTC) | Supply fixed line and related communications | Failed | Poor planning and resistance to change |
| E-legislation | Online access to laws and policies | Successful | Successful |
| E-health | Increased quality, efficiency, time saving and   safety | In progress | Financial constraints |
| E-business:    mobile banking | Access banking facilities online, improve safety and improve security | In progress | Resistance to change |
| E-documentation: e-passport system | Process e-passports | Successful | Successful |

Source:        Adapted from Mphale, Okike and Mogotlhwane (2016:970-971), Nkwe (2012:44)

Table 3.1 illustrates the ICT projects that failed and those that were implemented successfully in Botswana. The failure and success of the implementation of the ICT

project may be as a result of various factors as noted in the literature explored. The implementation of a policy is a complex phenomenon. Table 3.2 below illustrates the failure and success of implemented ICT projects in Botswana

**Table 3.2:    Factors influencing the failure and success of implemented ICT projects in Botswana**

| SUCCESS FACTORS | FAILURE FACTORS |
|---|---|
| The ability to address technological and technical issues | IT system inability to solve problem(s) that is intended to solve |
| The IT capability or functionality | Use of consultants |
| Effective implementation strategy | Poor project management |
| The ability of the IT to solve the problem it is intended to solve | No commitment |
| User training, education and support | Lack of top management support |
| Empowerment | Violated budget constraints |
| Requirements management | Poor leadership style |
| Effective project team commitment | Lack of stakeholder involvement |

Source:  Adapted from Mphale *et al.* (2016:975)

The table above illustrates the factors that lead to failure and success of the implemented ICT projects in Botswana. The basic factors that led to the successful implementation of ICT projects in Botswana included: IT capability and effective commitment of the team responsible for the implementation of the ICT projects. On the one hand, the lack of commitment, lack of top management support and financial constraints were noted as some of the factors that impeded successful implementation of ICT projects in Botswana.

The following discussion is based on the analysis of ICT projects in Lesotho.

### 3.3.2 An analysis of the implementation of ICT projects in Lesotho

Table 3.3 below illustrates the analysis of selected ICT projects implemented in Lesotho.

**Table 3.3:   ICT projects: analysis in Lesotho**

| PROJECT | PURPOSE | STATUS | COMMENTS |
|---|---|---|---|
| E-health ICT Village in Mahobong | Training personnel on ultrasound technology | Partially failed | Funding stopped and there was inadequate ICT equipment |
| New Partnership for Africa's Development (NEPAD) eSchool Demo Project | Transfer ICT skills to young Africans | Phased out | Phased out |
| Cyber Security Network | Promote harmonised policies and regulatory guidelines for ICT market | In progress | Mobilising financial resources and formulating guiding policy |
| Digital Broadcasting Migration | Improve television reception quality and add programme channels | Failed | Unclear policy direction and lack of funds |
| Integrated Financial Management Information System (IFMIS) | Expand Lesotho government data network in all districts | Successful | Successful |
| Lesotho Government Data Network (LGDN) | Capture and process government financial transactions. | Successful | Successful |

| E-documentation: e-passport system | Process and issue e-passports | In progress | The study aspires to find out its progressive status |
| --- | --- | --- | --- |

Source:  Adapted from IST- Africa, Maphephe (2014:124) and Thamae (2015:1)

Table 3.3 illustrates certain ICT projects implemented in Lesotho and their status. Certain ICT projects failed, while others proved successful. Therefore, factors that influence the implementation of ICT projects should be explored to ensure successful implementation.

The factors which influence the failure of ICT projects in Lesotho is the following (but not limited to): leadership incapability, broadband not accessed, lack of ICT expertise, financial constraints, lack of information sharing, regulation and legislation constraints as highlighted by Maphephe (2013:64). The following have been posited as the factors that may lead to successful implementation of ICT projects in Lesotho: training staff to utilise ICT, adequate ICT budget, governmental departments' cooperation, communications infrastructure, access to broadband, formation of an ICT board, ICT spending moratorium and establishment of ICT office (Maphephe, 2013:70-71).

Based on Maphephe's findings of the factors which influence the implementation of ICT projects in Lesotho and Mphale's findings in Botswana, the following comparisons can be drawn.

### 3.3.3  Similarities
Both countries (Botswana and Lesotho) face the following challenges for effective implementation of ICT projects: financial constraints which require adequate mobilisation thereof; outsourcing due to lack of skilled staff to implement the ICT projects which require access to proper training for staff; and lack of leadership commitment which should be encouraged.

### 3.3.4 Differences

For Lesotho to enhance effective implementation of ICT projects, the following must be considered: conducive ICT infrastructure be established; accessible broadband; develop intergovernmental relations; and establish both an ICT board and office to facilitate effective implementation. In the case of Botswana, ICT systems should be developed such that it will ensure the attainment of intended results; appoint a capable project management team; and empower senior management. It should be noted that the major challenges facing the effective implementation of the ICT projects in Botswana is financial constraints and technical expertise, while Lesotho faces these including but not limited to favourable ICT infrastructure.

### 3.4    CONCLUSION

This chapter focused on the implementation of the e-passport system, defined the concept as well as provided examples notably - the fingerprint and iris biometrics. A comparative analysis was drawn to highlight the similarities and the differences between the challenges in Botswana and Lesotho of the current situation or performance of ICT projects within their respective countries. The similarities include that both countries face financial constraints which require adequate mobilisation thereof; outsourcing due to lack of skilled staff to implement the ICT projects which require access to proper training for staff and lack of leadership commitment which should be encouraged. The differences include: in order to enhance effective implementation of ICT projects, Lesotho need conducive ICT infrastructure; accessible broadband; develop intergovernmental relations; establish both an ICT board and office to facilitate effective implementation. Furthermore, Botswana need to ensure that ICT systems are developed such that it will ensure the attainment of intended results; appoint a capable project management team and empower senior management.

**CHAPTER FOUR:**      **A COMPARATIVE ANALYSIS OF THE IMPLEMENTATION OF THE E-PASSPORT SYSTEM IN BOTSWANA AND LESOTHO**

## 4.1 INTRODUCTION

This chapter outlines certain policies and legal frameworks adopted by the governments of Botswana and Lesotho to support the implementation of the e-passport system in their respective countries. The chapter also highlights international best practices in the implementation of the e-passport system to establish lessons for Botswana and Lesotho for the effective and efficient implementation of the e-passport system. The rationale for adopting the e-passport system in Botswana and Lesotho is explained as well as the benefits and the challenges.

## 4.2 INTERNERTIONAL BEST PRATICES IN THE IMPLEMENTATION OF THE E-PASSPORT SYSTEM

The German e-passport is considered the best and most sound globally because its inhabitants can visit 176 countries without visa requisition due to its trusted security features. Therefore, the Federal Republic of Germany (hereafter referred to as Germany) was selected as the best international model for this study. Germany implemented the e-passport system and issued e-passports since 2005. According to Drukerei (2007:2-3), Germany adopted the e-passport system to comply with the ICAO specifications, inhibit identity fraud and improve border security. In 2007, Germany established an e-passport system guide, which according to Drukerei (2007: iii), was designed as a response to address many queries from the public since its implementation. Drukerei (2007:iii) further notes that the information provided by  the e-passport system guide includes but is not limited to the technical implementation thereof, e-passport legislation and other  related aspects such as security features, as well as data security and protection. This e-passport system guide provides necessary information to citizens online including passport application forms, which saves the Germans invaluable time and money to travel to the Federal Ministry of Interior. This breaks the shackles of hierarchical bureaucratic procedures.

One of the limitations of implementing the e-passport system, according to the reviewed literature, is the potential abuse of personal information by the government. To address this limitation, Drukerei (2007:3) posits that after processing and issuing the e-passport to the owner, the finger print biometric is deleted from the e-passport system, thus this data is stored exclusively in the chip because German legislation does not allow for this type of information to be stored in any database for security reasons. ICT projects are expensive to implement. Taking into account this limitation, Germany increased the price of passports in 2005 following the implementation of the e-passport system to inhibit any technical efforts employed to establish the e-passport system (Federal Ministry of Interior, 2007:9). However, one may argue that this measure only benefits the government not the public who is supposed to be the beneficiaries of the e-passport system policy. Consequently, the prices increase is unaffordable for the poor. It was noted that ICT projects require infrastructure for effective implementation. Drukerei (2007:3) asserts that all passport office workplaces have been equipped with the required e-passport system infrastructures as well as suitable software to ensure efficient and effective implementation thereof in Germany. Moreover, to facilitate the right to information, article 4 of Council Directive 2252/2004 stipulates that each e-passport holder has a right to view their personal data stored in the chip. Therefore, the reading devices facilitate this procedure and protect this information (Drukerei, 2007:3).

According to the *Passport Act*, 2007 (Act 1 of 2007) (of Germany), the following types of passports are issued in Germany: child passport that is valid for a maximum of six years but can be extended to 12th year; temporary passport; official passports that are valid for ten years, which includes the service passport issued to senior officials in government, diplomatic passports issued to German diplomats and consular officials as well as temporary diplomatic passports. All temporary passports may be valid for a maximum of one year only. A person may not hold more than one passport unless a legitimate interest is demonstrated to issue another. A passport may not be valid past a bearer's 23rd birthday unless determined by law that the holder may still hold German citizenship. Germany does not allow dual citizenship and citizens by descent are expected to renounce other countries citizenship at the age of 23 if they still want to retain German citizenship (Section 5[1-5] of the *Passport Act*, 2007 [Act 1 of 2007]).

However, the passport's strength cannot be attributed to the implementation of the e-passport system alone because there are other variables that determine the strength of the country's passport such as the economy of the country and its flexible market access (Passport Index). According to the Passport Index, a country's passport strength is also determined by the number of countries it has access to without visa restrictions. This implies that the passport may be ranked high even though it is not an e-passport such as the Seychellois passport, which is ranked the most powerful in Africa and the 28th in the world - due to the number of countries that Seychellois can visit without visa requisitions (Lablache, 2014). According to Lablache (2014), the implementation of the e-passport system in Seychelles has been approved which announced in 2012 but the implementation was postponed because of financial constraints. This postponement which was due to financial constraints is not a surprise for a developing country such as Seychelles because ICT projects are expensive and may become unaffordable in such countries. Although Seychelles has not yet implemented the e-passport system, there are certain practices in processing passports that other developing countries can learn from. One practice includes the adoption of availability and accessibility of an application form online (Department of Immigration and Civil Status). This is advantageous because passport applicants may download and complete the passport application form before visiting passport offices. Furthermore, Seychelles has encouraged the delivery of passport applications per courier, which reduce unnecessary long queues at the passport offices (Department of Immigration and Civil Status).

A discussion of the legal framework of the e-passport system in Botswana follows in the next section.

## 4.3 THE IMPLEMENTATION OF THE E-PASSPORT SYSTEM IN BOTSWANA

In March, 2010 the Ministry of Labour and Home Affairs issued e-passports following the installation of the e-passport system. It was launched in December, 2009 according to the Republic of Botswana Government Portal. The Botswana e-passport is ranked the third soundest passport in Africa and 58th in the world (Passport Index).

The legal framework that led to the implementation of the e-passport system in Botswana is discussed below.

### 4.3.1 Legal framework

The implementation of the e-passport system in Botswana is one of e-government's initiatives developed as a result of the Maitlamo ICT Policy. The latter intended to provide ICT equipment, infrastructure and e-services as well as bring Botswana on par with other countries in the global sphere (Nkwe, 2011:128-131). The issuance of e-passports in Botswana is regulated by the *Immigration Act*, 2011 (Act 3 of 2011) under the implementation of the Passport and Border Control System Project. These statutes and other legislation related to the implementation of the e-passport system in Botswana are illustrated in Table4.1 below.

**Table 4.1: Legal framework**

| LEGISLATION | USE |
|---|---|
| The Constitution of Botswana | Free movement of Batswana in and out of Botswana |
| Maitlamo ICT Policy | Installation of e-passport system |
| *Immigration Act,* 2011 (Act 3 of 2011) | Eligible e-passport applicants |
| *Citizenship Act*, 2004 (Act 1 of 2004) | Types of citizens eligible for e-passport application |
| *Electronic Communications and Transactions Act*, 2014 ( Act 14 of 2014) | Legal recognition of electronic signatures and documents |
| *Cybercrime and Computer Related Crimes Act,*2007(Act 22 of 2007) | Protection of personal electronic data |

| | |
|---|---|
| *Freedom of Information Bill*, 2010 | Right of access to information and official documents |
| Vision 2036 | Enhancing efficient public service delivery through the use of ICT |
| Botswana e-government master plan 2015-2021 | Enhance e-documentation system |

Source: Researcher's own analysis based on Botswana's legislation and documents

Table 4.1 summarises certain legislation that supports the implementation of the e-passport system in Botswana.

The e-passport system was implemented by the Ministry of Labour and Home Affairs through the Department of Immigration and Citizenship. The Ministry of Labour and Home Affairs is now referred as the Ministry of Nationality, Immigration and Gender Affairs (MNIG) - established in 2016 following the reorganisation of government portfolio responsibilities as stipulated by the Botswana Government Portal. However, to avoid confusion and for the purpose of consistency, the Ministry of Labour and Home Affairs will be utilised throughout this study. The implementation of the e-passport system in Botswana followed after the contract to install the e-passport system was awarded to a German firm, Giesecke and Devrient (G&D). According to Gaigl (2008), G&D was awarded a contract in 2008 to manufacture and deliver e-passports and supply data acquisition as well as personalisation systems for travel documents in Botswana. The e-passport system processes and facilitates issuance of e-passports to Batswana. The national e-passport may be issued to any Botswana citizen who wishes to travel abroad or in the country and has acquired the citizenship either by birth, descent, settlement or naturalisation as stipulated by the Ministry of Labour and Home Affairs. According to the Ministry of Labour and Home Affairs, the following e-passports are also issued by the Department of Immigration and Citizenship namely:  e-diplomatic passports are issued to diplomats and consular officers of Botswana; an e-official passport is issued to senior officials who serve the government of Botswana as well as e-child passport which is issued to Batswana who are below the age of 16. All passports are valid for 10 years except the e-child passport which is valid for five years only. An electronic emergency

travel document (E-ETD) is also issued for emergency purposes such as to patients who need medical attention abroad as illustrated by the Ministry of Labour and Home Affairs.

## 4.4    WHY ADOPT THE E-PASSPORT SYSTEM IN BOTSWANA?

The following are certain reasons Botswana adopted the e-passport system besides the need to comply with the ICAO requirements.

Prior to the introduction of the e-passport in Botswana, the traditional passport that was used in this country was not machine-readable as highlighted by the Botswana Government Portal. According to Mmengionline (2012), processing the Botswana traditional passport at the borders, notably the South African border, was time consuming, because it took approximately 15 minutes, and resulted in long queues and delays to pass through the borders. According to the Botswana Government Portal, the other challenge was identity fraud as well as corruption by Immigration Officers who issued Botswana passports illegally to foreign nationals.  Moreover, there was a high rate of reported lost passports that was attributed to allegations that Batswana were selling passports to foreign nationals (Botswana Government Portal).

The challenges Botswana experienced issuing traditional passports are expected to be surpassed through the implementation of the e-passport system.

## 4.5    BENEFITS AND CHALLENGES FACING THE IMPLEMENTATION OF THE E-PASSPORT SYSTEM IN BOTSWANA

According to Maramwidzwe (2012), the benefits of implementing the e-passport system in Botswana included the following:  reduced fraud in the form of forged travelling documents due to automation of the passport system and ports of entry; apprehension of wanted or illegal persons, stolen vehicles as well as stolen travel documents. The turnaround time was also reduced from 14 days to five days and currently from five days to a minimum of two hours or a day in Gaborone and its periphery (Botswana Government Portal). To resolve the challenge of high level of lost passports, the Department of Immigration and Citizenship introduced a fine of P1000 (P stands for

Pula, which is Botswana currency - 1P= R1.29) excluding the e-passport fee (Botswana Government Portal). When, the passport is reported missing it is electronically cancelled globally and can never be used. This fine does not only inhibit the high rate of lost passports but also reinstate the integrity of the Botswana passport.

The following are certain challenges which faced the adoption of the e-passport system in Botswana. Firstly, Maramwidzwe (2012) asserts that the e-passport and e-border systems were not fully implemented in 2012 whereby only major ports of entry were installed due to insufficient funds. Secondly, the government of Canada repealed visa immunity on the Botswana e-passport claiming that the level of immigration violation was high including two other African countries (Swaziland and Namibia), which benefited from visa exemptions as illustrated by Africa Review (2012). According to Africa Review (2012), the Government of Canada blamed immigration violation on unreliable authenticity of travel documents from Botswana, Swaziland and Namibia. However, Africa Review (2012) noted that the Ministry of Labour and Home Affairs in Botswana dismissed the allegation that its e-passport authenticity was unreliable and highlighted that the e-passport holders exploit the good relations the country has with Canada.

Moreover, as a result of an increased demand for e-passports, the Ministry of Labour and Home Affairs introduced additional fees for urgent e-passports namely: express service cost for e-passports processed within 48 hours and extra service cost for e-passports issued within 24 hours (Maramwidze, 2014). However, according to the Botswana Government Portal, due to the e-passport system that processes e-passports speedily since 2015, the increase in fees for urgent passports was unjustified. Therefore, fees for urgent passports were drastically reduced by the Ministry of Labour and Home Affairs. Currently, the Ministry headquarters applies the principle of "apply, wait and collect" for urgent passports.

The following discussion is based on the implementation of the e-passport system in Lesotho.

## 4.6    THE IMPLEMENTATION OF THE E-PASSPORT SYSTEM IN LESOTHO

Lesotho implemented the e-passport system in 2013. The contract to install the e-passport system was awarded to an Israeli company, Nikuv International Projects (NIP). The following discussion outlines the legal framework that led to the implementation of the e-passport system in Lesotho.

### 4.6.1   Legal framework

Legislation related to the implementation of the e-passport system in Lesotho includes but not limited to, is outlined below:

- The *Constitution of Lesotho*, 1993 (Act 12 of 1993): provides for freedom of movement
- The Lesotho ICT Policy:  provides for the implementation of ICT programmes, human development in the ICT  for sustainable implementation of ICT programmes and enhance delivery of services through such programmes
- *Communications Act*, 2012 (Act 4 of 2012): provides for improvement of ICT infrastructure in the public sector and  support to enhance service delivery through ICT opportunities
- The Lesotho Science and Technology Policy: provides for strategic framework for the Lesotho ICT Policy implementation
- Lesotho Vision 2020 Policy: aspiring for technologically well-established Lesotho
- Poverty Reduction Strategy Policy: provide  for human development and environmental security
- The National Strategic Development Plan: intended to accomplish a technologically wiser and creative society in Lesotho
- The *Lesotho Passports and Travel Documents Act*, 2016 (Act of 2016), regulating passports issuance.

The *Lesotho Passports and Travel Documents Act*, 2016, (Act of 2016) will be discussed in detail because this policy specifically led to the implementation of the e-passport system.

The e-passport Bill came into effect in 2013 to regulate issuance of e-passports and was used together with the *Lesotho Passports and Travel Documents Act*, 1998 (Act 15 of 1998). This Act was repealed and replaced by the *Lesotho Passports and Travel Documents Act,* 2016 (Act of 2016). The *Lesotho Passports and Travel Documents Act*, 2016 (Act of 2016) is the Lesotho E-passport Bill, 2016 but it is stipulated that it should be cited as the *Lesotho Passports and Travel Documents Act*, 2016 (Act of 2016). According to Section 4 of the *Lesotho Passports and Travel Documents Act*, 2016 (Act of 2016), the e-passport system was established to perform the following functions: capture a biometric sample from an applicant for the machine readable passport. Secondly, extract biometric data from the biometric sample. Thirdly, compare specific biometric data from value to data contained in one or more reference templates. Furthermore, the e-passport system revealed how well specific biometric data value and the biometric samples match. Lastly, the e-passport system revealed whether an identification or verification of identity is achieved. The e-passport system captures and validates the information of the applicant and processes it into the e-passport. The implementation of the e-passport system in Lesotho can be considered as an ICT advancement and a significant development in e-government.

The *Lesotho Passports and Travel Documents Act*, 2016 (Act of 2016) regulates the issuance and revocation of passports and travel documents. The passports are issued for purposes to identify holders and travel abroad or in the country. The *Lesotho Passports and Travel Documents Act*, 2016 (Act of 2016) regulates three types of e-passports; a temporary passport; a refugee passport (also called a Geneva passport or a Convention travel document); and a travel document that is issued to various citizens in Lesotho. A diplomatic e-passport is issued to their Majesties and their Royal Highnesses, the Prime Minister and spouse, Ministers and their spouses, and certain citizens and their spouses appointed by the Minister of Home Affairs, such as diplomatic officials deployed in other counties that have relations with Lesotho, for example, South Africa, Japan and Ireland.

An official e-passport is issued to a citizen of Lesotho who holds a senior position in the government of Lesotho recommended by the Minister of Public Service such as the

Director Passport Services. Furthermore, an official e-passport is issued to the citizen of Lesotho who is in the service of the government of Lesotho; or an institution responsible to the government of Lesotho; or recommended by the Department of Home Affairs to be issued an official e-passport. Moreover, an official e-passport is issued to the citizen of Lesotho who travels on official duty and can be used only for such duties. A regular e-passport is issued to any citizen of Lesotho to travel abroad or in the country. Hence, a regular e-passport is issued to any citizen of Lesotho either by birth or naturalisation. The three e-passports mentioned are valid for ten years but the bearers of the diplomatic e-passports (with the exemption of their majesties and their Royal Highnesses who hold these passports continually) and the official e-passports should surrender these to the Ministry of Home Affairs within three months of ceasing to hold the position for which the e-passports were issued. When the Prime Minister leaves office, he/she must surrender the diplomatic e-passport. The bearers of all e-passports can also surrender these to the Ministry of Home Affairs when  still valid but fully endorsed or  damaged or defaced and apply for new e-passports (Section 6-4[b] and Section 8 of the *Lesotho Passports and Travel Documents Act*, 2016 [Act of 2016]).

The following are also the passports and the travel documents regulated by the *Lesotho Passports and Travel Documents Act*, 2016 (Act of 2016), namely: the refugee (also known as a Geneva Convention travel document) and temporary passport. The refugee passport is issued to an expatriate who is a resident in Lesotho under terms and conditions prescribed by the Minister of Home Affairs. The refugee passport allows the holder to travel to a country of destination and the countries of transit and is valid for two years. A temporary passport is issued to a person who is at the time not in possession of a valid passport, but is eligible to hold one or whose passport is at the time not available, for example, while the holder is waiting for a visa application to be processed. The temporary passport is valid to travel globally for a period of six months from the date of issuance of the passport. Lastly, the travel document is valid to travel into Lesotho for one single journey, and expires when the holder arrives in Lesotho because it is issued to a local citizen who lost the passport abroad (Section 7[5-6] and Section 8 of the *Lesotho Passports and Travel Documents Act,* 2016 [Act of 2016]).

## 4.7 WHY ADOPT THE E-PASSPORT SYSTEM IN LESOTHO?

Prior to 1998, processing and issuance of passports in Lesotho was decentralised. Passport applicants would be sent to the nearby passport office in their district to apply for a passport and receive it on the same day. In 1998, the production of passports was centralised. A production centre was established in the Maseru District which was the resulted in challenges to issue passports. This challenge was attributed to the introduction of machine readable passports. Furthermore, the centralised passport production centre that came into effect in Lesotho in 1998 resulted in having to comply with the ICAO standards as specified by the Department of Passport Services. The traditional passport system was used to issue traditional passports. The Department of Passport Services realised that the implementation of the e-passport system was needed to inhibit the challenges faced with the issuance of passports through the traditional system.

The following are certain challenges that face the issuance of passports in Lesotho since the inception of the readable machine passports through the traditional system (Department of Passport Services, 2013:4-7):

### 4.7.1 Challenges facing production of passports

The system was unable to ensure that old applications are processed first which resulted in inevitable delays to produce the passports. Furthermore, it was impossible to trace the progress of the applications till it was processed in the system at the production centre (for the application to be processed in the system, it took up to three years). Consequently, it was difficult to update the applicants of the progress of their passport applications; access control to log into the system allowed the user to access all modules or stages in passport production, which was a loophole for corruption by passport officers (Department of Passport Services, 2013:4-5).

- **Security concerns**

The production centre was housed in a multi-occupancy government building that had limited security and failed to comply with ICAO standards; the production centre structure and location did not allow for secure delivery of blank passports (Department of Passport Services, 2013:6).

- **Applications processing challenges**

Applicants were able to submit multiple applications using different names and identities due to the lack of reliable control measures to establish identity; applicants were able to hold more than one passport due to lack of biometric technology; applicants applied for more than one passport to avoid penalties endorsed by South Africa for staying in the country illegally; application system was not integrated as a result the applicant was able to apply for a passport using different identities at various passport offices without being traced; holistic reliance on written statements by others confirmed the passport applicants' identity, which contributed towards documents being issued to non-nationals by corrupt passport officers; application forms had neither serial numbers nor bar code and were easily duplicated by corrupt passport officers (Department of Passport Services, 2013:5-6).

- **Distribution challenges**

The Department was faced with the challenge of a large number of uncollected processed passports due to, among other reasons, after applying for passports the applicants would proceed to South Africa for extended periods without passports due to delays in processing the document while certain applicants had passed-on before collecting their passports (Department of Passport Services, 2013:7).

- **Other challenges**

Other challenges included: lack of infrastructure whereby certain offices did not have access to electricity, office equipment and lack of staff. There was also lack of standard operating procedures. Hence, discretion of the passport officers resulted in different services offered at specific passport offices (Department of Passport Services, 2013:6-7).

To resolve the mentioned challenges the Department of Passport Services adopted the e-passport system.

## 4.8    THE BENEFITS AND CHALLENGES OF ADOPTING THE E-PASSPORT SYSTEM IN LESOTHO

The following paragraphs outline the benefits and the challenges of adopting the e-passport system in Lesotho.

### 4.8.1  The benefits of adopting the e-passport system

The benefits of implementing the e-passport system are measured by comparing the e-passport system against the previous passport system. Table 4.2 illustrates the comparison below:

**Table 4.2: The benefits of the e-passport system**

| Activity | Old system | E-passport system | Benefits |
|---|---|---|---|
| Production process | Slow | Faster | Turn-around time decreased from three years to four days |
| Production level | Low | High | Backlog no longer occur |
| Passport alteration | Easy | Cannot alter | Identity theft decreased |

| Biometrics | Less | More | Meets ICAO requirements Reduced multiple applications |
|---|---|---|---|
| Password usage | Performed all modules or tasks | Restricted to one module or task | Internal corruption reduced |
| Staff | Requires more staff | Requires less staff | Labour saving |
| Technological complexity | Complicated | Not complicated | User friendly |

Source: Researcher's own analysis based on the research findings from Department of Passport Services 2012 and 2016 reports

It can be inferred from the above that the e-passport system is advantageous to the Department of Passport Services. Furthermore, it has reduced the turn-around time from three years to four days and also eliminated the backlog. Thus, the e-passport system has sped up passport processing and issuance. However, no system is perfect, therefore, certain challenges which the e-passport system faces is identified below.

### 4.8.2  Challenges facing adoption of the e-passport system

E-passports were recommended by the ICAO and the benefits thereof have been identified. The challenges facing the implementation of the e-passport system cannot be ignored. The high cost of ICT in particular, poses a crucial question of affordability by developing governments such as Lesotho. This is a major concern for successful and sustainable implementation of the e-passport system.

The challenges relating to the issuance of passports in Lesotho is historic. These challenges pertain to the passport usage, document security, changes in the types of documents (passports) with the advent of time as a result of the requirement to comply with ICAO specifications. Changes in passports types have evolved notably from 1998. Hand written passports were phased out in response to ICAO requirements that all travel documents should be machine readable (Department of Passport Services, 2012:1). The first machine readable passport in Lesotho did not meet the ICAO security

specifications, therefore, it was easily fraudulent (Department of Passport Services, 2012:5).The following are certain identified challenges which faces the implementation of the e-passport system in Lesotho:

**Figure 4.1:   Challenges facing the implementation of the e-passport system in Lesotho**



Source:       Researcher's own analysis based on the research findings from the Department of Passport Services 2012 and 2016 reports

Figure 4.1 above illustrates the challenges facing the adoption of the e-passport system in Lesotho. The challenges are explained below as illustrated by the Department of Passport Services (2012:1-5) and the Department of Passport Services (2016:1-4).

- **Financial challenges**

According to the Department of Passport Services (2016:1-2), the price at which the e-passport system is acquired is extremely high due to costs to service and maintain the e-passport system which is undertaken by the service provider. Furthermore, the cost of blank e-passport booklets is also expensive. Therefore, due to insufficient funds, the e-passport system is not maintained or serviced according to a scheduled maintenance

plan (Department of Passport Services, 2016:1-2). Moreover, e-passport system procurement is also delayed due to the lack of funds for maintenance (Department of Passport Services, 2016:2). Furthermore, the e-passport system requires new infrastructure for enrolment centres to adapt to the system's requirement. However, due to inadequate funds, the new infrastructure has not been provided at the enrolment offices except for production centre in Mohale's Hoek where the service is available and complies with ICAO standards (Department of Passport Services, 2012:4-6). As a result of the lack of required infrastructure to process applications at enrolment offices, unnecessary errors occur, such as poor quality passport photographs, for example, either the passport photograph is too dark or bright and fails to meet the ICAO standards. These errors result in passports being damaged and unnecessary delays to issue the document timeously. This in itself increases production costs since production processes have to be repeated unnecessarily (Department of Passport Services, 2016:1-2).

- **Technological challenges**

The e-passport system relies on data provided by the National Identity and Civil Registration (NICR). The implication hereof is that any error in the NICR system constitutes an error in the e-passport system which results in unnecessary damage of passports. This is wastage that could have otherwise been avoided. The e-passport system is also unable to accommodate lengthy names (not more than 32 characters) and most applicants are forced to exclude these. Excluding names changes the applicants' identity and can contribute towards fraudulent acts. Most Basotho have lengthy names; first name and two middle names while others even add a second surname after marriage which cannot be accommodated on the e-passport system (Department of Passport Services, 2016:1-2).

- **Organisational challenges**

Distribution or issuance of passports is still a problem, because the Department of Passport Services does not have its own transport to collect processed passports from the production centre (production of passports is centralised, which is located in Mohale's Hoek and processed passports must be collected to be distributed at enrolment centres) to the passport or enrolment offices. The available transport is utilised by the entire Ministry. As a result, certain persons wait for up to a month to acquire their passports. Revocation of passports is also a challenge for the Department due to poor communication between the latter and Departments of Public Service and Foreign Affairs. The latter departments are expected to inform the Department of Passport Services upon exit of office by bearers holding diplomatic and official e-passports. However, this has not taken place as required by regulation. Furthermore, the e-passport system is serviced and maintained by a service provider and the Department's IT technicians are not involved in the maintenance and service of the system, which poses a question of the sustainability of the e-passport system. Furthermore, major service and maintenance of the e-passport system is delayed because the service provider is located outside the country (Israel) (Department of Passport Services, 2012:5 and Department of Passport Services, 2016:2-3). Therefore, major problems have not received urgent attention.

- **Other challenges**

Even though the e-passport system processes the passports faster than previously, reducing the waiting period from three years to four days, the passport offices in Lesotho are still faced with long queues (Department of Passport Services, 2016:2). This is due to, among other reasons, the passport was utilised as an identity document within and outside Lesotho prior to the introduction of identity documents in 2013. To this date, most Basotho still consider a passport as an identity document within Lesotho although the relevant identity document used in the country is available (Department of Passport Services, 2016:3). For this reason, they apply for a passport even though they do not intend travelling abroad. Furthermore, certain applicants apply for new e-passports whilst the old one is still valid because they hold that they are required to

change to e-passports as indicated by the Department of Passport Services (2016:3). However, all passports produced prior to the introduction of the e-passport system remain valid till its expiry date. Furthermore, despite the e-passport system processing passports faster, certain individuals are defrauded of huge sums of money by the passports officers in exchange for a speedier issue of the document (Department of Passport Services, 2016:3). It can be concluded that the implementation of the e-passport system in Lesotho is faced with challenges, for example, financial, technological, and organisational, including others. The Department of Passport Services should implement measures to remedy these challenges to ensure successful and sustainable implementation of the e-passport system. As Koma (2014:43) mentioned, financial, organisational and other challenges need to be taken into consideration for successful implementation of a programme. Brynard (2010:195) also illustrated primary factors that influence successful implementation of the policy, namely: sufficient resources, favourable environment and coordination between institutions responsible for policy implementation.

## 4.9 SIMILARITIES AND DIFFERENCES BETWEEN THE BENEFITS AND CHALLENGES OF ADOPTING THE E-PASSPORT SYTEM IN BOTSWANA AND LESOTHO

As mentioned earlier, Botswana and Lesotho are situated in Southern Africa and the study presupposes that they share similar challenges. Therefore, since Botswana implemented the e-passport system before Lesotho, it was selected as the model closer to 'home 'from which the country could learn.

The following may be noted as points of similarities to implement the e-passport system for both Botswana and Lesotho; both countries are member states of the ICAO and implemented the e-passport system to meet the requirements (of the ICAO). Furthermore, both countries adopted the e-passport system for the following reasons or benefits associated with the implementation of the e-passport system: inhibit identity fraud as both countries experienced this challenge during the traditional passport era; and speedy issuance of e-passports reduced turnaround time. Both countries

experienced delays in processing and delivering traditional passports. Moreover, financial constraints could be mentioned as a common challenge facing the implementation of the e-passport system in Botswana and Lesotho. The literature revealed that both countries experienced financial problems in executing the e-passport system.

Other similarities in the implementation of the e-passport system in Botswana and Lesotho included:  type of e-passports issued in both countries notably - e-official and e-diplomatic passports. However, the e-passport issued to a Botswana citizen is referred to as an e-national passport while the e-passport issued to a Lesotho citizen is referred to as an e-regular passport. Moreover, Botswana issues e-child passports valid for five years while all e-passports in Lesotho are valid for 10 years. Both countries have outsourced the installation and management of the e-passport system. Botswana utilises the services of a German company while Lesotho hired an Israeli company. Furthermore, both countries formulated policies that support the implementation of the e-passport system.

It can be inferred that both countries lack ICT skills to implement the e-passport system. Hence, foreign companies were sourced to assist. It can also be inferred that the countries share similar challenges and opportunities in the implementation of the e-passport system. Since Botswana implemented the e-passport system before Lesotho, it is assumed that latter will learn invaluable lessons from Botswana's experience.

## 4.10   CONCLUSION

The best international practice in the implementation of the e-passport system was discussed in this chapter with the view to highlighting significant aspects that both Botswana and Lesotho may learn to enhance effective and efficient implementation of the e-passport system. Furthermore, through well-defined legislation that protects the rights of the e-passports applicants; favourable ICT infrastructure established to ensure effective implementation of the e-passport system; and an increase in price of  e-passports  to meet  additional technical costs as well as avail the e-passport application online to inhibit  unnecessary queues at  the passport offices. This chapter also

illustrated the legal framework that laid a foundation for the implementation of the e-passport system in Botswana and Lesotho. The rationale for implementing the e-passport system in Botswana and Lesotho was highlighted. Despite the need to comply with the ICAO specifications of e-machine readable documents, Lesotho was faced with various challenges utilising the old traditional system such as the need to avoid backlog of passport applications dating as far back as three years. Therefore, there was a need to implement the e-passport system with the hope to inhibit the challenges faced utilising the old traditional system. The benefits and the challenges facing the adoption of the e-passport system in Botswana and Lesotho were mentioned, which included, *inter alia,* financial challenges. Similarities and differences in adopting the e-passport system in Botswana and Lesotho were also highlighted.

**CHAPTER FIVE:    DATA PRESENTATION AND ANALYSIS**

**5.1    INTRODUCTION**

The chapter presents document analysis of the reports clarifying the challenges facing the e-passport system policy beneficiaries in Lesotho. Furthermore, the primary data collected from the interviews conducted from Lesotho at the Department of Passport Services in Lesotho was based on Bhuyan'*s et al.* (2010:3) policy dimensions which influences  policy implementation namely:  policy, its formulation and dissemination; social, political and economic context; leadership for policy implementation; stakeholder involvement in the policy implementation; implementation planning and resource mobilisation; operations and services; lastly, feedback on progress and results. Bhuyan'*s et al.* (2010:4) model was adopted to analyse the challenges facing the implementation of the e-passport system policy in Lesotho. The objective was to develop a framework for effective and efficient implementation of the e-passport system in Lesotho. The e-passport system policy is both regulatory - stipulating rules and regulations for the issuance and revocation of e-passports and distributive - the e-passport system as the programme processes the document for utilisation by the public.

It was discussed in chapter one that the study adopted the qualitative methodology approach therefore, the findings were presented in a narrative and descriptive format. Data was gathered through structured and unstructured questions and face-to-face interviews were conducted. Document analysis was complemented with interviews to add an empirical aspect than mere perception as well as informed conclusions. Furthermore, data analysis in this chapter provides an important foundation to generate logical conclusions from which various, invaluable lessons can be learnt.

The following discussion outlines the document analysis of the reports from the Department of Passport Services as well as data gathered from the interviews conducted at the Ministry of Home Affairs and Department of Passport Services in Lesotho.

## 5.2 DATA PRESENTATION AND ANALYSIS OF THE CHALLENGES FACING THE IMPLEMENTATION OF THE E-PASSPORT SYSTEM POLICY IN LESOTHO

The Department of Passport Services reports of e-passport applicants and holders' complaints from July to September 2017 were analysed to gather data of current challenges that the e-passport system policy beneficiaries encounter. The reports are in the form of letters. Letters from e-passports applicants and holders explain the challenges they experienced while others are from government and private institutions such as local and international banks, notably South African banks at which e-passport holders had opened bank accounts, insurance companies and the Department of Home Affairs in South Africa. These letters are compiled including the responses and filed by the Department of Passport Services according to the date received. Other challenges include complaints lodged to the Department by dissatisfied e-passport applicants and holders, which was explained by the secretary to the Director of Passport Services.

These challenges as noted through the Department of Passport Services verifications (2017) together with data gathered from interviews conducted at the Ministry of Home Affairs is presented and analysed below.  For every policy dimension, applicable data is presented and analysed in the following order:  data collected from e-passport system policy beneficiaries, managers - Passport Services, passport officers, assistant passport officers and IT officials in the Ministry of Home Affairs.


### 5.2.1  The policy, its formulation and dissemination

The questions were based on the nature of policy formulation, the extent of policy implementers' involvement and dissemination of policy. The responses are outlined below.

It was noted that certain e-passports applicants visit the passport offices to apply for e-passports with inadequate documentations such as no national identity cards and birth certificates, while others do not have money for the e-passport fee. They claim that they did not know that one had to pay for the service. Furthermore, certain e-passports applicants demand that the document is processed and issued the same day.

Moreover, certain e-passports applicants below the age of 21 complain that they are denied a right to apply for e-passports because they are not Lesotho citizens because they were not born in the country. Others are informed that one of the parents is not a Lesotho citizen and they cannot speak Sesotho. Furthermore, guardians encounter challenges when applying on behalf of their foster children because only biological parents may apply for their children or produce a legal document clarifying that they are guardians. In most instances, they do not have the documents. Finally, others complain that they are not allowed to collect their friends, colleagues or family's processed e-passports.

The managers revealed that they had been consulted to provide input on the e-passport system policy; standard operating procedures that inform the formulation of the e-passport system policy; and issues concerning the development of the e-passport system such as users' requirements in the e-passport system. According to the managers, dissemination of the e-passport system policy was conducted during the on-the-job training in the form of a top-down approach. The managers were responsible to inform junior staff about the policy but only they were able to provide input, while junior staff was not afforded the opportunity to do so.

All passport and assistant passport officers who were interviewed revealed that they were not included in the formulation of the e-passport system policy. However, they were only briefed thereon, while others held that they were not briefed and are unaware that it exists. The passport and assistant passport officers also revealed that the policy is not well-disseminated because there are specific issues that are unclear as to how they should manage these such as a consent letter from a parent which in certain districts it is a requirement for e-passport application of a minor child below the age of 16, while in others it is not. Also, the documents that a guardian appointed by the family is required to bring is unclear. Therefore, passport officers and assistants held that to execute unclear services requires their own discretion with minimal consultation with the senior management. Consequently, the operating procedures are not standardised.

IT officials reported that they were included in the policy formulation of the e-passport system because they had been consulted of the specifications thereof although not all

were included in the system. They revealed that the e-passport system policy implementers included in the implementation of the system are well-informed of the policy because they had not observed any problems related to the actual execution thereof.

Based on the complaints from the public including insufficient requirements when applying for the e-passports, it can be inferred that the e-passport system policy has not been well-disseminated to the public, who are the beneficiaries of the policy. Furthermore, based on the data collected from the managers, it can be concluded that they were included in the formulation of the e-passport system policy and it was disseminated to other policy implementers although the question of how well, could not be answered adequately. Furthermore, dissemination of the e-passport system policy from managers to junior staff depended on the former to inform the recipients (junior staff). Thus instances in which information was disseminated poorly, it was received inadequately. The dissemination of the policy is questioned further by the passport officers and assistants who revealed that they still experience difficulty to execute the e-passport system policy effectively due to inadequate information. This is perceived in the execution of the policy because no universal or standard procedures adhered to in certain services offered at the enrolment centres. For example, in certain passport offices, a consent letter from one of the parents of a minor child (a child under 16 years) was required while at other enrolment centres it was not a requirement.

### 5.2.2  Social, political and economic context

The responses to the social context are discussed below:

Certain e-passports applicants complain that the passport officers compel them to remove their headscarves (also called hijab) and 'doeks' which signifies their religious beliefs or cultural practices, while others complained that they are required to remove their wigs.

Particular managers, passport officers and assistants state that the social context does not affect the implementation of the e-passport system. It is affected in the sense that some traditional, religious as well as cultural beliefs and norms are not acknowledged,

for example, members of certain religious denominations and married Basotho women (especially elderly) - whose norms include wearing the 'doek' are expected to remove these to be photographed for the e-passports. Other managers, passport officers and assistants revealed that all traditional norms and values are affected by the implementation of the e-passport system policy as they require all traditional attires put on the head or around the face to be removed to take a photograph when applying for e-passports. IT officials revealed that the social context is affected to a certain extent when taking a photograph although they can't really say they affected as it is only for a few minutes.

The responses regarding the political context are explained in the following paragraphs.

Political officials of the government in power are policy-makers and they decide which and how the policies should be implemented. Since the adoption of the e-passport system in Lesotho in 2013, the country has undergone three changes in government. According to the managers, these changes have brought about the following changes: delays in the enactment of the e-passport bill to an act due to recommended revisions of the bill to meet the interests of the government in power. Furthermore, regular amendments of the e-passport system policy regulations are effected to meet the interests of the government in power to secure votes; for example, regular amendments to e-passports fees. A regular e-passport was R150 at one stage and now stands at R130 although the initial proposed price was R450 as well as revisions to the eligibility of certain types of passports such as diplomatic passports. Moreover, the managers revealed that the change in government also affected the amendments to contractual relations with the service provider's implementation and maintenance of the e-passport system. This was also done to meet the interests of political officials, especially financial interests. The managers highlighted that political officials do not necessarily award the e-passport system tender to the highest bidder. It is based on what they will benefit from the bidder. The latter incident, that is, misapprehension of the contractual terms led to service providers fleeing the country (Lesotho) in 2013; several months after the new government assumed power. However, the contract was signed under the

previous regime and the incoming government demanded amendments to the contractual terms and conditions.

Some passport officers and assistants revealed that the political environment does not affect the implementation of the e-passport system. However, others explained that they do not know whether the implementation of the e-passport system is affected by change in the political environment. However, certain passport officers and assistants held that new government implies a new e-passport system rules and regulations. Furthermore, political officials interfere with the flow of normal work procedures and practices to meet their own interests - for example, regular interruption of collection and distribution of passports due to inadequate motor vehicles emanated from political officials who utilised the Ministry's vehicles to campaign in their constituencies.

Certain IT officials revealed that the political environment does not affect the implementation of the e-passport system, while others held that it does because political officials influence the service provider's terms and conditions of the implementation of the e-passport system. They are also responsible for deciding as well as appointing the service providers.

The responses to the question of the economic contexts discussed below.

The managers revealed that the country's (Lesotho) economy is performing poorly and the system is extremely expensive to manage and maintain. They highlighted that the payment due for the management, maintenance and subscription paid to keep the system functioning is paid in US dollars. Lesotho's currency is paired to that of South Africa, which is currently not performing well in the market due to i*nter alia,* the political situation. Therefore, the fluctuations in the Rand to US dollar affected Lesotho's economy, in this context the implementation of the e-passport system. When the value of the US dollar increases, the maintenance, management and subscription of the e-passport system also increase. Certain passport officers and assistants explained that due to the country's poor economy, the basic resources and equipment required for effective and efficient execution of the e-passport system was not provided. Furthermore, the issue of salary increment was highlighted. It was revealed that

sensitivity of the security documents they process warranted a higher salary. Therefore, a higher salary would motivate them commit fully to execute their functions and not consider an act of corruption. Furthermore, they would execute the e-passport system effectively to ensure its success but due to the poorly performing economy, they earn low salaries and the increment received was even lower than the inflation rate. However, certain passport officers and assistants revealed that the change in the economy does not affect the implementation of the e-passport system, while others mentioned they do not know whether the economic context affects its implementation.

IT officials state that the economic context has a significant impact on the implementation of the e-passport system due to the type of contract that the system is based on. The system is supported through first level support, that is, everything is conducted by service providers and anything related to the e-passport system is paid in US dollars - application forms, blank e-passport booklets, including the maintenance of the system. They note that fluctuations in the US dollar affect the implementation of the e-passport system. Currently the US dollar is expensive.

It can be inferred that in the social context, traditional norms and values are affected by the implementation of the e-passport system policy. However, at most passport offices certain traditional norms and values are not acknowledged by the passport officials who are affected because only specific ones are catered for.  Therefore, it can be concluded that certain traditional norms and values are being discriminated against and considered inferior compared to others. Furthermore, the issue of non-standardisation of operating procedures in the Department of Passport Services is realised because enrolment centres manage the issue of traditional norms and values differently. Although IT officials held that the social context is only affected for a few minutes when the photographs are taken, it should be noted that the validity of the e-passport is 10 years. Therefore, those who embrace specific traditional, cultural and religious norms and values are affected and obliged carry the e-passport that does not value their norms, beliefs and values. Moreover, it can be highlighted that the change in the economic and political context affects the effective and efficient implementation of the e-passport

system in Lesotho. Political officials are only interested in achieving their own interests rather than ensuring successful implementation of the e-passport system.

### 5.2.3  Leadership for policy implementation

The responses related to leadership commitment and support is discussed hereunder.

The managers held that they receive inadequate support from senior management because they delay or occasionally do not authorise funds required to maintain the e-passport system as well as purchase blank passport booklets and application forms. Often, the Department has an inadequate number of blank e-passport booklets and application forms. During data collection, the Department did not have 64 pages blank e-passport booklets in stock. Moreover, there is an acute demand for these by the public. Furthermore, the e-passport system is not maintained according to the service plan due to the lack of senior management support to facilitate funds required to maintain the e-passport system.

Certain passport officers and assistants highlighted that they receive inadequate support from senior management because the latter is only interested in pin-pointing errors without motivating or encouraging them to conduct their duties effectively and efficiently. However, certain passport officers posited that they receive adequate support from senior management because they always pay attention to the challenges encountered. However, the senior managers do not have much authority to solve all the challenges which are reported to headquarters. In turn, the latter is cascaded to the service providers for input.

IT officials conveyed that they are not involved in the implementation of the e-passport system. They were only involved during the formulation stage of the policy. Furthermore, there had been occasions during which senior management and political officials tried to include them in the implementation of the e-passport system but could not reach a mutual agreement with the service providers. Moreover, the misunderstanding related to their inclusion in policy implementation is among the reasons that led to service providers leaving the country in 2013. The IT officials also highlighted that senior management is not committed to ensuring effective

implementation of the e-passport system because they mention that the e-passport system is not operating as expected and senior management is ignoring the matter. The IT officials also revealed that they receive inadequate support from senior management because they lack initiative to include themselves in the implementation of the e-passport system.  Since the 2013 incident mentioned above, no measures had been taken to include them.

It can be concluded with reference to aforementioned challenges that senior management support is inadequate for the successful implementation of the e-passport system policy in Lesotho. Furthermore, there is either no leadership will or senior management is merely symbolic rather than functional. The respondents held that they only pay attention to the problems encountered during the execution of the e-passport system. Moreover, they are unable to solve problems that do not require the attention of the service providers such as facilitate procurement of blank e-passport booklets and e-passport application forms as well as encourage employees to perform well.

### 5.2.4  Stakeholder participation in the policy implementation

The questions on this factor are based on the stakeholder participation, the extent thereof, their influence on the implementation of policy as well as intergovernmental relations. The responses are discussed in the following paragraphs.

The question based on stakeholders engagement in the implementation of the e-passport system policy and how they influence the implementation thereof, the managers explained that besides the Ministry of Home Affairs, the Ministry of Foreign Affairs is mandated with the responsibility to facilitate or determine who should not be issued with the diplomatic e-passport according to policy regulations. The Ministry of Public Service is tasked with the responsibility to facilitate who should not be issued an official e-passport. The Ministry of Police facilitates opening cases for identity fraud as well as circulation of stolen and lost travel documents. The Ministry of Justice is also engaged in land responsible for issuing stop lists for fugitives as well as those who waiting trials and considered flight risks. The latter group of persons are not eligible to apply for e-passports. The Ministry of Finance is responsible for allocating funds and

procurement of all goods and services for the implementation of the e-passport system policy - for example, toners as well as assist in the collection of travel document fees. The Department of Immigration is responsible for the travel of e-passports holders nationally and internationally. The Immigration system (e-border) is integrated with the e-passport system. The Department of NICR, which processes identity cards and birth certificates, is also integrated to the e-passport system. Finally, the Department of Home Affairs as well as the Department of Labour in South Africa through the Lesotho special permit programme, issues permits that allow the Basotho to stay, study, engage in business as well as work legally in South Africa.

The question of the role of respondents in the Ministry or in the implementation of the e-passport system, the managers highlighted that they oversee and monitor the overall performance of the system and ensure that the objectives thereof are met at the District level as well as manage the human resource to ensure effective execution of the system. The passport officers and assistants illustrated that due to the lack of staff, they undertake all tasks, for example, an employee may complete the application form, complete registration forms, enter data, serve as a cashier and may conduct audits. However, in other Districts there was no evident lack of staff notably the Mohale's Hoek Production Centre and Butha-Buthe. The junior staff rotates weekly or seasonally from one job to another, while at Maseru District, there is also no lack of staff, no rotation but division of labour and specialisation of tasks. The IT officials highlighted that their role in the Ministry of Home Affairs is to support software systems such as the traditional passport system including hardware systems such as computers, printers, scanners, switch, rooters and network.

The challenges which e-passport system beneficiaries' face was established in stakeholder participation in the implementation of the policy which included: refugees seeking asylum in Lesotho who were issued e-refugee passports in 2017 complained that they were unable to cross the Lesotho border because the immigration officers at the South African border claimed that they are not aware of e-refugee passports. Furthermore, certain changes must be effected on the e-refugee passports before they would consider allowing the refugees to cross the border. Secondly, certain e-passports

holders are denied access at the border by immigration officers because their e-passports had been declared lost, and therefore, cancelled. Thirdly, the Department of Home Affairs in South Africa revealed that many Lesotho e-passports are not e-readable at their Department. Therefore, many e-passports holders are sent back to Lesotho to acquire new e-machine readable e-passports.

The question based on sound flow of work between stakeholders engagement, most managers, certain passport officers and all the assistants revealed that they do not encounter any challenges working with other stakeholders involved in the implementation of the e-passport system. However, certain managers and passport officers revealed that there is poor communication between the Department and other stakeholders which result in: problems related to revocation of e-passports; stop list had not been provided for; and e-passport holders denied access to services or even being told to return to the Department for minor issues. The IT officials posited that there is poor flow of work between their department and other stakeholders. They held that they should be among the stakeholders involved in the implementation of the e-passport system but based on their observation, they assumed there is regular flow of work between other stakeholders.

The question of who is responsible for the maintenance of the e-passport system and why, the managers revealed that the system's maintenance is determined by the service providers as per contract. Furthermore, the service providers had not handed over the maintenance and management of the e-passport system to the government of Lesotho. Moreover, they also revealed that the Ministry of Home Affairs IT has not been involved in the implementation of the e-passport system. The question of what measures have been taken to ensure that suspension of the issuance of the e-passports is not repeated, the managers responded that since the incident took place at the political level, they were unable to take steps to restrain its recurrence.

Based on the above mentioned challenges, it can be deduced that the e-passport system policy beneficiaries in Lesotho faced challenges that do not only delay them in the provision of services but they also incur expenses having to return to the Department of Passport Services with beneficiaries travelling from to South Africa. It

can also be inferred that poor communication between the stakeholders impedes working relations with the Department of Passport Services while certain stakeholders, notably the IT section are left to execute the e-passport system policy. Furthermore, the issue of the lack of staff was highlighted.  This lack impedes effective implementation of the e-passport system. Moreover, the e-passport system is managed entirely by the service provider. It can be inferred that when the service provider is dissatisfied herewith and may withdraw from the project at any time. Consequently, the issuance of e-passports may be impeded. This incident took place in 2013 as highlighted in chapter one of this study.   Therefore, it can be concluded that the Department of Passport Services may be obliged to adhere to the demands of the service providers at all cost to keep the e-passport system operating.

### 5.2.5  Implementation planning and resource mobilisation

The purpose of this question was to establish whether the human capital is capable of executing the e-passport system; training was provided to policy implementers; and adequate capital flow to implement the e-passport system effectively and efficiently. The following discussion is based on the responses gathered.

The managers revealed that the e-passport system is very expensive. The Department is unable to afford it because it often has inadequate application forms and blank e-passport booklets and at the time of data collection, lack of stock - 64 page blank e-passport booklets despite the demand. This was attributed to the lack of funds to procure them. Furthermore, the cost of production including the maintenance of the system; and cost of the blank e-passport booklets was not par with the price of the final product. Consequently, implementation of the e-passport system was extremely expensive, which raised the question of affordability. Moreover, they noted that the e-passport system is not maintained according to the scheduled maintenance plan due to inadequate funds.

Certain passport officers at the production centre revealed that they were given training, while all passport officers and assistants at the enrolment centres held that they were not granted the opportunity. However, they were presented a brief on-the-job-training by

senior management. Furthermore, certain passport officers and assistants revealed that they were neither trained nor briefed. They had to comprehend how to work through the e-passport system with their limited IT skills and experience gathered from the previous traditional passport system. Moreover, to this day, they still experience specific problems to execute the e-passport system properly.

The question of the qualifications of the Ministry of Home Affairs, IT official's capacity to execute the e-passport system explained that they held the following qualifications: Bachelor of Science in Computer Science and Mathematics; Bachelor of Science in Computer Science and Statistics; with short courses including Database Administration and Citrix. They (IT officials) also revealed that for IT officials to execute the e-passport system, they should have skills in networking and database. They had made recommendations related to the maintenance and management of the e-passport system at the formulation stage and if granted an opportunity, they would recommend that to sustain the system, they should be included in the implementation thereof. If they are unable to manage, they would consult the service providers. They also noted through observation the lack of a database back-up. If the system should fail, the current data would be lost permanently.

Therefore, it can be inferred that there is inadequate flow of capital and human resource mobilisation to implement the e-passport system effectively and efficiently. The sustainability of the implementation of the e-passport system and the exclusion of the Ministry of Home Affairs IT officials is also debatable.

### 5.2.6  Operations and services

The questions on this dimension were based on the challenges which impede effective implementation of the e-passport system as well as the capacity of the IT service providers to ensure effective implementation of the e-passport system. The responses are discussed in the following paragraphs.

The challenges the e-passport system beneficiaries face related to the effectiveness thereof, it was noted that certain e-passports holders are referred to the Department of Passport Services by the immigration officers either on the Lesotho side of the border or

South Africa because of data mismatch. Data mismatch occurs in different ways. In certain instances, the image that appears in the passport reader differs from the MRZ on the e-passport or vice versa. In other instances, certain e-passport holders complain that their e-passports are damaged within a short period of time and expect the Department of Passport Services to issue new one at no cost.

The question of whether service providers possess the capacity to execute the e-passport system, the managers held that the IT officials (of the service providers) are competent and capable of solving any e-passport system related problems. If the problems cannot be solved by IT officials stationed in Lesotho, they engage other IT service providers in Israel to assist although that delays the process. Furthermore, whenever they require assistance they receive the information within a specific time frame which ranges from immediately to up to a month depending on the nature of the problem. Moreover, they observed that the work load also determined the frequency of problems encountered. Hence, the higher the work load the more problems are encountered.

The question of challenges which impede effective implementation of the e-passport system, the passport officers and assistants explained that they encounter various problems while utilising the e-passport system including the lack of power back-up at enrolment centres. Consequently, the power cut results in them not being able to process e-passport applications because  the back-up power supply does  not function; lack of communication between the enrolment centres and production centre, which result in among other, problems of delays in the issuance of e-passports; integration between the e-passport system at enrolment centres and the production centre while in certain instances  the enrolment centre system will accept the photo quality according to ICAO standards but the same photo is  rejected at the production centre because it does not meet the required standards. It was reported by the passport officers at the production centre that they had been informed by service providers that for printers to function properly, they need to work at 17 degrees Celsius, which was revised to 22 degrees Celsius due to the lack of protective clothing. However, they still cannot work at such low temperatures due to lack of protective clothing which was not provided. As a

result, the printers make errors that result in high damaged e-passports which contributes towards increased cost of production due to tasks which have to be repeated, that is, - reprint e-passports.

IT officials could not respond to the questions of this dimension as they are not included in the implementation of the e-passport system. They could only highlight that through their observation, the e-passport system is integrated with all Districts and the applications are conducted online compared to the traditional system. The only live system was at the production centre and the applications were processed manually in the Districts.

An analysis of the e-passport system according to the managers compared to the previous system is discussed below.

**Table 5.1:    Traditional system versus the e-passport system**

| Old traditional system | Current e-passport system |
|---|---|
| Not biometric | Biometric |
| Could not detect multiple identities of one person | Detects multiple identities of one person |
| Allowed multiple applications on one person | Does not allow multiple applications on one person on the same passport type |
| Process not e-machine readable passports | Process e-machine readable e-passports |
| Process not traceable applications | Process traceable applications |

Source:        Researcher's own analysis based on responses from the managers

It can be inferred that the e-passport system policy beneficiaries are not only inconvenienced while using their e-passports but they are upheld from receiving the services they require. These delays are costly because occasionally, they are required to go to the Department of Passport Services for the same services such as data mismatch. It can also be deduced that the IT service providers are capable of utilising the e-passport system although if their expertise is required from abroad, it impedes the effective utilisation of the e-passport system. Problems encountered through the e-passport system includes: poor communication between the enrolment centres and

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production centre; poor e-passport system integration between the enrolment centres and production centre, for example, poor quality photograph may be detected at the production centre yet that error may not be detected at the enrolment centre; lack of power back-up at the enrolment centres and lack of protective clothing for staff, especially at the production centre.

### 5.2.7  Feedback on progress and results

The questions were based on gathering feedback to assess and monitor the progress of the e-passport system to achieve the intended results. The responses revealed the following:

Feedback from the e-passport system policy beneficiaries implied that certain e-passports holders experience problems because their names had been changed from maiden to the marital; others by virtue of a change of the passport number; and others had other names included such as a Christian or middle name. The reason for the errors was explained as follows:  institutions (the stored e-passports holders' data is based on the details provided in the old passports as a form of identity) at which e-passport holders require services must produce their current documents as a form of identity to ensure whether the holders details differ compared to the stored data. Therefore, the e-passports holders are sent back to the Department of Passport Services to acquire a letter that confirms and combines the information of the previous e-passport together with the current e-passport.

All managers, passport officers, assistant passport officers and IT officials revealed that no measures had been taken to acquire feedback on the progress and results since the inception of the implementation of the e-passport system. However, the managers mention that they do get feedback through e-passport holders who voluntarily report back at the Department or who lay complaints. IT officials also revealed that there has been no communication or feedback from senior management of their inclusion in the implementation of the e-passport system since the last initiative that bore undesired results in 2013.

The above mentioned challenges revealed that the e-passport system policy beneficiaries in Lesotho face the challenge that does not only inconvenience them of when to travel but also delays them when using e-passports. Furthermore, they also incur expenses having to return to the Department of Passport Services with beneficiaries travelling from as far as South Africa. It was also noted that the Department of Passport Services had taken no initiative to evaluate nor monitor the progress of the e-passport system as well as acquire feedback from the public. Therefore, public feedback could not be established except reports by e-passport applicants and holders.

## 5.3    CONCLUSION

The findings of the research collected through primary as well as secondary data was presented and analysed. Bhuyan's *et al.* (2010:3) model of factors which influence policy implementation was highlighted in this chapter. The findings included challenges facing the e-passport system policy beneficiaries, for example, poor policy dissemination to the public because of inadequate requirements for e-passport applications; difficulty in accessing services using e-passports as well as freedom of movement - out of the country (Lesotho) due to data mismatch and unreadable e-passports.

The data gathered  from primary sources  at the Ministry of Home Affairs  highlighted the following challenges related to the implementation of e-passport policy:  poor policy dissemination by  managers to junior staff; lack of staff at  most enrolment centres; lack of infrastructure to support the e-passport system at  the enrolment centres;  exclusion of IT officials in the implementation of the e-passport system; lack or limited support by senior management and political will to ensure  effective and efficient execution of the e-passport system policy. This chapter provided the foundation for the recommendations in the following chapter.

**CHAPTER SIX:    SYNOPSIS OF CHAPTERS AND RECOMMENDATIONS**

**6.1    INTRODUCTION**

This chapter provides valuable lessons from other countries selected for effective and efficient implementation of the e-passport system in Lesotho. A summary of the chapters and recommendations to solve the challenges facing the implementation of the e-passport system in Lesotho is outlined. The findings and recommendations are complemented with reference to the literature explored. The recommendations are based on the findings as well as substantiated by the reviewed literature followed by the conclusion.

**6.2    LESSONS FROM OTHER COUNTRIES**

The following paragraphs outline valuable lessons that Lesotho may learn from for effective and efficient implementation of the e-passport system.

- **Germany**

Germany designed the e-passport system guide as a response to address many enquiries that emanated from the public since the implementation thereof. The information provided through the e-passport system guide included but was not limited to:  technical implementation of the e-passport system; e-passport legislation and other related aspects such as its security features, relevant documents as well as data security and protection. The e-passport system guide provides necessary information to citizens online including an e-passport application form, which saves the Germans time and money to travel to the Federal Ministry of Interior for the information provided electronically.    This    procedure    breaks    hierarchical    bureaucratic    procedures. Furthermore, after processing and issuing the e-passport to the owner, the finger print biometric is deleted from the system. The data is stored exclusively in the chip because German legislation does not allow information to be stored in any database to ensure data protection and inhibit potential abuse of personal information by the government. This (potential abuse of personal information) aspect was highlighted as a likely limitation of the implementation of the e-passport system described in the literature.

Moreover, taking into account the limitation of high costs of the implementation of ICT projects, Germany increased the price of passports in 2005 following the implementation of the e-passport system to inhibit further technical efforts to establish such a system. Furthermore, all passport office workplaces have been equipped with the required e-passport system infrastructures as well as suitable software to ensure effective and efficient implementation of the e-passport system in Germany. The literature highlighted that ICT projects need infrastructure for effective implementation. Reading devices also ensure that each e-passport holder has the right to view their personal data stored in the chip and protection of this information is guaranteed. Lastly, a German passport may not be valid past a bearer's 23rd birthday unless stipulated by law that the holder may still hold German citizenship. Germany does not allow dual citizenship and citizens by descent are expected to renounce the other countries citizenship at the age of 23 if they wish to retain the citizenship.

- **Seychelles**

Although, Seychelles has not yet implemented the e-passport system, there are specific significant practices to process passports that Lesotho could learn from. One practice that Lesotho may adopt is to avail and provide access to passport application forms online. This is advantageous because applicants can download and complete the passport application form before going to the passport offices. Furthermore, Seychellois are encouraged to deliver the passport application per courier, which reduces unnecessary long queues at the passport offices.

- **Botswana**

Essential lessons that Lesotho may learn from Botswana are outlined in the following paragraph.

Botswana does not only use  e-passports to reduce fraud in the form of forged travelling documents but also to prevent  wanted or illegal persons, stolen vehicles as well as stolen travel documents. To solve the problem of lost passports, the Department of Immigration and Citizenship introduced a fine of P1000 (P stands for Pula, which is Botswana currency - 1P= R1.29) besides the e-passport fee as highlighted on the

Botswana Government Portal. This fine does not only inhibit the high rate of lost passports but also intends to reinstate the integrity of the Botswana passport. Furthermore, when the passport is reported missing, it is electronically cancelled which eliminates potential misuse of lost passports. Moreover, since the implementation of the e-passport system in Botswana in 2015, fees for urgent passports was deemed unnecessary. Therefore, fees on urgent passports were abolished by the Ministry of Labour and Home Affairs. Currently, the Ministry headquarters applies the principle of "apply, wait and collect" for urgent passports.

## 6.3    SYNOPSIS OF CHAPTERS

Chapter one introduced the topic and clarified concepts used in the dissertation such as Public Administration, public administration, policy, policy implementation and public sector. The chapter also provided the limitations of the study, problem statement and the methodological approach adopted to conduct the study. The primary objectives of this research were outlined as follows:

i.    To conceptualise e-passport policy implementation within the discipline of Public Administration.

ii.    To explain how the e-passport system is implemented and why it was introduced in Lesotho.

iii.    To compare and analyse the opportunities and challenges facing the implementation of the e-passport system in Botswana and Lesotho.

iv.    To provide recommendations pertaining to successful and sustainable implementation of the e-passport system in Lesotho.

The chapter also presented the literature review. The following was discussed: transition from paper to electronic based public administration which led to e-government. The chapter outlined that the implementation of the e-passport system in Botswana and Lesotho led to the introduction thereof, which is the e-government service and the product of policy implementation. According to Bhuyan *et al.* (2010:3)

seven primary factors, discussed in the chapter, influence policy implementation namely;

- The policy, its formulation and dissemination

-  Social, political and economic context

- Leadership for policy implementation

- Stakeholder involvement in the policy implementation

- Implementation planning and resource mobilisation

- Operations and services

- Feedback on progress and results

These dimensions were utilised in this study to analyse the challenges facing the e-passport system policy implementation in Lesotho. Chapter one also provided a preliminary framework for the study.

Chapter two focused on a theoretical foundation of the study which included the operationalisation of Public Administration and public administration as well as conceptualisation of the e-passport system public policy implementation within the discipline, Public Administration. The chapter illustrated the relationship between public administration and public policy to develop services for the public. The relationship was presented as follows:  public administration encompasses work undertaken by public officials in public institutions, which provides the mandate decided by political officials through the legislature, that is, policies to deliver services to the public. Furthermore, it is the public officials who execute the policies, undertake the actual daily tasks to render services to the public on behalf of political officials. Consequently, public officials are accountable to political officials who provide them with a mandate and the public they serve. The chapter also explained what public policy entails, which is whatever the government decides to do. Hence, the task is undertaken as stipulated in the policy by the public officials who execute the prescribed function to address the public needs.

Other discussions included: public needs are dynamic because these are influenced by the ever-changing and unpredictable social, political, economic and technological environment. Secondly, the technological environment influences the change in the needs of the public that led to adoption of e-government-government was also discussed in this chapter and highlighted that it (e-government) led to the provision of e-services such as e-passports which is provided through the implementation or establishment of e-systems. The focus of this chapter was on the operationalisation of the implementation of the e-passport system policy. Thus, the e-passport system policy was conceptualised in the discipline, Public Administration.

Chapter three focused on the implementation of the e-passport system as an ICT programme as well as the challenges facing the implementation of ICT projects in Botswana and Lesotho. The objective was to provide an overview of the current situation in the implementation of ICT projects in Botswana and Lesotho. This chapter discussed the implementation of the e-passport system, defined the concept, as well as provided examples thereof.  A comparative analysis was drawn to illustrate the similarities and the differences between the challenges facing successful implementation of ICT projects in Botswana and Lesotho. A brief overview of the current situation or performance of ICT projects in these countries was provided because the e-passport system is an ICT project. The following was revealed as points of similarities relating to success factors and challenges facing the implementation of the ICT projects in Botswana and Lesotho.

It was noted that both countries (Botswana and Lesotho) face the following challenges for the effective implementation of ICT projects: financial constraints; outsourcing due to the lack of ICT skills because internal staff need proper training; and the lack of leadership commitment which should be encouraged.

The following was outlined as differences pertaining to the challenges and successes facing the implementation of ICT projects in Botswana and Lesotho.  For Lesotho to enhance effective implementation of ICT projects, the following has to be considered: conducive ICT infrastructure has to be established, broadband should be accessible, intergovernmental relations should be developed, ICT board and office should be

established to facilitate effective implementation of such projects. In the case of Botswana, ICT systems should be developed to ensure attainment of the intended results, a capable project management team should be appointed, and senior management should be empowered. It was noted that the major challenges facing the effective implementation of the ICT projects in Botswana was financial constraints and technical expertise while Lesotho faced the same challenges and more but not limited to favourable ICT infrastructure.

Chapter four discussed the comparative analysis of the implementation of the e-passport system in Botswana and Lesotho. An overview of the current implementation of the e-passport system in these countries was discussed. The best international practice in the implementation of the e-passport system was outlined in this chapter. The salient aspects were highlighted for both Botswana and Lesotho  to enhance effective and efficient implementation of the e-passport system – notably, well-defined legislation that protects the rights of the e-passports applicants; favourable ICT infrastructure established to ensure effective implementation of the  system; and the price increment  to pay  for additional technical costs as well as provide access to e-passport application forms online to avoid  unnecessary queues at  the passport offices.

This chapter also discussed the legal framework that laid the foundation for the implementation of the e-passport system in Botswana and Lesotho. The rationale for the implementation of the system in Botswana and Lesotho was highlighted. Countries are required to comply with the ICAO e-machine readable documents specifications. Lesotho was faced with various challenges because of the old traditional passport system, for example, avoid the backlog of passport applications which dated as far back as three years. The benefits and the challenges facing the adoption of the e-passport system in Botswana and Lesotho were also discussed in this chapter, which included financial challenges. Similarities and differences in the adoption of the e-passport system in Botswana and Lesotho were also highlighted.

Chapter five presented the data collected, findings as well as data analysis thereof. Data was collected from secondary as well as primary sources. Bhuyan's *et al.* (2010:3) policy dimensions which influences policy implementation was utilised namely:  policy,

formulation and dissemination; social, political and economic context; leadership for policy implementation; stakeholder involvement in the policy implementation; implementation planning and resource mobilisation; operations and services; lastly, feedback on progress and results. The analysis of the findings was based on Bhuyan's *et al.* (2010:3) policy dimensions model.

Chapter six outlined significant lessons Lesotho may learn or adopt from other countries namely: Germany, Seychelles and Botswana to ensure the effective and efficient implementation of the e-passport system. A summary of the chapters was provided followed by recommendations to solve the challenges faced with the implementation of the e-passport system in Lesotho.

## 6.4    RECOMMENDATIONS

The recommendations are based on the reviewed literature as well as data collected from the Ministry of Home Affairs in Lesotho with specific reference to the implementation of the e-passport system. The findings and recommendations are discussed below:

- **Reduction of costs**

One of the primary findings is that the e-passport system is expensive to implement due to high ICT costs. This challenge does not only impede effective and efficient implementation of the e-passport system but also poses a crucial question of sustainability of the implementation of ICT projects - e-passport system in developing countries such as Lesotho. Therefore, it is recommended that to ensure a successful and sustainable e-passport system, that the Department of Passport Services embarks on an implementation approach that is less costly and raise awareness to reduce the number of unnecessary e-passport applications.

- **Inclusion of IT technicians**

It has also been established that the Department's IT technicians are not involved in the implementation of the e-passport system and only the service provider's IT technicians are included. This is not only a costly approach but it also raise a question of sustainability of the implementation of the e-passport system because the Department now depends on IT technicians for overall operation of the e-passport system. It is suggested that the Department's IT technicians should be included in the implementation of the e-passport system in order to curb high implementation costs of the e-passport system. If they do not have suitable skills, they should be funded to develop their skills on e-passport system management and maintenance, since this will ensure sustainable implementation of the e-passport system with low costs in the long term.

- **Collection and distribution of e-passports**

Another finding revealed in the literature is that collection and distribution of passports from Mohale's Hoek Production Centre to the enrolment centres is hindered by the shortage of cars in the Ministry of Home Affairs. Since the Department does not have its own cars, arrangement and assistance should be required from other institutions, which have efficient transport. Therefore, courier service is suggested as this service has proven to be reliable in Seychelles. A short-message service (SMS) and an e-mail notification are also suggested in order to notify passport applicants when the e-passports are ready for collection. If the applicants require emergency passports, an express rate should be introduced and applicants should pay for that service in order to cater for frequent courier services until the Department is able to apply the principle of "apply, wait and collect" like in the case of Botswana.

- **Dissemination of information to public**

It is also recommended that the e-passport system guide should be formulated and be made available online at the Ministry's Portal and as a hardcopy at any place where it can be easily accessible to the public such as at District Administrators offices. This plan will help disseminate information regarding the use of the e-passport system and any related information linked to issuance and revocation of e-passports that may be valuable to the e-passports applicants to safe the applicants' time and money of travelling to the passport offices for this information. This guide has proven beneficial in Germany therefore this research maintains that it will be advantageous in Lesotho as well.

- **Raising of funds**

As a means to raise funds for effective implementation of the e-passport system it is suggested that validity of official and diplomatic e-passports be reduced and their price be increased. Official and diplomatic e-passports are held by wealthier citizens, if their validity is reduced from ten to five years, this will generate more income for the Department, since the income that is collected once in ten years will be collected twice in that period. Reducing the validity of these passports will also reduce long-term misuse of these passports in order to address the challenge of revocation - that has been established in the literature. In addition, the lesson that Lesotho may adopt from Botswana as a way to raise funds is to introduce fine on lost, stolen and damaged e-passports that will be added to the normal price of the e-passport.

- **Reduction of unnecessary applications**

It has been realised that some applicants apply for e-passports even though they do not need them and this is considered costly to the Department. Example of applicants who do not need to apply for e-passports include, applicants who do not need to cross the border as well as applicants who still hold valid traditional passports. Therefore, it is recommended that awareness be made by the Department to the public that the e-passport is required only when crossing borders and not used as an identity document in the country - Lesotho, as there is a relevant document that is used for identification

purposes, which is an identity card obtainable through the Department of NICR. Awareness should also be raised to the public to apply for the e-passport, only when the passports they hold have expired, defaced or fully endorsed. When people know when to require new e-passports, unnecessary e-passports demand will decrease, hence low production costs for the Department. The implementation of the e-passport guide will help provide information concerning these issues.

- **Internal fraud**

It has been found that ignorant e-passport applicants are still defrauded money for faster delivery of e-passports.  It is suggested that awareness should be raised to the public to know that the passports are issued faster than it was during the deployment of the old traditional system (whereby it took up to three years for applicants to be issued with passports) and that they should not pay more money than the amount stated in the e-passports regulations to corrupt passport officials. The implementation of the e-passport guide will also help raise awareness on this issue.

- **Reduction of technical errors**

It has been mentioned that the e-passport system does not accommodate some long names therefore, some e-passport applicants are forced to remove some of the name(s). This does not only inconvenience the e-passport applicants but their identity is forced to change, which may encourage fraud. It is therefore, recommended that the e-passport system be adjusted to accommodate all names, to avoid changing the identity of people and this will also reduce fraud. It has also been established that some e-passport applicants use faulty identity cards - with misspelt names or wrong date of birth to apply for e-passports. The e-passport system is integrated to the NICR system such that an error in the identity card constitutes to an error in the e-passport.  Therefore it is suggested that awareness should be raised that errors made through the NICR system, should be corrected before the applicants apply for e-passports. This awareness can also be accomplished through the implementation of the e-passport system guide.

The discussion on the findings and recommendations based from data collected from the Ministry of Home Affairs follows here under.

### 6.4.1 Findings from the Ministry of Home Affairs and recommendations

The following discussion outline findings identified through data collected from the Ministry of Home Affairs together with suggested recommendations to address the challenges facing the implementation of the e-passport system in Lesotho established through Bhuyan's *et al.* (2010:3) policy dimensions influencing policy implementation identified in chapter one of this dissertation and mentioned in this chapter.

- **The policy, its formulation and dissemination**

It is established through the data explored that there is poor dissemination of e-passport system policy to the public who are the beneficiaries of the e-passport system whereby it is noted that e-passport applicants bring insufficient requirements for e-passport application. Therefore, it is already recommended that the e-passport system guide will help disseminate information including the requirements of the e-passport application, use of the e-passport system and any related information linked to issuance and revocation of e-passports that may be valuable to the e-passports applicants to safe the applicants' time and money of travelling to the passport offices for this information. It is found that junior staff involved in the implementation of the e-passport system was only briefed about the e-passport system policy thus, what they know is only what they have been told and it is evident that the information was poorly received resulting in no standardisation of operating procedures. Bhuyan *et al.* (2010:5) explain that when policy implementers are not properly informed about the objectives of the policy they lack ownership of the policy and it becomes difficult for them to implement the policy. It is recommended therefore, that the e-passport system policy be made available to the staff so that they can have access to first-hand information, which this research deduces will establish standardisation of operating procedures and make it easier for policy implementers to effectively and efficiently execute the policy.

- **Social, political and economic context**

It is established that traditional norms and values are affected through the implementation of the e-passport system. However, not all traditional norms and values are affected as some are catered for. It was highlighted in the previous chapters that the ICAO is responsible for setting specifications for the e-passport therefore the e-passport system is developed based on the ICAO standards. Document 9303 developed by International Civil Aviation Organisation (2015:11) provides a guideline for acceptable traditional, cultural and religious norms and values and specify that any other traditional norms and values will be acceptable if the issuing state approves them but in the case where head coverings are approved they should be put on at all times. However, it is shocking to find out that some traditional norms and values appearing on Document 9303 provided by ICAO are still not recognised by some passport officials. It is therefore, recommended that passport officials should adhere to the ICAO standards in their daily operations. It is also recommended that the senior management should advise the state to approve the country's traditional, cultural and religious norms so that those embracing them are not affected by the e-passport system policy implementation.

It is also realised that there is lack of political will to ensure effective and efficient implementation of the e-passport system. Political officials are policy makers, they decide on which policies should be implemented and how they should be implemented including approving funds for policies therefore, their will to ensure successful implementation of the e-passport system policy is needed. In addition, the various changes in the government since the inception of the e-passport system has let to multiple changes in the regulations of the e-passport system policy as well as the delay in the enactment of the e-passport system policy into an act. While the change of the government cannot be controlled, it is suggested that achieving the objectives of the policy should be made priority as it serves the interests of the public, who are voters, which political officials are interested in securing their votes.

It is discovered that economic context affect the implementation of the e-passport system at international and national level. International level - the payment due for management, maintenance and the subscription paid to keep the e-passport system

running are paid in US dollars. Therefore, the fluctuations of the Rand to US dollar affect the economy of the country and hence the implementation of the e-passport system because when the value of the US dollar increases the maintenance, management and subscription of the e-passport system also increases. National level - due to poorly performing economy of the country the basic resources and equipment that are needed to effectively and efficiently execute the e-passport system are not purchased such as stationery and the infrastructure needed to cater for the e-passport system. In order to curb production costs of the policy and ensure sustainability of the implementation of the e-passport system, it is recommended that IT officials in the Ministry of Home Affairs be included. This will reduce maintenance and management costs of the e-passport system as the e-passport system will no longer be supported from first level support hence reduction of costs paid to service providers. It is also recommended that the price of the e-passport be revised and put in par with its production costs and this will generate income that may contribute to funds required to adjust infrastructure necessary to cater for the e-passport system. In addition, some of the significant lessons noted from Germany are the increase in the price of e-passports to cover implementation costs of the e-passport system as well as improved infrastructure in all passport offices to support and ensure effective implementation of the e-passport system.

- **Leadership for policy implementation**

One of the challenges identified point out that there is either no leadership will or the senior management is only symbolic rather than functional because it was discovered that senior management only listen to the problems encountered during execution of the e-passport system but are unable or reluctant to solve the problems even problems that do not need service providers such as facilitating procurement of blank e-passport booklets and e-passport application forms, purchasing protective clothing as well as encouraging employees to perform well. In order to successfully implement the e-passport system, senior management need to be committed therefore their will in ensuring effective and efficient implementation of the e-passport system is highly

recommended. Bhuyan et al. (2010:5) asserts that leadership is crucial to ensure effective and efficient policy implementation.

- **Stakeholder involvement in the policy implementation**

The findings reveal that the e-passport system policy beneficiaries in Lesotho face the challenges that do not only delay them on the services they require while using the e-passports but they also incur expenses having to return to the Department of Passport Services with some beneficiaries travelling from as far as South Africa. It is also discovered that poor communication between the stakeholders involved hampers tremendous working relations with the Department of Passport Services. The issue of e-passport system policy beneficiaries experiencing difficulty in accessing services using e-passports is also linked to poor communication as well as lack of cooperation between the stakeholders. Therefore, inter-organisational as well as inter-governmental relations between the stakeholders engaged in the implementation of the e-passport system are recommended.

It was also noted that there is a lack of staff. An employee is required to perform on average three tasks which impede effective implementation of the e-passport system. The literature revealed that access control to log into the system allowed the user to access all modules or stages in passport production, which was a major loophole for corruption of the traditional passport system. If the same problem prevails in the e-passport system due to the lack of staff, it is strongly recommended that all vacant positions are filled so the e-passport system objectives may be realised. Lesotho should consider adopting the Seychelles passport system. The applicants can access the e-passport application online and complete before going to the passport offices. This would reduce labour cost and unnecessary demands on the staff.

- **Implementation planning and resource mobilisation**

It was revealed that there is inadequate flow of capital and human resource mobilisation to implement the e-passport system and sustain it effectively and efficiently. It is also debateable whether the e-passport system can be implemented excluding the Ministry of Home Affairs IT officials. However, recommendations to generate income to ensure effective and efficient implementation of the e-passport system, adequate human resources including the IT officials was recommended in the previous discussions of this chapter. Furthermore, this study assumes that the IT officials are capable of executing the e-passport system effectively with minimal service provider consultation based on their qualifications and their experience. Although the service providers did not participate in the study to establish which qualifications are required to execute the e-passport system, the IT officials were confident that they possessed the necessary skills.

- **Operations and services**

The findings revealed that the service providers IT is capable of utilising the e-passport system. However, if the expertise has to be acquired from abroad, it would impede the effective utilisation of the e-passport system. It is, therefore, recommended that while initiatives are taken to include IT officials of the Ministry of Home Affairs, all expertise required for effective implementation of the e-passport system is within reach and stationed in the country to avoid unnecessary delays in the maintenance of the system.

It was also realised that the problems associated with the e-passport system included: poor communication between the enrolment centres and production centre; poor e-passport system integration between the enrolment centres and production centre (photo quality may be detected at the production centre but not at the enrolment centre); and the lack of power back-up at the enrolment centres and protective clothing for staff at the production centre. Therefore, it is recommended that measures be taken to improve communication between the enrolment centres and the production centre; improve and integrate e-passport system so that the data from the enrolment centre is interpreted similarly at the production centre to inhibit the rejection of applications and

unnecessary delays in issuing e-passports. It is also recommended  that power back-up be provided   at the enrolment centres to avoid delay in processing e-passport application forms during power cuts as well as the provision  of protective clothing  to ensure that the e-passport system operates at the required temperature levels.

- **Feedback on progress and results**

It is noted that the Department of Passport Services has taken no initiatives to either evaluate or monitor the progress of the e-passport system as well as acquire feedback from the public. However, the e-passport applicants and holders who had to return to the Department of Passport Services expressed concern that certain e-passport system policy beneficiaries encounter problems. It is an inconvenience because of additional travel expenses and delay to access services they require using e-passports. Nonetheless, this challenge has been discussed and recommendations are provided.

It is also recommended that the Ministry of Home Affairs engage in initiatives to acquire feedback and monitor the implementation of the e-passport system to address challenges as they arise. The objective should be to ensure accountability, as well as effective and efficient implementation of the e-passport system. According to Bhuyan et al. (2010:9), it is imperative that policy beneficiaries or clients perspective is considered of services rendered in the policy. Bhuyan and associates also assert that acquiring feedback and the utilisation of information of how policy implementation takes place will enable policy-makers and implementers to assess provisional achievements, address problems as they arise and ensure accountability as well as successful implementation thereof. Bhuyan *et al.* (2010:9) further posit that to monitor policy progress or acquire feedback from policy beneficiaries, an entity may be designated comprising of a government agency or an official body such as government and / non-governmental representatives.

## 6.5     CONCLUSION

This chapter outlined the summary of the chapters to provide a brief overview of the discussions delineated throughout the study. The lessons learnt in this study were explained, and it is anticipated that Lesotho take cognisance hereof to realise a successful implementation of the e-passport system. The chapter also highlighted the findings gathered from both secondary and primary sources including recommendations to alleviate the challenges facing the implementation of the e-passport system in Lesotho notably - initiatives to disseminate e-passport system policy, approval of the country's traditional norms and values, political and leadership will, intergovernmental and inter-organisational relations, enhancing   infrastructure and monitoring the progress of the e-passport system policy. This study maintains that if these recommendations are adhered to, effective and efficient implementation of the e-passport system in Lesotho will not only be ensured but also sustained.

The government of Lesotho has taken initiatives in policy formulation and implementation to enhance public service delivery efficacy for its citizens. It has also upgraded and aligned ICT to respond to ever-changing needs thereof globally.  The legal framework (regulatory policy) that laid the foundation for the implementation of the e-passport system (distributive policy) in Lesotho was explained. The successes and challenges that face the implementation of the e-passport system were highlighted including recommendations to address the identified challenges. It is, therefore, recommended that the challenges facing the implementation of the e-passport system be addressed to not only ensure successful, effective and efficient implementation of the e-passport system in Lesotho but also ensure its sustainability.

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**APPENDIX 1:    INTERVIEW SCHEDULE**

The questions are based on the seven factors which influence policy implementation identified by Bhuyan et al. (2010:3). These are presented in tabular form hereunder.

| | |
|---|---|
| The policy, its formulation and dissemination | Implies the policy content, nature of the policy formulation process, and extent of policy dissemination. Policy analysis focuses on the policy goals, objectives, and strategies and analyses whether these are clear and appropriate given the concerns it intends to address.  This process also attempts to establish whether key stakeholders agree on the goals and strategies, including whether the policy has been disseminated to and understood by those responsible for its implementation. |
| Social, political and economic context | Entails various social, political, and economic factors outside of the policy process that can either improve or impedes effective policy implementation. Depending on the nature and scope of the policy, social norms such as gender inequality and governing processes such as decentralisation and other factors can affect policy implementation. This factor attempts to analyse the effects and consequences of social, political and economic factors in the implementation of policy. |
| Leadership for policy implementation | Identifies that strong leadership and |

| | commitment are crucial prerequisites to ensure adequate resources, and accountability required for actual execution of the policy. However, the leaders responsible for policy formulation in most instances are preoccupied elsewhere once the policy has been adopted or the responsibility for leading implementation shifts to new individuals and groups. This factor analyses the effectiveness of leadership commitment in the implementation of policy. |
|---|---|
| Stakeholder involvement in the policy implementation | Implies that policy implementation is increasingly a multi-sectoral endeavour. It is crucial to consider the extent of stakeholder involvement in the implementation of policy and the nature of the relationships and collaboration among different stakeholders – intergovernmental relations. |
| Implementation planning and resource mobilisation | Involves planning, resources, and capacity needed to facilitate policy implementation. Identifying whether the policy implementation plan exists, whether organisations require new skills and training to implement the new policy and whether a funding for new policy is ensured as well as determining the reliability of the resource flow. |
| Operations and services | Entails the coordination of mechanisms, operational systems, and the capacity of |

| | individuals and organisations responsible for delivering services delineated in the policy. Discovering positive changes as a result of policy implementation as well as challenges which impede effective policy implementation. |
|---|---|
| Feedback on progress and results | Implies the significance of gathering frequently, disseminating, and using feedback to assess progress towards accomplishing intended results. Ensuring sound information dissemination about policy implementation, utilising received information and considering beneficiaries or clients perspectives of policy. |

Source:  Adapted from Bhuyan et al. (2010:6)

**THE MINISTRY OF HOME AFFAIRS**

**PASSPORT MANAGERS**

| The policy, its formulation and dissemination |
|---|

1. Were you included in the formulation of the e-passport system policy?
2. In your own observation can you say the e-passport system policy has been well-disseminated to all relevant policy implementers? Please substantiate your response.

| Social, political and economic context |
|---|

3. Does the social context - traditional norms and values affect the implementation of the e-passport system policy?
4. How does the change in the political environment affect the implementation of the e-passport system?
5. How does the change in the economic environment affect the implementation of the e-passport system?

| Leadership for policy implementation |
|---|

6. Is senior management committed to ensure effective implementation of the e-passport system? Substantiate your response.
7. Do you receive adequate support from senior management to ensure effective implementation of the e-passport system policy? Please explain.

| Stakeholder involvement in the policy implementation |
|---|

8. Which stakeholders are engaged in the e-passport system policy implementation?
9. How do these stakeholders influence policy implementation?
10. Can you explain your role in the implementation of the e-passport system in terms of your responsibilities?
11. Is there a sound flow of work between your department and other stakeholders? Elaborate.
12. Who is responsible for the e-passport system maintenance and management? Why?

13. Has the Ministry of Home Affairs IT been involved in the system maintenance and management of the e-passport system? If yes, based on your observation are they able to maintain and manage the e-passport system well? (If their assistance is required are they able to solve the e-passport system technical problems?) Please explain.

14. There was a time when the issuance of e-passports was suspended, what measures have your office and the Ministry taken to ensure that this incident does not reoccur?

## Implementation planning and resource mobilisation

15. Are there adequate funds to implement the e-passport system effectively? Please explain.

## Operations and services

16. Are IT officials capable of addressing the problems you encounter when using the e-passport system? Please explain.

17. Can you estimate in a period of a week or month how often do you require e-passport system maintenance or IT assistance?

18. Can you estimate how soon do you receive IT assistance when required? (Do you get the help the same day or how long do you wait?).

19. Can you briefly compare the previous passport system to the e-passport system? (For example, in terms of performance?).

## Feedback on progress and results

20. What methods do you utilise to receive feedback from the public?

21. How often do you require feedback from the public?

22. What is the public's opinion of the implementation of the e-passport system? (Provide any positive feedback or complaints related to the implementation of the e-passport system). Please explain.

23. Are evaluations conducted to monitor the progress of the implementation of the e-passport system? If yes, how often are these evaluations conducted?

**Appendix 2: PASSPORT AND ASSISTANT PASSPORT OFFICERS**

**The policy, its formulation and dissemination**

1. Were you included in the formulation of the e-passport system policy?
2. In your own observation, has the e-passport system policy been well-disseminated to all relevant policy implementers? Please support your response.

**Social, political and economic context**

3. How does the social context - traditional norms and values affect the implementation of the policy?
4. How does the change in the political environment affect the implementation of the e-passport system?
5. How does the change in the economic environment affect the implementation of the e-passport system?

**Leadership for policy implementation**

6. Have you reported the problems you encounter processing e-passports to your supervisor?
7. Are any measures taken by senior management to address the mentioned problems?
8. Do you receive adequate support from senior management to ensure effective implementation the e-passport system policy? Please explain.

**Stakeholder involvement in the policy implementation**

9. What is your role in the implementation of the e-passport system in terms of your responsibilities?
10. Is there sound flow of work between your department and other stakeholders? Please explain.

**Implementation planning and resource mobilisation**

11. Did you receive any training for the implementation of the e-passport system? If yes, is the training beneficial in your daily work?

**Operations and services**

12. Do you encounter any challenges in processing e-passports? Please explain.

**Feedback on progress and results**

13. Are evaluations conducted to monitor the progress of the e-passport system? If yes, how often are these evaluations conducted?

**Appendix 3: MINISTRY OF HOME AFFAIRS IT**

| The policy, its formulation and dissemination |
|---|

1. Were you included to formulate the e-passport system policy?
2. Has the e-passport system policy been well-disseminated to all relevant policy implementers? Please support your response.

| Social, political and economic context |
|---|

3. How does the social context - traditional norms and values affect the implementation of the policy?
4. How does the change in the political environment affect the implementation of the e-passport system?
5. How does the change in the economic environment affect the implementation of the e-passport system?

| Leadership for policy implementation |
|---|

6. Are you included in the daily operation and maintenance of the e-passport system? If not involved, why?
7. If you are not involved have any steps been taken by senior management to include your office in the e-passport system maintenance and management thereof? If yes, briefly describe the current status thereof.
8. Is the senior management committed to ensuring effective implementation of the e-passport system? Please explain.
9. Do you receive adequate support from senior management to ensure effective implementation of the e-passport system policy? Please explain.

| Stakeholder involvement in the policy implementation |
|---|

10. What is your role in the Ministry and the operation of the implementation of the e-passport system?
11. Is there sound flow of work between your department and other stakeholders? Please explain.

**Implementation planning and resource mobilisation**

12. What qualification do you hold?

13. Briefly describe the type of training you think is required for maintenance and management of the current e-passport system.

14. Has your office made any recommendations to the Ministry concerning the maintenance and management of the e-passport system?

15. If your office has not submitted any recommendations, and given the opportunity, which would you suggest for efficient implementation of the e-passport system?

**Operations and services**

16. How often does the system require maintenance, within a week or a month?

17. How often are you consulted by the passport managers or officers to assist you with problems when processing the e-passports?

18. Which type of problems is generally encountered?

19. Can you briefly compare the previous passport system to the e-passport system in terms of production capacity?

**Feedback on progress and results**

20. If you have made any recommendations pertaining to the effective implementation of the e-passport system, has the Ministry responded? If yes, please explain.

21. Are any evaluations conducted to monitor the progress of the e-passport system? If yes, how often are these evaluations conducted?

**Appendix 4: NIP IT**

**The policy, its formulation and dissemination**

1. Has the e-passport system policy been well-communicated to you?
2. Do you understand the e-passport system policy? Please support your response.

**Social, political and economic context**

3. How does the social context - traditional norms and values affect the implementation of the policy?
4. How does the change in the political environment affect the implementation of the e-passport system?
5. How does the change in the economic environment affect the implementation of the e-passport system?

**Leadership for policy implementation**

6. Is the senior management committed to ensuring effective implementation of the e-passport system? Motivate your response.
7. Do you receive adequate support from senior management to ensure effective implementation the e-passport system policy? Please explain.
8. Who determines when the maintenance of the e-passport system should be done? Please explain.

**Stakeholder involvement in the policy implementation**

9. Briefly explain the involvement of NIP in issuing e-passports in the Ministry of Home Affairs.
10. Is there a sound flow of work between your department and other stakeholders? Please explain.

**Implementation planning and resource mobilisation**

11. Based on your experience, which qualifications or type of training is needed for maintenance and management of this e-passport system?
12. What qualifications do you have?

13. Which advise if any, can you give to the Ministry for the successful implementation of the e-passport system?

**Operations and services**

14. How often does the Ministry require your assistance in the maintenance of the e-passport system?
15. Can you estimate how often do passport managers or officers require your assistance while processing the e-passports? (within a day, week, or month)
16. Briefly explain which problems they encounter?
17. Is the Ministry of Home Affairs IT capable of operating and managing the e-passport system? Motivate your response.

**Feedback on progress and results**

18. Are any evaluations conducted to monitor the progress the implementation of the e-passport system? If yes, how often are these evaluations conducted?