

University of Cape Town



Department of Information Systems

Power relations among stakeholders in the implementation of National ICT Policy: Case of Malawi

A thesis submitted in fulfillment of requirements for the
Degree of Doctor of Philosophy (PhD) in Information Systems

by

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Declaration

I hereby declare that
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Signed by candidate

Frank Makoza

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Publications

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Abbreviations and Acronyms

AISI	Africa Information Society Initiative
CDA	Critical Discourse Analysis
CSO	Civil Society Organisation
CST	Critical Social Theory
DISTMS	Department of Information Systems and Technology Management Services
E-Government	Electronic Government
ESCOM	Electricity Supply Commission of Malawi
FDA	Foucauldian Discourse Analysis
GDP	Gross Domestic Product
HDI	Human Development Index
ICT	Information and Communication Technology
ICT4D	Information and Communication Technology for development
IS	Information Systems
ITU	International Telecommunications Union
MACRA	Malawi Communications Regulatory Authority
MCC	Media and Communications Committee
MGDS	Malawi Growth and Development Strategy
MICE	Ministry of Information and Civic Education
MPC	Malawi Postal services Cooperation
MTL	Malawi Telecommunications Limited
NEPAD	New Partnership for African Development
NGO	Non-Governmental Organisation
NICI	National Information and Communication Infrastructure
NICTWG	National ICT Working Group
OPC	Office of the President and Cabinet
PMEU	Policy Monitoring and Evaluation Unit
PPP	Public Private Partnership
PPPCM	Public Private Partnership Commission of Malawi
RBM	Reserve Bank of Malawi
RCIP	Regional Communication Infrastructure Project
RCIPMW	Regional Communication Infrastructure Project of Malawi
SADC	Southern Africa Development Community
TCA	Theory of Communicative Action

UNDP	United Nations Development Program
UNECA	United Nations Economic Commission for Africa
UNESCO	United Nations Education, Science and Culture Organisation
WSIS	World Summit on Information Society

Abstract

Purpose: Recent years have seen a growing number of low-income countries formulating and implementing national Information and Communication Technology (ICT) policies with the aim of supporting their socio-economic development agendas. For the majority of these countries, this exercise has been fraught with numerous challenges such as lack of resources; limited support for legal and regulatory frameworks; over-dependence on donors; lack of expertise; lack of implementation strategies; lack of policy championship; and limited participation of stakeholders. Consequently, the intended policy outcomes have not been adequately realised. To mitigate some of the challenges, there have been calls for promotion of more inclusive stakeholders participation in the formulation and implementation of national ICT policies. However, stakeholder participation may not be a silver-bullet to addressing policy implementation challenges since participation itself may be beset with power relations due to differences in beliefs, norms and values of the stakeholders themselves. The study analyses how power relations among stakeholders affect implementation of the national ICT policy. Using the case of Malawi, this study focuses on the implementation of national ICT policy in the context of a developing country.

Research methodology: The study was premised in a critical research paradigm and used Critical Social Theory to analyse the interactions and practices of policy stakeholders in the execution of activities for the national ICT policy. The study analyses policy documents and interviews to highlight issues of domination, exclusion and assumptions in the national ICT policy implementation. The case of Malawi was used as representing a developing country.

Key findings: Power relations affected the recruitment and the implementation of the ICT policy. The government controlled the recruitment of stakeholders in the national ICT policy, however, other stakeholders demanded their inclusion in the policy implementation network. The recruitment process resulted in the membership in policy implementation network was elitist. The stakeholders had different interests in the policy and some performed multiple roles in policy implementation activities. The stakeholders mobilised and used different forms of resources to advance their interests in policy implementation activities. The differences in access to resources and capacity to mobilise these resources (legal, financial, information, human capacity) among the stakeholders led to power relations challenges. However, the exercise of power led to the circulation of power among the stakeholders and affected the policy implementation activities such as institutional settings, collaborations among stakeholders, coordination of policy and oversight of the policy. Power relations, to some extent, supported the dominant discourses that shaped the policy implementation to focus on demand perspective of ICTs, including ICT infrastructure initiatives, legal and regulatory frameworks.

Value of the study: The study contributions are twofold: First, the study suggests theoretical propositions for explaining power relations among stakeholders in the implementation of national ICT policy; and second, the study makes recommendations for policymakers and actors in Malawi where there is urgent need to address socio-economic challenges and to improve the well-being of citizens using ICTs.

Key words: National ICT policy, policy implementation, power relations, Malawi

Chapter 1

Introduction

1. Introduction

Using the case of Malawi, this study analysed power relations among stakeholders in the implementation of national Information and Communication Technology (ICT) policy in the context of a developing country. This chapter provides the overview of the study. Section 1.1 summarises the background to the study, highlighting the status of national ICT policies in developing countries. Section 1.2 presents a summary of the context of the study. Here the context of Malawi is presented as an example of a developing country. Section 1.3 outlines the problem statement of the study. Section 1.4 summarises the research objectives and questions guiding the study; this presents the scope of the study. Section 1.5 presents the contributions of the study, emphasising the theoretical contribution and practical value of the study. Section 1.6 highlights the researcher's assumptions made while developing and conducting the study. Section 1.7 outlines some of the key terms that are used in the thesis. Section 1.8 summarises how the chapters in the thesis are presented.

1.1. Background to the study

The past two decades have seen African countries developing national ICT policies to support their development agendas (Gillwald, 2010; Mansell, 2011). There are perceptions that ICT can support African countries to address some of the economic, social and political challenges. It is not surprising then that ICTs have been applied in various sectors of the economy such as health, education, finance, tourism, media, transport and telecommunications. The national ICT policies guide the application, regulation and use of ICTs in supporting the socio-economic development activities and in achieving well-being of citizens (Checchi, Loch, Straub, Seycik & Meso, 2012; Heeks & Stanforth, 2015). In this vein, the implementation of national ICT policy is important since it is here where policy intentions and goals are translated into policy programmes and processes to address the economic, social and political issues (Cohen, Salomon & Nijkam, 2002).

In many developing countries national ICT policies are implemented in a top-down manner in which government officials and politicians dominate the policy implementation activities. In most cases, there is limited participation of other policy stakeholders in the policy activities. Some of the policy stakeholders do not influence decisions on policy activities that affect their interests (Mashinini, 2008; Twaakyondo, 2011). This results in domination, even exclusion, with partial or symbolic participation where policy stakeholders or beneficiaries are engaged but do not influence decisions in

the policy process. Consequently, national ICT policies have not produced the expected outcomes (Adam & Gillwald, 2007; Gillwald, 2010; Mashinini, 2008). The national ICT policies are not addressing the needs of the policy beneficiaries.

Many argue that a bottom-up approach would mitigate some of the challenges inherent in the top-down approach in policy implementation (Duncan-Howell & Lee, 2008; Kendall, Kendall & Kah, 2006). A bottom-up approach requires participation of stakeholders in the policy process. This involves the engagement of both policymakers and beneficiaries in decision-making, coordinating policy activities, sharing roles and responsibilities in policy activities and consideration of local context conditions (Adam & Gillwald, 2007; Gillwald, 2010; Marcelle, 2000). The assumption is that participation can lead to well-informed decisions, support learning on policy issues, minimise resistance from some stakeholders and address the real needs of policy beneficiaries (Bishop & Davis, 2002; Thapa & Saebo, 2014; Twaakyondo, 2011). This has resulted in perceiving participation as a panacea for policy implementation and it being considered as best practice for policy process (Chacko, 2005; Labelle, 2005; Schware, 2003).

While the participation of policy stakeholders in national ICT policy is viewed as a means for addressing limitations of the top-down approach, participation should not be viewed with simplistic notions (Carpentier, 2016; Fischer, 2003; Thompson, 2008). Policy stakeholders differ in beliefs, norms and values, in access to resources, and in knowledge. Further, policy stakeholders have differences in interests and means of achieving policy objectives (Matland, 1995; Weible & Sabatier, 2007). These factors influence the way policy stakeholders exercise power when executing policy implementation activities. Power relations are strategies in interactions and communication, and use of resources forms part of participation in policy activities (Howarth, 2010). Therefore, it becomes pertinent to understand power relations among policy stakeholders in the policy implementation process because the exercise of power influences policy decisions, roles of stakeholders, allocation of resources, prioritising and coordination of policy activities which can affect successful outcomes of policy implementation (Ingold, 2011; Mansell, 2010).

A number of studies have analysed the challenges in the implementation of national ICT policies (Adeyeye & Iweha, 2005; Duncan, 2015; Mashinini, 2008). Some of the problems are lack of skilled staff in implementing agencies; lack of financial resources; absence of regulatory frameworks; top-down approach to policy activities where politicians and government officials dominate in decision-making and do not consult policy stakeholders; and lack of monitoring and evaluation to establish the outcomes of the policies (Kendall, Kendall & Kah, 2006; Makinde, 2005; Twaakyondo, 2011).

Despite a growing body of literature focusing on challenges in national ICT policy implementation, analysis of power relations has received little attention. For instance,

Mansell (2013:33-34) calls for exploration of power relations in the context of policy implementation initiatives: *“There is need to assess the barriers to the effective and equitable implementation of many of these initiatives as well as understand what contested values are being embraced ... To understand ways in which insights from research enter policy domain, we need deeper exploration of power relations that influence participation in policy debates and implementation”*.

In addition, there is still need for further research that critically analyses ICT policy processes where assumptions and common ways of executing policies activities are scrutinised to initiate change that can lead to successful policy outcomes (Mansell, 2011; Ordonez, 2015; Thompson & Walsham, 2010). For example, there are calls for a critical stand on policies related to ICT and development research: *“(...) we need to be willing to engage with and critique international and national development policies from an ICT perspective, as well as contributing to ICT policy within individual countries”* (Thompson & Walsham, 2010:121). This implies that there are still knowledge gaps that require critical scrutiny related to the implementation of ICT in specific countries to influence the policy activities. Specific to the context of Africa, Gillwald (2010) argues that African researchers have not critically assessed policy issues. Studies have not attempted to engage on controversial issues that affect implementation of national ICT policies to highlight conditions that may limit policy outcomes. Consequently, insights emerging from national ICT policy studies have not influenced debate at the policy-making level (Mansell, 2010; Ordonez, 2015).

This study aims to address part of these knowledge gaps and draws on Critical Social Theory (CST) (Foucault, 1980) to analyse widely accepted views and assumptions on participation of stakeholders focusing on power relations in the implementation of national ICT policy. CST was appropriate to unravel issues of power (who has power, who has no power, and why) among stakeholders in the implementation of national ICT policy. Further, CST attempts to understand the historical and social context of a phenomena and how the exercise of power enables or constrains policy stakeholders to achieve policy goals (Kincheloe & McLaren, 2005; Myers & Klein, 2011). Highlighting the constraints related to power relations may enlighten those engaged in policy-making and implementation to find solutions to the challenges of policy implementation (Ngwenyama & Lee, 1997; Stahl, 2008).

1.2. Context of the study

Malawi, located in southern Africa, is one of the developing countries with a low human development status (UNDP, 2015). The country represents an ideal case for the study where ICTs are adopted in the development agenda to leapfrog some of the stages for development. The ICTs are integrated in the development agenda is to improve economic and social conditions of the country, as countries in developed

regions do. Malawi formulated the national ICT policy to support the application, regulation and use of ICTs in development activities (Bichler, 2008; Makoza & Chigona, 2012).

Malawi began the process of developing the national ICT policy in 2001. The policy was revised in 2006 and 2009, drawing on the input of stakeholders from different segments of the society. The policy stakeholders included government officials, international development and financing organisations, academia, local ICT associations and Non-Governmental Organisations (NGOs). The country benefited from the support on developing the policy provided by the United Nations Economic Commission for Africa (UNECA) under the African Information Society Initiative (AISI). The National Information and Communication Infrastructure (NICI) framework was used as a blueprint for the national ICT policy development (Adam & Gillwald, 2007).

Despite the challenges, the national ICT policy formulation and the implementation were conducted in tandem. Some of the objectives were being revised while the activities related to the policy were being implemented (Makoza & Chigona, 2012). The Malawi government cabinet approved and adopted the final version of the national ICT policy and its implementation plan in August 2013. The current situation presented an opportune time to reflect on the national ICT policy process, focusing on the implementation phase, and to analyse in detail the effect of power relations among the policy stakeholders (Mansell, 2010; Ordonez, 2015).

The country faced and is facing challenges in formulation and implementation of national ICT policy. The challenges include weak economic market, over-dependency on donors, lack of technical expertise, lack of legal frameworks and limited financial resources (Bande, 2011; Bichler, 2008; Kanjo, 2008). The country experienced poor performance in the economic sectors which resulted in limited financial resources being generated to support activities for the national ICT policy. The lack of resources led to over-dependence on financial aid from international development and financial agencies. However, some of the policy activities could not be executed because of the absence of legal frameworks and lack of human capacity in the policy implementation agencies.

1.3. Problem statement

Many developing countries find it challenging to implement national ICT policies. A number of factors have been suggested and these include lack of resources, incomprehensible policy goals and lack of in-depth understanding of local context needs. However, the issue of a policy top-down approach to national ICT policy implementation has been persistent in previous studies (Adeyeye & Iweha, 2005; Mashinini, 2008; Twaakyondo, 2011). Participation of stakeholders is suggested as a means for addressing some of the challenges in ICT policy implementation. This is

centred on communication, interactions, making sense of policy and practices. However, participation raises its own challenges since stakeholders have different norms, beliefs and values that may affect the way power is exercised among stakeholders in policy implementation (Ike, 2009; Weible, 2006). This raises the need to critically examine the participation and highlight the views that ignore alternatives on issues in the implementation of national ICT policy. Foucauldian perspective on power provides a holistic view for analysing stakeholders' relations where power is not repressive but productive; is not static but circulates among subjects in social relations; is closely related to knowledge that limits or enables practices and regulates the conduct of individuals and others in a social system (Foucault, 1980).

1.4. Research objectives

The main objective of the study was to analyse the power relations among the stakeholders in national ICT policy implementation and the effect of power relations in the policy implementation process (Mansell, 2010). The sub-objectives of the study are:

- To explore how stakeholders are recruited in the implementing of national ICT policy
- To examine the influence of power relations among stakeholders on strategies and decisions in national ICT policy implementation
- To analyse the outcomes of power relations in recruitment, strategies and decision of stakeholders in the implementation of national ICT policy.

To address the first objective, the study analysed key discourses for the policy and how they were enabling or constraining the way stakeholders were identified, selected, assigned to different roles in the policy implementation. This was crucial to understand which group of stakeholders were privileged or marginalised in the policy implementation activities. The second objective was addressed by analysing the institutional settings for the ICT policy and how they were affecting stakeholders in decision-making, interactions at different levels of society and collaborations for the policy activities. The practices and norms of the stakeholders were analysed focusing on the conduct of policy actors and how they influenced other stakeholders in the decisions for the policy implementation activities. The third objective was to outline the outcomes of the effects of power relations in the processes for recruitment of stakeholders, decision-making and use of strategies in policy processes, programmes and politics. The focus was on identifying what was missing, hidden and unquestioned assumptions in the processes to achieve successful policy outcomes.

Addressing these objectives was important in contributing towards indigenous research on national ICT policies. Studies on national ICT policy for developing countries have been conducted mainly by foreign experts from the international development and financing agencies. In some cases, the experts may not fully understand conditions,

politics, historical and cultural backgrounds of the local context (Chiumbu, 2008; Gillwald, 2010). The study addresses part of this gap and attempts to initiate the debate on challenges on participation in policy implementation (Adam & Gillwald, 2007; Mansell, 2010).

From these research objectives, the study was guided by the main research question:

- *How do power relations among stakeholders in a policy subsystem affect the implementation of national ICT policy?*

The main question was further broken down into three sub-questions (SQ) to understand the problem; these sub-questions are outlined as follows:

- **SQ1:** *How do power relations affect the recruitment (inclusion or exclusion) of stakeholders in the implementation of national ICT policy?*
- **SQ2:** *How do power relations influence the strategies and decisions of policy stakeholders in the implementation of national ICT policy?*
- **SQ3:** *What are the outcomes of power relations in recruitment, strategies and decisions for the implementation of national ICT policy?*

1.5. Research contributions

The contributions of the study are twofold. Firstly, the study provides propositions for explaining power relations in the implementation of national ICT policy. The second contribution is the relevance of research to practice through enlightenment intentions of critical research (Myers & Klein, 2011; Stahl, 2008b). The contributions of the study are summarised in detail in the subsequent subsections.

1.5.1. Theoretical contribution of the study

The study provides an in-depth analysis of the national ICT policy implementation process focusing on power relations. It highlights how stakeholders were recruited to the policy implementation process and the effects of power relations in the execution of policy processes, programmes and politics. Theoretical contributions emerging from the analysis are propositions explaining the effects of power that circulates among the policy stakeholders and power that is exercised beyond access to resources in policy implementation activities. The propositions suggested the influence of power relations in the recruitment of stakeholders, the capacity of stakeholders to access and mobilise resources, coordination of policy activities and the effect of power relations on strategies and decisions for policy implementation.

1.5.2. Relevance of study to practice

Prior studies on national ICT policy in the context of Malawi have described challenges in policy formulation and access to ICT services processes (Bichler, 2008; Kanjo, 2008).

This study goes beyond descriptions of policy formulation challenges to highlight the effects of power relations amongst stakeholders in the execution of policy activities. Critical research approach was used to highlight the taken for granted issues relating to domination and inclusion or exclusion in the participation of stakeholders in the implementation of national ICT policy (Myers & Klein, 2011; Stahl, 2008). The researcher's interactions with the respondents may have led the policymakers to reflect on the challenges for policy implementation and to take actions that can prevent detrimental consequences (Gillwald, 2010; Mansell, 2010; Stahl, 2008b). The study suggests practical recommendations for policymakers.

1.6. Assumptions of the study

The researcher was aware of factors which may have affected the objectives and results of the study (Hart, 1998). The following were the assumptions of the study.

First, national ICT policy process is iterative; it involves agenda-setting, policy formulation, enactment of laws, implementation and evaluation (Brooks, 1998; Lubua & Maharaj, 2012). It was assumed that agenda-setting and policy formulation were executed and that the policy process was at the implementation phase. The study concentrated on the implementation phase.

Second, one of the objectives of critical research paradigm is emancipation where social conditions affecting society are brought to light for the affected people to take action (Stahl, 2008). The issues such as alienation, domination and other unjust human conditions may affect policy stakeholders and the national ICT policy process. The researcher recognised that emancipation was difficult to achieve and was cautious of potential unintended consequences the study might have caused (Cecez-Kecmanovic, 2011; Niinikoski & Kuhlmann, 2014). Hence, the researcher reflected on his assumptions and prejudices before taking a critical stand on the issues on policy implementation analysed in the study.

Third, policymakers and actors who were engaged in national ICT policy practised freedom in their activities as opposed to discipline in the context of the ethical code of conduct and through technologies of the self (Foucault, 1982; Foucault, 1988). The assumption was that the conduct of policymakers and actors was in line with the Public Sector Charter, Guide for Permanent Secretaries, Constitution of Malawi and laws related to ICTs. The documents informed activities, decisions and strategies of national ICT policies through reflection (conscious and unconscious) on their practices and when faced with challenges in the policy process (Bacchi, 2009; Bacchi & Bonham, 2014; Sharp & Richardson, 2001).

1.7. Explaining the use of key terms

This section describes some of the key terms used in the study. It provides working definitions of the key terms that are applicable in the context of national ICT policy implementation. The key terms are summarised as follows.

Public policy

Public policies describe the plans of government that are aimed at addressing social challenges. The policies are written down (or may not be written down) to represent intentions and aspirations of government which inform actions and practices of policy actors. The policies can focus on issues at national, provincial and local levels that affect stakeholders at different levels of society (McBride & Stahl, 2010; Sapru, 2011). National ICT policy is an example of a public policy. The study will use the terms national ICT policy and ICT policy interchangeably.

Policy stakeholders

Stakeholders are individuals or organisations who work together on a policy issue and those that are affected by the policy (Brugha & Varvasovszky, 2000). However, Mitchell, Agle and Wood (1997) argue that the concept of 'stakeholder' is too broad and can include everyone in society. A manageable scope for describing stakeholders in the context of ICT policy is necessary. This study describes policy stakeholders as individuals or organisations who form coalitions based on their beliefs and use resources to work together on a policy issue over a period of time (Checchi et al., 2012; Weible & Sabatier, 2007).

Policy implementation

Policy implementation is the process of executing policy activities using resources to achieve policy goals through programmes, processes and politics (Marsh & McConnell, 2010; Pulzl & Treib, 2007). The activities in policy implementation include decision-making, prohibitions, enforcement of regulations and standards, coordination of activities and processes and controlling these activities of the implementation agencies (Cohen et al., 2001; Hill, 2013).

Power relations

The term 'power relations' emerges from the concept of power which is widely contested in literature (Howarth, 2010). Power relations emerge when actors engage or participate in a relationship (Foucault, 1980). In this study, power relations are strategic communication and interactions between individuals and institutions as contingencies for using resources (power/knowledge) which inform ways of thinking and acting in a social system. The description captures the exercise of power in a relationship where individuals influence and transform the behaviour of others using different resources to

achieve policy goals. The interactions between individuals and institutions can lead to events and practices that are widely accepted among actors and become norms in a social system (Foucault, 2003; Habermas, 1984; Kendall & Wickham, 2004).

Strategies

Intentional and unintentional practices that stakeholders adopt to achieve political or social goals in a social system. The strategies include discursive practices where language is used and extends to actions that stakeholders perform in the exercise of power and consideration of actions of others at different levels of society (Bacchi & Bonham, 2014; Foucault, 2003; Wodak & Meyer, 2016).

Developing countries

Countries across the globe can be classified according to the performance of economic sectors, the level of well-being and literacy of citizens and the access and application of advanced technologies in social, political and cultural spheres. These factors affect industrial and human living conditions. Developing countries in this context are economies that have low economic sector performance, and limited integration of advanced technologies. Further, the majority of the citizens living in these countries have limited access to basic resources, limited income opportunities, high levels of illiteracy, and constraints in access to public services that can deprive their participation in economic, social and political activities in their communities (Avgerou, 2010; Brown & Grant, 2010; Hassan, 2016).

'Taken for granted' issues

Policy processes, procedures and practices in policy implementation become embedded in social arrangements where the ways of thinking and acting of the policy actors are unquestionable and they are unable to see things different from the norms. Policy actors may not be able to understand new problems because the situations may be obscured by the normalised ways of thinking and acting. Policy actors may ignore alternatives in problems solving and make assumptions about issues to maintain the status quo – hence, the term 'taken for granted' issues (Fischer, 2003; Mingers, 2000).

1.8. Organisation of the chapters

The presentation of the chapters reflects the way the study was developed and conducted. The chapters in the thesis are organised as follows:

Chapter 1 is the introduction which outlines the research problem; the context of the study; research objectives; the key research question and sub-questions; and the researcher's assumptions. The chapter also highlights potential contributions from the study.

Chapter 2 presents the literature review of the study. The description of national ICT policy and the characteristics of the policy are discussed. The policy process is described and challenges in the process are summarised. This chapter also reviews the concept of participation in the policy process and how decisions are made in the context of policy implementation.

Chapter 3 augments the theoretical underpinning of the study, focusing on Critical Social Theory. Power relations are discussed to gain a holistic view of the concept in the context of national ICT policy. Drawing on the work of Foucault on power/knowledge, concepts of discourse, problematisation, regimes of truth and technologies of the self are appropriated for explaining power relations among stakeholders in the context policy implementation.

Chapter 4 presents the research methodology for the study. Research paradigms in the Information Systems discipline are discussed. The critical research paradigm and its justification for selecting it are discussed; so too are the methods used in the study such as document review and interviews. The chapter outlines the data collection procedures, data analysis techniques and issues of validity and reliability.

Chapter 5 summarises the description of the case of Malawi. The chapter discusses the context of the policy formulation and implementation of national ICT policy in Malawi. Key historical events that affected the development and implementation of national ICT policy in Malawi are discussed.

Chapter 6 presents the results of data analysis. The chapter summarises the recruitment of stakeholders in the national ICT policy. Further, the chapter summarises the effects of power in the strategies, interactions, decisions on policy implementation activities. The outcomes of power relations in policy programmes, processes and politics are highlighted.

Chapter 7 discusses the results. The discussion focuses on the themes that emerged from data analysis. Theoretical propositions are suggested for explanations of power relations in the context of national ICT policy. The research questions are revisited to summarise how the study addressed them.

Chapter 8 is the conclusion. It summarises the contribution of the study. This is followed by the reflections of the researcher on the research process. The recommendations for practice are discussed in this chapter. Areas of further research arising from the study are outlined.

Chapter 2

Literature review

2. Introduction

This chapter presents the literature review for the study. While information systems (IS) research has attempted to address issues on national ICT policy, there is still a paucity of studies on the subject (Chini, 2007; Kendall, Kendall & Kah, 2006). Part of the reason is lack of research that focuses on strategic issues on ICT and development; policy issues are mainly analysed by international development and financing organisations and the output of such research does not form part of mainstream academic research (Chini, 2009; Njihia & Merali, 2013; Thompson & Walsham, 2010). To overcome these challenges, the study complemented literature from other disciplines, such as critical public policy studies, management studies, among others. The multi-discipline approach to the literature review supported multiple perspectives of viewing national ICT policy issues and that IS discipline stand to benefit from the advances in knowledge on policy studies from other disciplines. The chapter is presented as follows. Section 2.1 summarises the definition and characteristics of national ICT policy. Section 2.2 outlines the relationship between national ICT policy and developments section 2.3 presents the policy process where policy implementation is derived from. Section 2.4 summarises the process of policy implementation. Section 2.5 highlights the stakeholders in national ICT policy implementation. Section 2.6 summarises decision-making approaches in the context of public policies. Section 2.7 presents the challenges of national ICT policy implementation. Section 2.8 summarises previous studies on national ICT policies. Section 2.9 presents a synthesis of literature to highlight the knowledge gaps in literature which the study attempted to address. Section 2.10 is the summary of the chapter.

2.1 National ICT policy and its scope

This section provides a working definition of national ICT policy and its scope. It also summarises how the policy is related to other economic sectors.

2.1.1. Defining national ICT policy

There are many definitions for national ICT policy in literature. The diversity in the definitions could be attributed to the composition of the terms ICT and policy that have each been conceptualised and used differently across disciplines. For example, ICT *“is a collection of technologies and applications which enable electronic processing, storing and transfer of information to a wide variety of users or clients”* (Cohen, Salomon & Nijkamp, 2002:34). Again, ICT is *“a set of human and non-human artifacts, processes and practices ordinarily directed towards modifying or transforming natural or social phenomena in pursuing*

human purposes” (Knights & Murray, 1994:46). The two definitions show the focus of describing ICT where the first definition concentrates on technology. The second definition demonstrates the diversity of viewing ICTs beyond the technology and includes the social or human elements.

The term ‘policy’ is defined as intentions and aspirations that are integrated with other development agendas and inform the actions and practices of policy actors and stakeholders (Sapru, 2010). Policy also represents principles, values of public organisations in relation to social, historical contexts and reproduction of reality over time (Kim & Roh, 2008). Thus, policy may be presented as text (set of laws or guidelines), having value-laden actions (guiding actions that assign value of ideals), as a process (process-based activities) and discursive practice (initiating discourses across or within text and social actions) (Bacchi, 2000; Bacchi & Bonham, 2014).

While each perspective of the terms provides distinct features related to humans in a social context, it was appropriate to consider the definition that has characteristics of the policy and technology. The study adopted the definition of national ICT policy as: *“an integrated set of decisions, guidelines, laws, regulations and other mechanisms geared to directing and shaping production and use of ICTs”* (Marcelle, 2000:4).

2.1.2. The scope of national ICT policy

National ICT policy is unique from other public policies because of a number of features. These include being multi-sector in scope, dynamic of the artifacts, covering multiple levels of society and action-oriented. The national ICT policies are harmonised with other public policies including technology, industrial, media and telecommunications (see Figure 2.1). This is important to support the effective integration of ICTs and coordination of policy activities in the economic sectors and subsectors (Marcelle, 2000; Maitland & van Gorp, 2009).

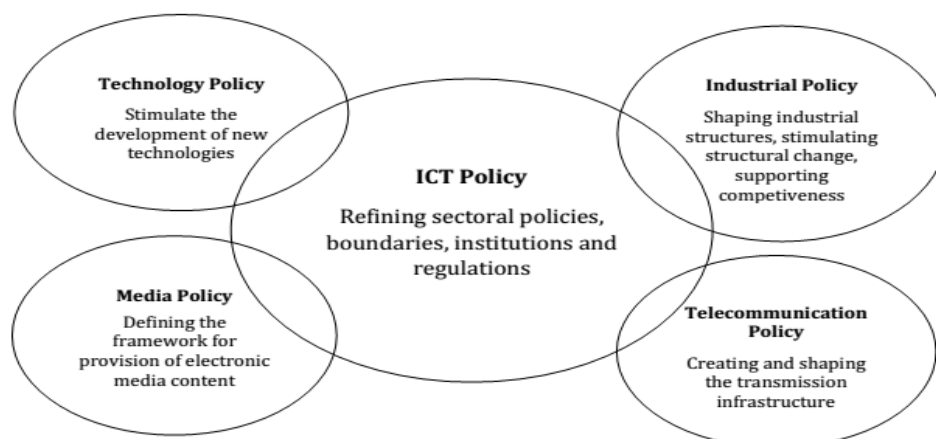


Figure 2.1: ICT policy and other related policies (Marcelle, 2000)

Further, technology changes at a rapid pace mainly because of hardware and software reducing in cost but with more processing capacity and storage (Brown & Brown, 2008). This has led to ICTs becoming more accessible and being applied at individual, organisational, national and global level (Cohen et al., 2002). The objectives in the policies may become outdated and require to be revised to cover the emerging technologies. The policies influence the practices of policy actors and policy beneficiaries at different levels of society. For instance, ICT regulations and standards outlined in policies limit or support the application and use of ICTs at different levels of society.

However, in some cases, there are emerging sector issues or use of ICTs that are not outlined or covered in the policy documents that may lead the revision of the policies and legal frameworks. For example, Heeks, Subramanian and Jones (2015) highlighted e-waste as an emerging issue affecting developing countries more than developed countries because of lack of knowledge. Similarly, the datelines set by regional and international bodies (for instance, Communications Regulators Association of Southern Africa and International Telecommunications Union (ITU)) on the transition from analogue to digital communication systems (digital migration) may initiate change in national ICT policies. In addition, adoption of new international development agendas (for instance, United Nations Sustainable Development Goals) in developing countries will require national ICT policies to be harmonised with the new goals. Thus, practices in the ICT sector or society can lead to changes in policies because lack of adoption can affect socio-economic activities (Howarth, 2010; Maitland & van Gorp, 2009). The changes in policies become part of ICT policy implementation activities.

2.1.3. National ICT policy and economic sectors

National ICT policy can be viewed as a direct or indirect policy in relation to economic sectors. The direct policy perspective of national ICT policies addresses issues of ICT infrastructure investment, access, legal and regulation; and supply and consumption of ICT services (Hanna, 2008; Meso, Musa, Straub & Mbarika, 2009). As illustrated in Figure 2.1, the national ICT policy is linked to subsectors policies: media, telecommunications, industry and technology. The subsector policies address specific needs for the subsectors. However, the subsector policies may need to be harmonised with the national ICT policy to avoid duplication of efforts and waste of resources (Gregor & Imran, 2005; Maitland & van Gorp, 2009). Researchers should be cautious of the synergies between the national ICT policy and the subsector policies when analysing the policies. It is important for researchers to understand the policy synergies because subsector policies can support or limit the activities and practices in the implementation of national ICT policy.

The indirect perspective of the national ICT policy relates to the roles of the policy in supporting the application and use of ICT in other economic sectors such as health, education, finance and agriculture. One example of the indirect role of national ICT policy is supporting and guiding the application of ICT in development sector, for example, ICT for development (ICT4D) (Ojo, 2016; Singh & Flyverbom, 2016). ICTs are integrated into programmes and initiatives that are aimed at improving the conditions of marginalised communities. It is envisaged that through the integration of ICT in different programmes and initiatives in local communities, developing countries will become information societies where information and knowledge are at the centre of economic activities (Mansell, 2008). However, the link between ICT and development is widely contested and needs to be clear, based on the context of the discussion (Avgerou, 2010; Brown & Grant, 2010; Thompson & Walsham, 2010). Studies in this domain have concentrated on micro level issues and in some cases without articulating the broader perspective of issues. There have been calls to include issues at the macro level on ICTs related to policies (Ordonez, 2015). The following subsection summarises the relationship between national ICT policy and development.

2.1.4. National ICT policy and development

Development is the change in society related to attitudes, institutions, reduction in inequality, addressing of poverty and increase in economic growth (Max-Neef, 1991). Development is also *“the process of expanding the real freedoms that people enjoy”* (Sen, 1999:3). Development, in this case, may be viewed as the capabilities for people to enlarge their choices in leading healthier, longer and fuller lives (Kleine, 2010). From the definitions, it is observed that there are diverse dimensions of development, such as freedoms, well-being, technological advancement of society, economic growth and reduction of poverty. International development and financing agencies have recommended adoption of technologies to developing nations so that they can emulate and achieve the status of developed countries. The recommendations have been widely accepted in most developing countries where ICTs are perceived as a catalyst that can address the challenges of poverty, poor economic performance and sustainability. This view has led to too much focus on technology (technology determinism) and leapfrogging where it is perceived that developing countries can bypass some of the stages of development using technologies (Davison, Vogel, Harris & Jones, 2000; Hayes & Westrup, 2012).

There are also alternative views regarding society, political structure and development presented in post-development theory. The proponents of post-development theory (among others, Arturo Escobar, Wolfgang Sachs, Magid Rahnema and Gilbert Rist) argue that industrial and living conditions in Western European and North American countries are different from the other countries across the globe. Therefore, it is

necessary to consider local culture and knowledge, critique scientific discourses and support grassroots movements in the development of low-income status countries (Escobar, 2000; Mathews, 2004). These views have been adopted in the role of ICT and development discourses. For example, Thompson (2004) analysed the speech of the World Bank president to highlight the role of the organisation in the development of low-income status countries. The study showed that the bank's experts viewed ICTs as neutral tools which could be implemented in low-income status countries with Western ideals. The analysis demonstrated that cultural and local context conditions of developing countries were not considered. It was concluded that the speech portrayed technical optimism and a deterministic approach in addressing poverty and development in the interventions for low-income status countries (Thompson, 2004). Eko (2013) analysed the role of United Nations in the transfer of policies for Internet development in African countries. The study showed that there was an emphasis on access and connectivity without the consideration of culture, values and ideals of African countries. Further, the study highlighted the one-way approach in which the policies were transferred from developed countries to developing countries (Eko, 2013). While these studies highlight privileged position of United Nations at global and regional perspective, there is also need to understand the role of ICT and development at national level.

Specific to ICT in national development, Sein and Harindranath (2004) suggest three perspectives of development in relation to ICTs: modernisation, dependency and human-centredness. Modernisation supports the view that low-income status economies should emulate high-income status economies. The focus is on technology, having skilled labour force to work in industries and increase in capital. Dependency view maintains that developed countries exploit low-income status countries through trade and colonisation. Resources from low-income status countries are used for the benefit of developed countries. Human-centredness focuses on empowering societies and individuals to realise their human potential (Sein & Harindranath, 2004). Despite growing body of literature on ICT and development, most literature points on modernisation and human-centredness and less debate on dependency. Part of the reasons is the dependency perspective to development is embedded and normalised in IT global practices between countries and international development agencies (Eko, 2013; Thompson, 2004). To reveal these practices requires critical interrogation of assumptions on development.

There have been debates on the roles of ICT for development where consideration of the human-centredness approach is promoted (Avgerou, 2008; Walsham & Sahay, 2006). It is argued that the role of ICTs is perceived as technologies that support human activities and interactions in a social context. Further, ICT should not be viewed as solutions in themselves to the challenges of low-income status countries (Brown &

Grant, 2010; Thompson, 2008). Hence, national ICT policies may guide application and use of ICT in development to support the human-centredness to development (Marcelle, 2000; Mansell, 2008). This perspective may extend to include human well-being in areas on health, poverty, security and literacy (Faik & Walsham, 2013; Kleine, 2010).

However, understanding of the different standpoints of development is important in national ICT policy implementation because they form the basis of interests of policy stakeholders in policy activities. For instance, in her critical review of ICT and development, Avgerou (2010:2) noted that “*development policy and action are entangled with conflicting interests and power relations in contemporary global and national politics ...*”. This implies that development and ICT could represent different interests from different levels of society e.g. interests of international development and financial agencies and governments. Although there are substantial studies on ICT and development, there is still need to articulate interests and power relations among policy stakeholders at national level and influence policy debates for stakeholders to take corrective action (Gillwald, 2010; Mansell, 2010).

2.2. Public policy cycle

Public policy activities are grouped into phases (Bridgeman & Davis, 2003). There are many models for representing the phases of the policy process emerging from different disciplines (such as Brooks, 1998; Colebatch, 2005; Lubua & Maharaj, 2012). The generic public policy cycle encompasses problem identification, policy formulation, passing of laws and regulation, policy implementation, and policy evaluation (Brooks, 1998; Jann & Wegrich, 2007). The process begins with identification of social problems. This phase informs the phase of formulation of policy objectives. Then laws are enacted and regulations are formulated to support the execution of policy activities using resources. Finally, the policy activities are evaluated to examine if the policy objectives have been achieved. Depending on the outcomes and context conditions, policies may be terminated or revised to meet the new challenges (Bridgeman & Davis, 2003; Colebatch, 2005). The policy process is iterative (see Figure 2.2).

The phases are viewed as interrelated where there are inputs and outputs in each phase providing feedback loops for the process. For example, Brown and Brown (2008) highlighted that the South African national ICT policy was well-formulated but lacked implementation due to lack of capacity resulting in delays of policy reforms in the ICT sector. This demonstrated that policy formulation was adequate but the implementation phase affected the progress to other policy phases (Gillwald, 2005; Mashinini, 2008). If policies are not well-articulated during the problem identification and formulation phase, the policy may affect subsequent phases such as implementation and evaluation phases. The success of the policy depends on the completeness and comprehensiveness

of the policy (Everett, 2003). Consequently, there is a need to be cautious of the interdependency of policy phases and to understand the policy process holistically (Jann & Wegrich, 2007).

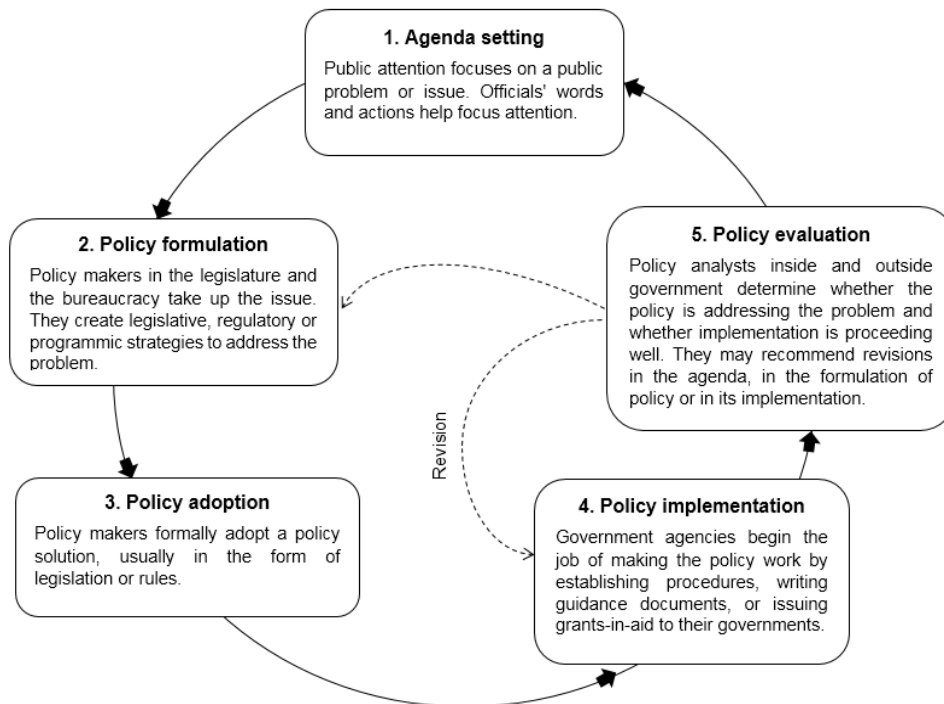


Figure 2.2: The public policy cycle (Lubua & Maharaj, 2012)

There are also criticisms of viewing policy process as a cycle. Sabatier and Jenkins-Smith (1999) argue that the policy cycle lacks theoretical ability to predict policy outcomes of the different phases. Part of the reasons is that policy process is complex and deals with unstructured problems without clear solutions. Further, the policy cycle has limited representation of multiple stakeholders in the policy process (Everett, 2003). There are assumptions that government administrators are presented in the policy cycle with limited focus on other policy actors outside government (Colebatch, 2005). Thus, the policy cycle represents the policy process as a purely bureaucratic process without consideration the context. However, policy process depends on social, economic and political environment where power relationships among stakeholders are inherent in the policy activities (Mansell, 2008). It is argued therefore that a theorisation of policy process should consider the participants in the policy process and the context in which the policy operates.

2.3. Policy implementation

This study focuses on the implementation phase of the policy cycle. Policy implementation is described differently in literature. The following subsection sets out to demonstrate the different views of policy implementation.

2.3.1. The concept of policy implementation

Policy implementation is the process for carrying out activities for achieving policy objectives through administrative, institutional and regulatory arrangements (Bridgeman & Davis, 2003; Jann & Wegrich, 2007). Policy implementation is achieved through policy actors translating policy goals into policy programmes or initiatives, passing laws and enforcing regulations and rules (Hill, 2013; Marsh & McConnell, 2010). In addition, policy implementation may include decisions, actions and controlling these activities (Cohen et al., 2002; Labelle, 2005).

For instance, Kerrets (2004) demonstrates enforcement of regulations in the ICT sector of Kenya as part of policy implementation. However, due to differences in interests between the regulator and telecommunication providers there were licensing issues which led to litigation. Similarly, Njihia and Merali (2013) analysed ICT for development projects as part of broader context of development agenda for national ICT policy of Kenya. The study showed that national politics and the influence of donor interventions affected the way the ICT policy programmes were implemented. A study conducted in Tanzania (Twaakyondo, 2011) showed that government departments were responsible for controlling the implementation of policy activities. Stakeholders outside government had limited roles in the policy. Consequently, policy implementation had inherent challenges of power related to administration and regulatory arrangements. A common thread in these examples demonstrates that policy implementation is a complex process, yet one of the important areas of the national ICT policy.

2.3.2. Other perspectives of policy implementation

Policy implementation is also viewed as a value chain comprising processes, outcomes and impact (O'Toole, 2004; Paudel, 2009). Policy implementation as a process is where government officials and legislators focus on making decisions and taking actions on policy. Outcomes are the expected results derived from the processes and the impact of the consequences is changing that may be noticed or measured as a result of policy processes. In line with the view, policy implementation may be perceived as a system where there is feedback from policy stakeholders or external factors that may lead to change or transformation. The external factors include socioeconomic conditions, public opinions and impact of other policy decisions (Sabatier & Weible, 2007; Weible, Sabatier & McQueen, 2009).

While policy implementation can be viewed as system having input, processes and outcomes, lack of feedback on policy implementation has been a common problem. Mashinini (2008) highlighted lack of feedback on ICT policy implementation initiatives in the context of South Africa. The study showed that government officials responsible for policy implementation did not provide feedback on policy processes to the policy beneficiaries in the rural communities. In their study on the implementation of ICT policy in Egypt, Stahl, McBride and Elbeltagi (2010) showed that ICT policy that is implemented without input from beneficiaries may disempower rather than empowering. The hierarchical structure where government officials controlled the policy process with limited feedback from those affected by the policy led to disempowering of other policy stakeholders. These examples demonstrate the close relation between policy, context and practices (Bacchi, 2009; Bacchi & Bonham, 2014). Thus, contextual conditions such as political systems and institutional arrangements affect the way policies are implemented (Goodwin, 2011; Pastor, 2009).

Policy implementation can also be viewed as comprising interrelated activities of programmes, processes and politics (Howlett, McConnell & Perl, 2015). Policy programmes relate to activities that executed over a specific period of time using policy instruments, for instance finance, regulations and fiscal resources, to achieve policy goals. Processes are day-to-day activities in the implementation agencies that are executed to enforce directives or achieve a specific policy goal. Politics are decisions of those with political authority in government that are aimed at achieving policy objectives in return for electoral support, reputation and governance (Mukherjee & Howlett, 2015; Poel & Kool, 2009). While the dimensions of programmes and processes have received attention among scholars, issues related to politics (with the exception of Eko, 2013; Duncan, 2015) are still lacking, especially on policy oversight. In this context, oversight is the role of legislators in ensuring that policy implementation activities are carried out in consideration of laws and ensuring transparency and accountability on expenditure from Treasury in the implementation agencies (Pelizzo & Stapenhurst, 2013). To sum up, national ICT policy implementation should be viewed in a holistic manner beyond individual ICT projects or ICT for development initiatives to include ICT sector programmes, processes, enacting of laws and regulations, policy oversight and politics.

2.4. Policy implementation approaches

There are a number of factors that can affect how a policy is implemented. The factors include what initiates formulation of policy, who control policy decisions, whether policy processes are administrative or networked, policy involving formal or informal structures, policy decisions being centralised or decentralised (Paudel, 2009; Pulzl & Treib, 2007). These factors have been considered when implementing policies and have

led to different approaches to policies. In addition, the engagement of policy actors from macro and micro levels of society in policy programmes, processes and politics resulted in top-down and bottom-up policy approaches. A third approach is hybrid or middle-out approach (Matland, 1995; Winter, 2003). The different approaches to policy implementation are discussed in detail in subsequent subsections.

2.4.1. Top-down approach to policy implementation

The top-down approach to policy implementation supports policy actors at macro-level such as government officials and legislators to control the activities of formulating policy objectives, making policy decisions, allocating resources and prioritising policy strategies (Paudel, 2009). In addition, the government officials carry out administrative activities and ensure that policy activities are carried out within the legal frameworks. In this view, the government officials and legislators have the legal mandate to make policy decisions on behalf of the policy beneficiaries (Pulzl & Treib, 2007). Hence, the top-down approach to policy implementation may be viewed as purely an administrative process where formal organisations are in control of implementation activities, but with limited influence on policy decisions from other policy stakeholders. Authority on policy decisions is centralised and top bureaucrats make policy decisions based on their discretion. Stahl, McBride and Elbeltagi (2010) showed that the decision-making using a decision support system as part of the implementation of national ICT policy of Egypt followed the hierarchies of government. Stakeholders with military background were appointed because of their familiarity with chain of command where policy decisions were executed without questioning decisions of those in leadership and with limited delays. This demonstrated that the top-down approach maintains the policy interests of those in power. Thus, participation of the stakeholders was merely symbolic and the ICT policy did not achieve emancipation of the policy decision-makers in the local authorities (Stahl, McBride & Elbeltagi, 2010).

In the top-down approach policy decisions are usually aligned with the interest of politicians and agenda for the incumbent government (Matland, 1994; Paudel, 2009). Some of the reasons why the top-down approach is preferred is that it is faster to implement the policy and the politicians forming cabinet and legislators as elected representatives have the legal and constitutional mandate to make policy decisions on behalf of the electorate. Moreover, African leaders are under pressure from international financial lending institutions to deliver on policy programmes and meet the targets for further funding or meet the conditions for loans (Chiumbu, 2008; Eko, 2013). The political leaders require funding for development programmes to deliver their promises to the electorate. The main reason is that politicians want to be voted into power again.

However, the top-down approach to policy implementation has a number of limitations. For example, a study conducted in Tanzania (Twaakyondo, 2011) showed that national ICT policy was implemented in a top-down manner where the government dominated the process. Although few experts were engaged to formulate the policy objectives, input from other policy stakeholders was not considered. Therefore, other stakeholders felt marginalised and that the policy did not represent their interests which affected the implementation process (Twaakyondo, 2011). Similarly, the national ICT policy of Nigeria adopted a top-down approach which affected the buy-in of the policy stakeholders; the policy was narrow in scope to address the interests of policy stakeholders and beneficiaries (Adeyeye & Iweha, 2005). Others argue that the approach policymakers may perceive policy implementation as a purely political process with limited consideration of those affected by the policy and of the realities on the ground such as language, implementation structures and cultural issues (Kwapong, 2008; Yusuf, 2005). In addition, policy outcomes may disregard the impact on the implementers due to more emphasis on central decision makers (Pulzl & Treib, 2007; Schofield, 2001).

2.4.2. Bottom-up approach to policy implementation

The bottom-up approach directs attention at the needs of policy beneficiaries. The street-level bureaucrats, such as government officials, in the implementation agencies may identify the needs of policy beneficiaries and influence decisions on implementation of the policy (Matland, 1995). They negotiate and bargain with top government officials, legislators, non-governmental organisations and international development agencies on policy objectives. The bottom-up approach is integrated with the other phases of the policy cycle: *“In contrast, bottom-up approaches argue that policy implementation cannot be separated from policy formulation . . . policy-making continues throughout the whole process. Hence, bottom-up scholars do not just pay attention to one particular stage of the policy cycle. Instead, they are interested in the whole process of how policies are defined, shaped, implemented and probably redefined”* (Pulzl & Treib, 2007:94). Thus, a policy may be formulated while being implemented. The approach should be considered in relation to the policy stakeholders which are engaged in the different phases of the policy.

The bottom-up implementation approach has the potential to address the needs of policy beneficiaries because their input is considered in the policy formulation and implementation. The stakeholders have different interests in the policy which may lead to negotiations and bargaining over policy decisions and objectives. The process may lead to changes in the administrative and legal processes and the ICT sector institutional arrangements as part of policy implementation (Gillwald, 2005; Kerrets, 2004). The bottom-up implementation approach supports buy-in from the policy actors

which addresses the challenges of change in the implementation agencies (Pulzl & Treib, 2007). In addition, Plantinga (2009) argues that the bottom-up implementation approach supports the development of local networks where there may be a balance of power through local agreements. The policies are implemented with support from local institutions and consideration of organisational arrangements.

The bottom-up implementation approach has its own challenges. The approach may be time-consuming for stakeholders to come up with policy objectives, make decisions and execute policy activities. Cohen et al. (2002) suggest that ICTs change fast and policy objectives may be outdated if they are not implemented on time. The process of negotiating and bargaining involves power relations where policy actors with resources may dominate the process. Mashinini (2008) showed the challenges of local participation in policy formulation and implementation in rural South Africa through *Imbizo* (a meeting between local people as policy beneficiaries and government officials). Some of the stakeholders' views and opinions were marginalised due to their political affiliations. Thus, power relations form part of the bottom-up approach where there are different interests, values and norms among the policy stakeholders.

2.4.3. Hybrid approach to policy implementation

The hybrid approach, also known as the middle-out approach, combines the top-down and bottom-up approaches to policy implementation with the aim of overcoming the limitations of each approach (Matland, 1995; Pulzl & Treib, 2007; Sabatier, 1986). The approach has advantages, including supporting stakeholders in analytical and visible planning to come up with high levels of comprehensive plans, supporting integration of different levels for decision-making e.g. at strategic level and operational level, promoting capabilities for learning among policy actors to address challenges of change and supporting wider participation of stakeholders (Paudel, 2009; Segars & Grover, 1998). There are studies that have demonstrated the use of hybrid approach to policy implementation. Munyua (2005), for instance, explored how the national ICT policy of Kenya was implemented in the Kenya ICT Network for Action. The organisation comprised stakeholders from government, international development agencies and private local organisations who influenced policy intentions, decisions and funding. Another example of hybrid approach to policy implementation is the study on one-laptop per child implementation in a rural community as part of policy programme for Namibian government ICT for education. The study showed that government engaged teachers, local chiefs, school principals and learners in the implementation of the project (Boer, 2015). These examples demonstrate the broad perspective of stakeholders that can be engaged in policy implementation using the hybrid approach.

There are also limitations of hybrid approach to policy implementation. For instance, issues of accountability and difference the capacity of stakeholders to influence policy

implementation decisions. Munyua (2005) highlighted that there were challenges related to representation of grass root organisations and the danger of transferring policy implementation responsibility from government to other stakeholders in the Kenya ICT Network for Action. The challenges had the potential limitation for government accountability on the national ICT policy (Munyua, 2005). In the case of one laptop per child project, local stakeholders e.g. parents and local chiefs had limited influence in the project and government officials had the control on the decisions for the project (Boer, 2005).

The hybrid approach has merit in addressing limitations of top-down and bottom-up implementation approaches but critiques of the implementation approach argue that there are necessary conditions and factors that should be in place for the approach to achieve policy objectives. These factors include policy actors having a clear understanding of the policy objectives; the policy actors having necessary skills and competencies for conducting policy programmes and processes; the policy implementation agencies having adequate resources (e.g., finance, human capacity and legal frameworks); the favourable operating environment (e.g., economic, social and political) which can support the policy actors and operations of implementation agencies to achieve policy goals (Cairney, 2009; Marsh & Rhodes, 1992). Specific to the context of developing countries, Yoon and Chae (2009) suggest that political leadership, ICT infrastructure, funding, human capital and institutional arrangements are crucial for the success of ICT policy. The policy actors who hold political authority should support and provide direction for the policy implementation activities. Basic ICT infrastructure e.g. roads and electricity supply are necessary to support and operate ICT infrastructure. Adequate human capacity is required for execution of policy activities. Institutional arrangements should be supportive to ensure that there is clarity on the roles of the stakeholders in policy implementation. Along similar lines, Dzidonu (2002) suggested that leadership, political will, clear policy plans, government commitment and stakeholders support are necessary for ICT policy in the context of African countries. Although these conditions are equally important in the ICT policy implementation using the hybrid approach, others have argued that power is inherent in policy implementation (Ingold, 2011). Issues of power relations in hybrid approach have not been adequately addressed and there is a need for clarity of power dependence, relationships, networks and recruitment in policy implementation (Guys, 2014; Mansell, 2010).

2.5. Stakeholders in ICT policy implementation

National ICT policy attracts a broad range of stakeholders because ICTs are being applied and used in many areas of social, political and economic activities in societies (Marcelle, 2000). Mitchell, Agle and Wood (1997) argue that the term 'stakeholder' is too

broad and possibly open to including everyone in society. Depending on the nature of policy, stakeholders who work together or are affected by a policy, are described using different terms, such as policy subsystems or policy network or policy community or sub-government (see Kim & Roh, 2008). A working definition was necessary for the context of ICT policy implementation and definition that provides a manageable scope. Stakeholders are individuals and organisations who work together on a particular policy issue, influence policy decisions, and coordinate and share information on policy activities (Ingold, 2011). The stakeholders extend to those that are affected by the decisions for policy implementation; they form coalitions based on their beliefs and compete in influencing their interests on the policy goals and activities (Sabatier & Weible, 2007).

In the context of national ICT policy, stakeholders include government officials, international finance and development agencies, local IT associations, non-governmental organisations, community groups, private sector organisations, legislators, researchers, members of the media and policy beneficiaries (Checchi et al., 2012; Chiumbu, 2008; Weible, 2006). The policy stakeholders bring different perspectives, interests, motives and preferences to the policy implementation. Part of the reasons for differences in interests and preferences is that the stakeholders originate from different levels of society e.g. macro, meso and micro, and can be on international, national and local community levels respectively (Fischer, 2003; Kim & Roh, 2008). As Njihia and Merali (2013) demonstrated, the process of developing and implementing the process of ICT policy of Kenya attracted different stakeholders from government, outside government and international organisations. Similar situations are demonstrated in studies conducted in Rwanda (Mwangi, 2006), Uganda (Madanda et al., 2009) and Nigeria (Adeyeye & Iweha, 2005). In contrast, the national ICT policies of Mauritius and South Africa were developed and implemented locally with limited support from external expatriates (Adam & Gillwald, 2007). This implies that there are differences in the composition of stakeholders for national ICT policy implementation.

Regional organisations have an interest in development and implementation of ICT policy in member countries. The regional bodies are interested in ICT development because application and use of ICTs in the member countries have regional and global implications, such as standards of telecommunications, ICT products and services and trade. Examples of studies that have examined issues on regional groups include the role of European Union in the ICT policy of Greece (Chini, 2009), the impact of ideas for the UNECA through AISI in African countries (Chiumbu, 2008; Eko, 2013) and the effect of policy harmonisation in Southern Africa Development Community (SADC) (Maitland & van Gorp, 2009). However, others argue that such regional groups can influence ideas on ICT and development leading to new social forms in the member

countries. Hence, in a way their influence as national ICT policy stakeholders should also be recognised (van Gorp & Maitland, 2009).

2.5.1. Participation of stakeholders in policy implementation

As outlined in Section 2.4, participation of stakeholders is one of the features that determine the mode of policy implementation (Matland, 1995; Pulzl & Treib, 2007). It is, therefore, important to clarify the concept of participation, recruitment of policy stakeholders, and the interests and roles of the stakeholders and the techniques of participation in the context of national ICT policy.

Participation is *“a process through which stakeholders influence and share control over development initiatives, the decisions and resources that affect them”* (World Bank, cited by Bishop & Davis, 2002:15). Participation is also *“a process in which social structures are designed in such a way that individuals are included in the constitution of the social systems they live in and actually take part in these constitution processes”* (Verdegem & Fuchs, 2013:7). The two definitions capture the perspectives of individuals, social structure and activities in participation. In the context of ICT policy implementation, the key activities of participation include communication among the stakeholders, decision-making on policy activities, sharing experiences, responsibilities and resources and learning from the policy outcomes (Irvin & Stansbury, 2004).

The concept of participation in public policies is not new; it emerged in the 1970s to address policy failures (Reed et al., 2009). The concept has evolved since then and has been used differently across different disciplines. For instance, the World Information Society Summit of 2003 and 2005 emphasised a multistakeholderism approach to ICT policy development and implementation (Commaerts, 2011; Mansell, 2008). Hence, terms such as ‘partnerships’, ‘collaborations’, ‘multistakeholderism’ are often used interchangeably to represent participation. Arnstein (1967) suggests a typology (classification of activities) that captures the phases in participation and the terms that have been used in literature to represent the process of participation. The typology has eight steps which are categorised under the following headings non-participation (manipulation, therapy), tokenism (informing, consultation, placation), citizen of power (partnership, delegation, citizen of power) (Bishop & Davis, 2005; Nabatchi, 2012).

The participation typology (Arnstein, 1967) concentrates on the power and control of government over policy decisions. The assumption in the typology is that participation begins with non-participation, then tokenism and finally citizen of power. The non-government stakeholders negotiate with the government to move up the ladder (Collins & Ison, 2009). In non-participation, government as power holders do not share power with policy stakeholders. The aim of non-participation is to educate stakeholders that are outside government on the policy. In tokenism, the government may share its power while maintaining the status quo through informing participants without

allowing feedback. In this phase, participation is symbolic and stakeholders are manipulated in the process. In citizen of power, non-government stakeholders have control over policy decisions and influence government on policy activities (Nabatchi, 2012).

Critics of the typology argue that it portrays the process of participation as linear without feedback loops (Collins & Ison, 2009). The typology does not link back to the steps at the beginning of the process, assuming that stakeholders have moved up the ladder. In addition, the typology does not adequately address culture and administrative and political conditions that affect participation in the context of public policies (Huxley, 2013).

There are benefits of participation of stakeholders in policy implementation; these include stimulation of learning among policy stakeholders, promotion of empowerment of stakeholders to decide on their policy needs and priorities, and improvement of relations among policy stakeholders and policymakers (Buchy & Hoverman, 2000; Irvin & Stansbury, 2004). There are also challenges of participation in the implementation of policy. For example, more time is required to come up with policy agendas, while the cost in policy process activities may be high. Some of the policy goals may be exaggerated due to diverse opinions among the policy stakeholders. Vocal or organised stakeholders may overshadow views of other stakeholders and there may be problems of stakeholders' representation (Irvin & Stansbury, 2004; Luyet et al., 2012).

2.5.2. Recruitment of stakeholders in ICT policy implementation

Recruitment of stakeholders is the process of identifying and assigning roles of stakeholders in the implementation of ICT policy. Government officials are key in deciding the inclusion or exclusion of stakeholders in ICT policy implementation. They use different techniques to identify and recruit the policy stakeholders. The techniques include brainstorming (Bryson, 2004), interviews (Archterkamp & Vos, 2007), systematic approach (Ballejos & Montagna, 2008), and activity-based recruitment (Reed et al., 2009). Brainstorming involves a group of government officials suggesting a potential list of stakeholders which may influence and, in turn, be affected by the ICT policy. Interviews may be conducted with stakeholders to identify other stakeholders to be recruited in the policy process. A systematic approach has a sequence of steps which are used to identify stakeholders, assign roles and evaluate their influence and interests. In activity based recruitment, the process began with identifying the key activities of the policy and recruit stakeholders based the requirements of the policy activities. While there is diversity in stakeholders' recruitment, each approach is suitable for a specific policy context. Andre et al. (2012) argue that social, political and economic factors influence the recruitment of policy stakeholders. These factors determine the way stakeholders are recruited.

For instance, Hassan and Oyebisi (2011) indicate that the Federal Ministry of Science and Technology of Nigeria was responsible for the selection of stakeholders in the national ICT policy. The study showed that only six experts were recruited to formulate the ICT policy. The exclusion of some stakeholders led to lack of ownership of the ICT policy implementation. Duncan-Howell and Lee (2008) showed that the Ministry of Education in the Philippines handpicked policy stakeholders in an attempt to catch up in formulation and implementation of ICT policy. Most of the local participants that participated in the policy activities had no experience in policy formulation and implementation which affected coordination and execution of the policy. In contrast, Hall and Lofgren (2004) showed that government attracted and recruited diverse stakeholders in the early stages for the development of Swedish ICT policy. The stakeholders included government officials, industry experts and academics to support free thinking when articulating ICT policy issues. The support of European Union standards drove such recruitment approach. However, it was reported that the Swedish political culture affected the subsequent stages of ICT policy development and implementation (Hall & Lofgren, 2004).

Although the previous studies highlight the issue of stakeholder's recruitment, specific details of inclusion and exclusion are not fully articulated. The current study argues that recruitment of stakeholders is complex, going beyond social, political and economic factors (Reed et al., 2009) and understanding of power relations is crucial. Stakeholder's recruitment extends beyond access to resources, interests, influence and include social relations where power is exercised for both the recruiters and the recruited (Foucault, 1980; Mitchell, Agle & Wood, 1997). Despite previous studies highlighting the factors in recruiting ICT policy stakeholders, the issues of power relations have not been adequately addressed. It is important to understand power relations in the recruitment so that the process does not perpetuate exclusion in the ICT policy implementation process (Mansell, 2010; Stahl, 2008).

2.5.3. Interests and roles of stakeholders in ICT policy implementation

Policy stakeholders have different interests in the ICT policy which influence the roles they perform when executing policy activities. For example, Checchi et al. (2012) noted stakeholders assign values or interests to ICT policy, mainly related to financial, strategic, political, ideological, social and stewardship. The values ascribed to these dimensions can be related to individuals, organisations and society. The authors argue that the interests of the stakeholders must be aligned with organisations responsible for the policy to deliver the expectations of the stakeholders (Checchi et al., 2012). Thus, interests of stakeholders in a way determine the roles that they may perform in ICT policy implementation.

There are different classifications of roles of stakeholders related to policy implementation in literature. From a project based view, Bailur (2006) suggest the roles of stakeholders in relation to planning, resources allocation, implementation, monitoring and evaluation. Archterkamp and Vos (2007) classify stakeholders into actively involved, passively involved, client, decision-maker, designer and representative. The classification is based on a systems thinking approach which addresses the challenges of dynamics in interests, attitudes and preferences of stakeholders in a project. They argue that identification of the roles of stakeholders should consider sources of motivation, control and expertise to address the problems of representation of those affected by the project (Archterkamp & Vos, 2007). Ballejos and Montagna (2008) outline the roles of stakeholders in situations where there is interorganisational collaboration. The roles of the stakeholders include decision-makers, regulators, operators, consultants, politicians, developers, negotiators and experts. However, the roles of the stakeholders depend on geographical location (for example, local or international), knowledge (related to the contribution towards policy activities), and hierarchical level, which determines authority.

The study acknowledges the diversity in roles of stakeholders highlighted in the literature. Each of the highlighted list of stakeholders' roles offers a viable basis for clearly defining the roles of stakeholders and the most appropriate in a given context. The roles of stakeholders in ICT policy implementation may include supporters, providers, coordinators, experts, decision makers, regulators and affected (Archterkamp & Vos, 2008; Ballejos & Montagna, 2008; Reed et al., 2009). Politicians as policy supporters are responsible for negotiating assistance from international financial institutions, formulation of laws and approving of budgets for ICT policy implementation. The politicians obtain political gains in the form of re-election, power and prestige. Other supporters are private organisations and donors outside the government which are engaged to facilitate activities for ICT policy implementation. The supporters obtain influence in issues that affect their activities that require policy support. Providers supply resources in the form of financial, technology and knowledge for the policy activities. The providers are interested in financial reward from their investment (Ballejos & Montagna, 2008; Checchi et al., 2012).

Top government officials represent government and are considered as the primary stakeholders of the national ICT policy. The officials lead in decision-making and may engage donors, private sector organisations and politicians to obtain support in their decisions. Government agencies act as coordinators and implementers of policy activities and ensure that individuals and organisations that are engaged in such policy activities fulfil their functions. Hence, the agencies allow interactions and negotiations with the engaged individuals and organisations. Experts are engaged in policy activities because they possess special knowledge of ICT policy that may not be available in the

government agencies. The regulator ensures that control standards and quality of services in the ICT sector are enforced when implementing the ICT policy. The policy beneficiaries represent those that are affected. In most cases, these are represented by legislators and consumer protection organisations (Ballejos & Montagna, 2008; Reed et al., 2012).

The study is cautious of the necessary conditions for the roles of stakeholders in the context of national ICT policy implementation. These include social, political, cultural and historical conditions (Luyet et al., 2012). These may affect the way power is exercised by privileging and marginalising some of the stakeholders.

2.5.4. Techniques of participation in ICT policy implementation

Government officials responsible for national ICT policy use different techniques of participation once the policy stakeholders have been identified and their roles assigned to the policy activities. For instance, Luyet et al. (2012) suggest participation techniques that can be mapped to the Arnstein typology of participation based on communication (summarised in Section 2.5.1). The techniques include reports, public hearings, focus groups, citizen jury and consensus conference (See Table 2.1).

Table 2.1: Summary of techniques for participation (Luyet et al., 2012)

Technique	Informing	Consultation	Collaboration	Co-decision	Empowerment
Reports	x				
Public hearing	x	x			
Focus group			x	x	x
Citizen jury		x	x	x	x
Consensus conference		x	x	x	x

As summarised in Table 2.1, the reports and public hearings are usually one-way communication where government provide information to other policy stakeholders. The examples are categorised under informing and consulting in the Arnstein typology of participation. Focus groups, citizen jury and consensus conference provide the opportunity for two-way and deliberative communication among stakeholders (Luyet et al., 2012; Nabatchi, 2012). These are grouped under involve, collaborate and empowerment in the Arnstein typology of participation. However, communication in such situations may be two ways and aimed at rational motives (communication aimed at shared understanding), strategic intention (communication aimed at influencing others to conform), and instrumental intention (communication aimed at manipulating others and viewing them as objects or resources) (Habermas, 1984; Ngwenyama & Lee, 1997). Although communication is considered as a necessary condition for the

participation of policy stakeholders, it can also support domination and exclusion of stakeholders in the policy process (Wilklund, 2005). Hence, it is important to understand the motives of communication because some policy stakeholders may use communication to pursue their personal interests and preferences while marginalising other policy stakeholders.

Application of participation techniques in the context of ICT policy varies considerably across countries. Some African countries, for instance Botswana and Tunisia, did not involve external experts in policy development (Adam & Gillwald, 2007). Similarly, the South African national ICT policy development process began with the government developing a green paper, then appointing a task force of local experts to develop the ICT policy draft (van Audenhove, 2003). The policy stakeholders were invited to a consultative conference to comment on the ICT policy draft. The implementation of the policy was done through partnerships between government departments, such as the Department of Communication, State Information Technology Agency and Government Information Systems, with private organisations. Participation techniques included communication and decisions on IT issues and initiatives among the public and private sector organisations. In a recent study, Duncan (2015) showed that government of South Africa through the Ministry of Communication instituted a review of ICT policy and recruited an advisory committee. It was found that more time was spent on debating policy issues with less focus on the implementation of the ICT policy. This demonstrated the challenges of participation despite the national ICT policy being developed and implemented locally with less external influence.

Other African countries benefited from the support of United Nation Economic Commission for Africa which proposed the National Information and Communication Infrastructure (NICI) Framework (Chiumbu, 2008; van Audenhove, Burgelman, Cammaerts & Nulens, 2003). The framework prescribed techniques of participation of stakeholders in ICT policy formulation and implementation. The application of NICI's participation techniques are demonstrated in a number of studies. For instance, a study conducted in Nigeria showed that the government recruited a task force of experts to develop the ICT policy (Adeyeye & Iweha, 2005). Other stakeholders were invited to comment on the draft policy during stakeholder consultations. A similar approach was adopted in the cases of Kenya (Njihia & Merali, 2013), Tanzania (Twaakyondo, 2012). A study conducted in Rwanda on the role of leadership in ICT policy showed that the President of the country championed the ICT policy development. He appointed a task force that conducted consultations with stakeholders including those outside the government (Mwangi, 2006). The study also highlighted the participation of politicians and legislators who approve budgets in the National Assembly. Their participation was crucial in ICT policy implementation decisions. The findings in the study showed that

participation of stakeholders considered the structures of government and institutions that supported ICT policy implementation.

While the NICI framework supported identification and recruitment of stakeholders that participated in the ICT policy formulation, there were challenges in the application of the framework in a number of countries. Adeyeye and Iweha (2005) reported that not all stakeholders were engaged in the ICT policy of Nigeria, which led to challenges of buy-in in the implementation agencies, especially those from the private sector. The stakeholders that were excluded during the policy formulation phase felt that the ICT policy was not representing their interests. Twaakyondo (2011) explored the implementation of ICT policy of Tanzania. The study noted that the stakeholders from the government dominated the policy implementation activities and there were few stakeholders from outside the government during policy implementation. Madanda et al. (2009) showed the lack engagement of women in the policy development processes of Uganda. The exclusion of women in the policy formulation affected the way universal access initiatives addressed the needs of policy beneficiaries. From these examples, it can be argued that there was need for African countries to examine the assumptions of the NICI framework when using the framework in ICT policy formulation and implementation. It appears that the framework was taken as a prescription that could be applicable to the selected countries in Africa. It was necessary to appropriate the framework to ensure that it addressed the specific issues of each country. For example, the historical, political, social and cultural realities on the ground (Avgerou, 2010). This was important to ensure equity and empowerment of stakeholders in the ICT policy implementation.

2.6. Decision-making in national ICT policy implementation

Besides communication and interactions of stakeholders in participation, decision-making is a crucial part of national ICT policy implementation. Decision-making is *“the art of choosing reasonable decision rules, ones that are appropriate for each decision context”* (Andrews, 2007: 163). Decisions can be made by government officials alone or can involve other policy stakeholders. For example, a minister or top government official can decide on policy issues on day-to-day operations in the policy implementation agency. In such cases the decisions are structured and rational choices are made, for example, logical and consistent choices to support preferences and minimise constraints. In contrast, collective or group policy decision-making involves different policymakers including politicians, judges, government officials, legislators, NGOs and international development agencies. The group decision-making process is complex and can be challenging because the policy stakeholders have different interests, opinions and preferences. Policy stakeholders engaged in decision-making resort to bargaining and negotiations on policy decisions. As a result, others have suggested that

power and politics influence the way decisions are made in the policy implementation (Ingold & Varone, 2011; van Tatenhove, Edelenbos & Klok, 2010). However, policy stakeholders are constrained by rules and structures of organisations that affect their access to resources and exercise of power in making policy decisions.

Lukes (2005) suggests three mechanisms or ways of exercising power that can describe how decision-making in public policies may be achieved. These are overt, covert and latent dimensions. In the overt dimension, decision-makers invest in resources and talents to obtain advantage over other participants when discussing policy issues. The covert dimension explains the situation where decision-makers with resources also mobilise rules in the bargaining to their favour over other decision-makers. Prevention in decision-making is achieved through threats, sanctions and force. Bias towards decisions is reinforced by emphasising values, beliefs and norms. In the latent dimension, patterns and meaning for actions of some policymakers lead them to behave and act to the advantage of other policymakers and are disadvantaged themselves. In this decision-making dimension, it is difficult to analyse how perceptions are shaped. Decision-makers use myths, symbols and language to benefit from the power relations (Lukes, 2005). These three dimensions demonstrate how power influences the decision-making process and how it can affect the roles of policymakers in policy implementation.

Other factors that affect the decision-making process for policymakers are the nature of the problem, information and time (Howlett, 2007; Irvin & Stansbury, 2004). A combination or consideration of these factors generates a mix of possible outcomes for the policy decisions (See Table 2.2).

Table 2.2: Summary of decision-making styles (Howlett, 2007)

	Complexity of the policy context	
Severity of constraints on decision maker	Low	High
	Single or limited actor, single setting	Multi actor, multi setting
Low	TYPE I	TYPE III
Clear problem definition, available information, available time	Rational decision making	Multiple around 'decision accretion' decision making
High	TYPE II	TYPE IV
Poor problem definition, limited information, limited time	Incremental decision-making	Heuristic, bureaucratic politics or garbage-can decision-making

As summarised in Table 2.2, the decision-making process may contain a mix of issues that are not clear and have limited information and time constraints. The policymakers must understand the context and weigh the alternatives and consequences before making policy decisions. For example, in the Type I decision-making style, the policy outcomes may be predicted as the context of the policy is simple. In the Type II decision-making style, there are minimal constraints for the policy decision-makers commonly found in public organisations. Consequently, Types I and II decision-making styles may relate to perfect rationality where policymakers make decisions that are logical, consistent and systematic, using resources such as information (Birkland, 2011; Howlett, 2007).

Types III and IV decision-making styles are described as complex because they involve multiple actors, are in a different context and are often time-constrained (Howlett, 2007). This may relate to bounded rationality where policy decisions are made in a resource-constrained situation such as limited information and time. The decision-making process for national ICT policy may follow this pattern due to frequent changes in technologies, and use of ICT which is not predictable (Brown & Brown, 2008; Cohen et al., 2002). Understanding of such a setting is vital for the decision-makers.

While proponents of modern policy approaches, such as hybrid approaches (Matland, 1995; Sabatier, 1986), promote participation which supports inclusion of stakeholders in decision-making, the process is inherently political due to differences in choices and preferences. The process may combine the different types of decision-making styles (Howlett, 2007). It is important to recognise the multi-dimensions of decision-making in the context of national ICT policy, as well as the roles of the policymakers in exercising power which can support or limit the outcomes of policy implementation. For example, they can influence policy decisions through formal positions (such as government authority), control over resources (such as finance and expertise) and stakes in the policy issues such as proponents of a policy issue) (Kornov & Thirsen, 2000).

2.7. Challenges of national ICT policy implementation

Despite a growing number of countries in Africa with national ICT policies, the policies have not yielded the expected results (Gillwald, 2010; Kendall, Kendall & Kah, 2006; Mashinini, 2008). The policies have been formulated, but the execution of policy activities has been problematic, leading to the policy objectives not being attained. Literature provides a range of studies that highlight some of the challenges that are inhibiting attainment of successful policy outcomes. The challenges are poor coordination within public institutions; lack of monitoring and evaluation of the policy activities; lack of policy vision and leadership; inconsistencies of ICT policy goals and national development goals; lack of skills for policy actors to articulate course of actions; limited legal frameworks to support implementation of policies and absence of

basic infrastructure that support implementation of ICT programmes (Adeyeye & Iweha, 2005; Makinde, 2005; Twaakyondo, 2011; Ulrich & Chacko, 2005).

Poor coordination within policy implementation agencies (government departments and regulatory institutions) and among policy stakeholders in carrying out of policy plans has led to duplication of efforts and wastage of resources (Adeyeye & Iweha, 2005). The poor coordination of the implementation of national ICT policy is to an extent attributed to inadequate leadership skills where those in decision-making positions lack the capabilities to influence policy activities and other policy stakeholders to achieve policy goals (Makinde, 2005).

Studies have shown that despite African countries initiating policy activities to address national ICT policy goals, the policy implementation activities are not being adequately monitored and evaluated. For example, Hassan and Siyanbola (2011) assessed the implementation of the national ICT policy of Nigeria. The study indicated that there was a failure in monitoring the policy implementation activities. The problem was attributed to lack of commitment from the government in supporting policy activities and inadequate institutional support, including legal frameworks in the implementation agencies to conduct monitoring and evaluation of policy activities (Adeyeye and Iweha, 2005; Hassan & Siyanbola, 2011).

Human capacity in the implementation agencies is another problem that is affecting policy-executing activities. For instance, Checchi et al., (2003) highlight that least-developing countries face changes in human capacity where there is a shortage of skilled staff to implement IT public policies. As a result, policy implementation agencies rely on external experts and there is overdependence on external support (Checchi et al., 2003). Alinaghian, Rahman and Ibrahim (2010) note that human resources quality is necessary for successful ICT policy implementation. This human resources quality includes competent staff and well-structured management in the policy implementation agencies (Alinaghian et al., 2010).

Lack of basic infrastructures such as electricity and roads has led to failure to implement ICT policy programmes that could address issues of access and use of ICTs. Bowman (2010) suggests that lack of execution of ICT programmes such as universal access in rural areas of Kenya is because of the absence of electricity that is required to operate ICTs. Similarly, Diso (2005) noted that the national ICT policy of Nigeria ignored details on issues of electricity supply that was necessary for the implementation of the policy and described the absence of the electricity supply as a recipe for implementation failure (Diso, 2005).

Another challenge is inadequate funding in the implementation agencies which leads to the policy implementation activities not being executed despite having the written ICT policy documents. A number of studies point out the issues of limited funding in policy

implementation agencies. In Nigeria, the National Information Technology Development Agency was not adequately funded and failed to execute some of the policy programmes (Adeyeye & Iweha, 2005; Diso, 2005; Hassan & Siyanbola, 2011). Similar situations are reported in the cases of Malawi (Kanjo, 2008) and Ghana (Kwapong, 2007), where implementation agencies lacked adequate budgets to support the execution of ICT policy activities. As a result, the implementation agencies relied on the support of regional and international development agencies for funding. In Tanzania, despite having the resources allocated to implementation agencies, policy implementation agencies competed for the financial resources which affected the relations among the agencies (Twaakyondo, 2011).

In some cases, the developing countries lack regulatory and legal frameworks which inhibit effective execution of national ICT policy activities, especially in the government departments and regulatory institutions. As a result, the policy implementation agencies fail to perform their activities effectively because of lack of legal mandate. For example, dealing with issues related to telecommunications regulations requires legal backing to avoid litigation (Kerrets, 2004; Twaakyondo, 2011).

While the challenges highlighted above concentrated on policy implementation, they are linked to other problems in the other phases of the policy cycle. For instance, lack of comprehensive policy goals at formulation phase; absence of legal frameworks in the phase for enacting laws; and limited understanding of the impact of the policy in the evaluation phase can affect the policy implementation phase (Kanjo, 2008; Singh, 2010; Twaakyondo, 2011). Figure 2.1 summarises the problems for national ICT policy in the phases of the policy cycle.

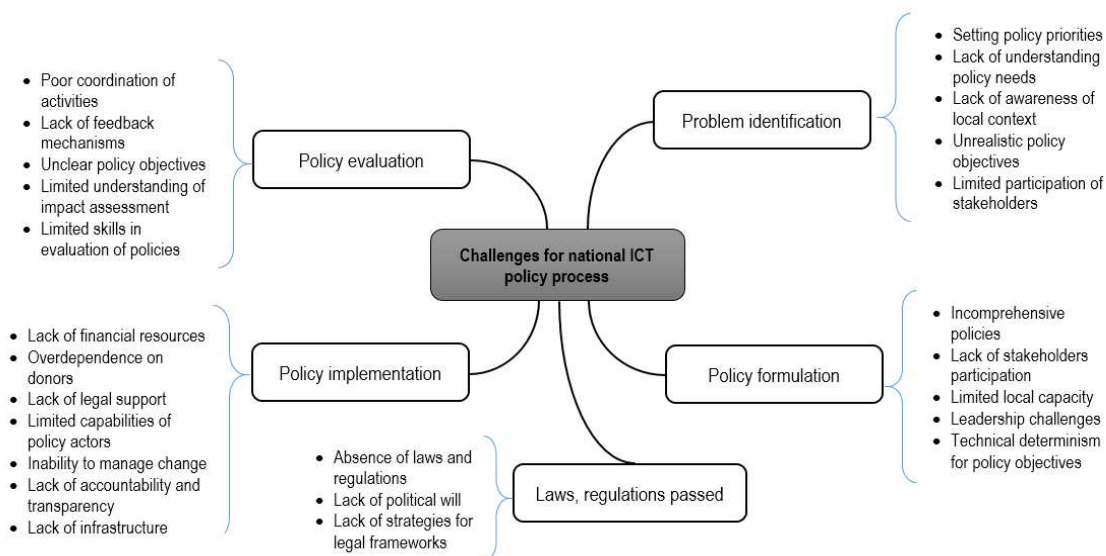


Figure 2.3: Summary of challenges in ICT policy (Makoza & Chigona, 2013)

As illustrated in Figure 2.3, the challenges in the policy cycle phases are, in a way, interdependent (Bridgeman & Davis, 2003; Parag, 2006). While the other problems including leadership, policy coordination, resources and clarity of policy goals in policy implementation are equally important for successful policy outcomes, the focus of the discussion concentrated on stakeholders' participation in the policy implementation. As others have suggested, participation of stakeholders can mitigate some of the challenges in the policy process e.g. understanding of real needs of policy beneficiaries to avoid waste of resources, providing diverse views on policy problems, and supporting policy evaluation (Chacko, 2005; Checchi et al., 2012).

Governments and development agencies have emphasised 'active citizenship' where those affected by the policy are encouraged to participate in policy-making and implementation (Schware, 2003; Singh & Flyverbom, 2016). It is argued that participation of stakeholders in policy implementation may improve securing of benefits, wider acceptance or buy-in of policy goals and achievement of realistic policy outcomes (Checchi et al., 2012; Labelle, 2005). Nonetheless, participation involves stakeholders from different levels of society. For instance, at macro level there are representatives of international development agencies and government officials who sponsor, decide and prioritise on ICT policy programmes. At micro level there are some implementation agencies, NGOs that are in contact with policy beneficiaries, engaged in negotiations with macro level stakeholders and execution of policy programmes and processes. Each group of stakeholders at different levels of society has its own beliefs, norms and values that shape how the policy is perceived. Moreover, the stakeholders have differing access to resources (finance, information, leadership and legal resources) which are mobilised and used to influence other stakeholders in implementation activities (Avelino & Arts, 2011; Weible, 2006). Power relations is one of the important issues in the policy implementation process because the exercise of power by different groups in policy implementation shapes the way resources are used, coordination of policy activities, communication among the policy stakeholders, the way policy decisions are made, and the different roles that the policy stakeholders perform. Hence, understanding of power relations may help policymakers to mitigate some of the policy challenges and achieve successful policy outcomes (Alinaghian et al., 2011; Ike, 2009; Mansell, 2010; Weible, 2006).

2.8. Previous studies on national ICT policies of Malawi

There are few but significant studies that have examined some aspects of national ICT policy in the context of Malawi. For example, Kanjo (2008) analysed the challenges of the National ICT Working Group (NICTWG) that was tasked to develop the national ICT policy and address other national ICT issues. The NICTWG comprised government officials, academics, private sector organisations and local ICT association. Kanjo (2008)

used a reflective approach and secondary data to highlight issues that emerged in the activities of NICTWG. The study showed that despite the backing of few top government officials the issues of inadequate human capacity, limited resources and lack of commitment, over dependency on support from international development agencies constrained the functions of the NICTWG (Kanjo, 2008). Unfortunately, the study misses out on insights from other policy stakeholders participating in the implementation of the national ICT policy e.g. international development agencies, NGOs, regulatory organisations and private sector organisations. Thus, the study was narrow in focus and did not adequately address political, historical and social issues that affected the activities related to national ICT policy.

In another study, Chiumbu (2008) examined the role of international organisations in influencing the ideals of the elite and the national ICT policy in African countries (Malawi, Ghana, Rwanda and Uganda). Using Neo-Gramscian theory, she interrogated secondary data and interview data from the representatives from the international development agencies. The findings showed that there were hidden motives for the international development organisations in promoting the transfer of national ICT policy in African countries to obtain access to markets and support trade (Chiumbu, 2009). Although, the study took a critical research approach to highlight hidden motives of international development organisations, the key focus of the study was at international level. National ICT policy dimensions at national and local issues were not analysed in detail. For example, the local stakeholders interviewed in the study were limited to the elite and decision-makers. The study lacked insights from the policy implementation agencies and beneficiaries.

Bichler (2008) analysed the role of ICT in socioeconomic development in the dimensions of political, economic, cultural and well-being of citizens. By conducting a survey on internet café users in some urban centres and interviews with some of the key stakeholders of national ICT policy, the study showed that ICT were being used to support development initiatives in areas of education and health. Further, there were efforts in developing strategies to integrated ICT in addressing cultural, ecological issues. However, lack of infrastructure affected the provision of ICT services. Consequently, the cost of available ICT services was high, which rural dwellers could not afford. In addition, the ICT services were mostly available in urban centres which resulted in disparities in access to ICTs between urban and rural areas (Bichler, 2008). This evidence supports the view that national ICT policy implementation was necessary to translate the written intentions and aspirations of stakeholders into actions for achieving social economic development.

The current study is not refuting the contributions of previous studies (Bichler, 2008; Chiumbu, 2008; Kanjo, 2008) but extends the existing body of knowledge in a way that

highlights unquestioned assumptions on issues in the implementation of national ICT policy. Questioning the assumptions of the national ICT policy is important because despite participation being recommended as a best practice in the ICT policy process (see Chacko, 2005; Labelle, 2005), there has been limited progress in national ICT policy implementation of Malawi. Hence, understanding of assumptions in participation of stakeholders in policy implementation opens possibilities of change for policymakers to improve the situation (Mansell, 2010).

2.9. Synthesis of literature

In summing up, this chapter demonstrated that success of policies in delivering the desired outcomes is a major concern for many policy stakeholders in the context of developing countries (Brown & Brown, 2008; Olatokun, 2008). The process for execution of ICT policy activities is challenging, leading to policies not delivering the intended results. While participation of stakeholders in a hybrid approach is portrayed to address limitations of top-down approach, understanding of exercise of power among the policy stakeholders is crucial. There is a need to analyse the concept of participation in relation to power relations among stakeholders and how the exercise of power affects communication, interactions and decision-making and policy implementation outcomes. This is evident in the persistent calls for research in this area (see Mansell, 2010; Mansell; 2014; Ordonez, 2015).

Although previous studies have attempted to discuss issues on ICT policy implementation, the studies are descriptive in nature and do not highlight controversies in policy implementation. Thus, extant literature in the context of Malawi has limited application of a critical research approach on national ICT policy. Gillwald (2010:85) argues that *“African academia has historically not examined ICT policy issues critically, nor has it engaged with governments who, themselves, have largely not encouraged critical participation in policy formulation”*. Addressing this knowledge gap requires critical examination of national ICT policy implementation, opening up reasons why, despite the participation of stakeholders, the policy is not delivering the expected outcomes, who is privileged or marginalised in the implementation process and highlighting the outcomes of power relations dynamics. This thesis attempts to address the calls for research on ICT policies to address the identified knowledge gaps.

2.10. Summary of chapter

This chapter has described national ICT policy and its implementation in relation to socio-economic development. The different views on socio-economic development have been summarised and it was noted that ICTs may be appropriate in supporting the human-centredness approach to socio-economic development. The discussion also highlighted the process for public policies focusing on the policy cycle. The different approaches to policy implementation have been summarised. The challenges for

implementing national ICT policies have been analysed, focusing on the context of developing countries. Participation of stakeholders was highlighted as one of the main solutions for addressing challenges for implementing national ICT policy. The concepts of participation of stakeholders have been summarised, and it is noted that understanding of participation can extend from communication, decision-making to include power relations and the need to highlight the unquestioned assumptions in participation.

Chapter 3

Theoretical background to the study

3. Introduction

This chapter presents theoretical background to the study. Section 3.1 presents the description and different ways viewing power in the context of policy implementation. A working definition of power relations is outlined followed by a summary of the exercise of power. Section 3.2 outlines theories on power. Section 3.3 summarises Critical Social Theory (CST) and summarises the work of key theorists for CST in information systems. Section 3.4 highlights reasons why the Foucault's power/knowledge was selected in the analysis of power relations in ICT policy implementation. Section 3.5 outlines the power/knowledge concepts used in the study. Section 3.6 summarises the chapter.

3.1. Power in context of policies

This section presents definition of power and perspectives on power. It also defines power relations in the context of national ICT policy and describes how power is exercised.

3.1.1. Definition of power

The concept of power has been widely discussed across disciplines. It has been noted that there are competing definitions of power in literature (Avelino & Rotmans, 2009; Dowding, 2012). For example, according to Weber, *"power is the probability that one actor within a social relation will be in a position to carry out his own will despite resistance, regardless of the basis on which that probability rests"* (Weber, 1978:53). Wrong (1979:23) states that *"power is a matter of practical efficiency or capacity focusing on various resources that people can draw upon in their attempts to shape the present and the future and to exercise intended and effective influence"*, while Giddens (1984) views power as a resource and the capacity of an agent to achieve the desired outcomes. These definitions reflect efforts to capture the diversity for dimensions of power e.g. sovereignty, will and resistance (Weber, 1978), the capacity of agents and resources (Giddens, 1984; Wrong, 1979).

The different perspectives provide a useful understanding of power; however, there is hardly one definition that captures how power is defined and understood in the context of national ICT policy; hence, a working definition is required. In this study, power is: *"the organisational and discursive capacity of agencies, either in competition with one another or jointly, to achieve outlines in social practices, a capacity which is however co-determined by the structural power of those social institutions in which these agencies are embedded"* (Arts & van Tatenhove, 2004:347).

3.1.2. Perspectives of power

There are a number of ways of viewing power that can be used to understand and examine power, depending on the context and objectives of a study. In the context of public policies, power can be viewed as a resource, process, meaning and social systems (Dhillon, Caldeira & Wenger, 2011; Haugaard, 2003). In the resources-based perspective, actors mobilise resources with the intention of influencing policy outcomes. In the process based view, the bureaucratic processes determine the exercise of power to achieve collective outcomes. In the meaning-based view context and processes determine the meaning policy actors assign to power and their actions to achieve policy goals. In the systems-based view, disciplinary power is part of the structure and enables or constrains the functions of policy actors to achieve policy goals (Avelino & Rotmans, 2011).

Jasperson et al. (2002) extend the views of power to include rational, pluralist, interpretive and radical dimensions. The rational view of power is based on authority to make rational decisions. A pluralist view of power is where actors are engaged in negotiations to reach a common goal. In an interpretive view of power, actors assign meaning to situations and exert influence over other actors. The radical view considers power in terms of social structure such as class, race and social institutions. The aim of research in this dimension is to understand social conditions and influence change (Bradshaw, Campbell & Murray, 1991; Jasperson et al., 2002). The study showed that most studies focus on rational and pluralist views of power because these views can be observed in organisational context. A radical view of power is deep-rooted in social structures and may be difficult to identify and analyse. This explains part of the reasons why there are few studies on power that analyse the radical view of power.

This study considered power in the context social systems because national ICT policy implementation is carried out in social context comprising social structures. The social systems view support understanding of power beyond the view of power as a resource to include how the resources are mobilised in the context of national ICT policy and the exercise of power among actors using the resources (Haugaard, 2003). From this perspective, it is argued that the policy process involves many stakeholders resulting in interactions between individuals and organisations in interpreting policy declarations and influencing the implementation activities (Weible & Sabatier, 2007). The interactions, communications, sense-making and decisions may result in power relations as policy stakeholders compete and negotiate to advance their interests and preferences (Ingold, 2011; Matland, 1995). The next subsection provides a definition of power relations.

3.1.3. Definition of power relations

The diversity in the definitions of power also affects the way power relations are defined. Consequently, the definition of power relations also varies according to context in literature (Howarth, 2010). 'Power relations' is described as politics, battles and struggles that may arise from interactions of policy actors due to differences in interests, interpretations and status (Cecez-Kecmanovic, 2005). This description captures power in action but misses the aspects of social structures that enable or limit actions of actors (Avelino & Rotmans, 2011). In this study, an attempt is made to describe power relations in a more generic form from a social system perspective.

Actors in a social system may influence or transform the behaviour of other actors through interactions to achieve their goals (for example, strategic interactions) (Habermas, 1984). The collaborations among the actors may lead to the emergence of events as part of possible results of a whole series of complex relations between other events (for example, contingencies) (Foucault, 1981; Kendall & Wickham, 2004). The interactions among actors during collaborations may lead to what is considered normal and legitimate behaviour in a given context or society (for example, discourses) (Foucault, 1980). The coordinated activities in social collaboration can also lead to the achievement of goals and the emergence of new practices (Giddens, 1984). Conceived on the premise of concepts for strategic interactions, contingency, discourses and practices, power relations in this study are defined as strategic interactions between individuals or institutions as a contingency for the use of resources with power and knowledge that inform practices or discourses in a social system.

In this definition, differences between power, communication and capabilities of actors are taken into consideration (Foucault, 2003). The three elements overlap in the conceptualisation of power relations. Communication among policy stakeholders forms the basis for relationships through information and shared work. Power relations form part of practices that are imposed through traditions in a social system, which are exercised through production and exchange of meaning. Capabilities or resources influence the way actors interact in the process of exercising power (Foucault, 2003; Hekkala, Stein & Rossi, 2014).

3.1.4. Exercise of power

Actors in a social system may exercise power between each other in two possible ways: 'power over' and 'power to' (Avelino & Rotmans, 2009). The former refers to actions of actors where there is control over other, for example actor A having more power over actor B in terms of dependency for resources. These include access to resources, strategies to mobilise the resources, skills for using the resources and willingness to exercise power. However, others have argued that when exercising power, the

resources have no power in themselves but become power-laden when mobilised by actors in a social system through relations, rules, laws, rituals, culture and traditions (Avelino & Rotmans, 2009; Hannus & Simola, 2010) (see Table 3.1). ‘Power to’ refers to the ability of actors to use their capacities and resources, for instance actor A can mobilise more resources than actor B in terms of economic power (Avelino & Rotmans, 2009; Lukes, 2005).

Table 3.1: Summary typology of resources (Avelino & Rotmans, 2011)

What is mobilised?	Resource Type	What kind of power is exercised?
Information, concepts, ideas, beliefs	Mental	Ideological
Human leverage: personnel, members, voters	Human	Military/Physical
Apparatuses, products, construction, infrastructure, Art (music, painting, photography, dance)	Artifactual	(Geo)-political
Raw material, physical space, time, organic life	Natural	Economic
Funds, cash, financial stock	Monetary	Economic

As summarised in Table 3.1, the resources for exercising power include mental, human, artifactual, natural and monetary (Avelino & Rotmans, 2011). Mental resources can be in the form of information, ideas and beliefs that people have related to a policy; human resources are in the form of support actors obtain from others such as members of a group or voters; artifactual resources relate to physical objects that stakeholders can use or access; natural resources are raw materials that are converted into products or support creation of services and can be related to economic exercise of power; and monetary resources include use of financial stock to achieve economic and material advantage. Further, the resources types can be related to material arrangements that can enable or constrain the formation of a discourse and the way actors mobilise resources to exercise their power (Avelino & Rotmans, 2011; Hardy & Thomas, 2014).

Avelino and Rotmans (2011) reviewed the forms of exercising power and propose three forms of power relations: power over, more/less power to and different power to. More

or less power is a situation where actors have differences in power but work together to achieve a common goal. Different power to relate to a situation where actors have differences in power but support one another (Avelino & Rotmans, 2011; Clegg, 1989). The three forms of power relations are based on the argument that there are differences in how actors exercise power founded on the resources they mobilise (listed in Table 3.1). For example, the exercise of economic power may be different from the exercise of ideological or political power. Consequently, there are different manifestation of power relations. The differences in levels of interactions between two or more actors can result in balance or imbalance of power. Actors have the ability or capacity to create or discover, distribute and transform resources and change their social structures and institutions. The situation leads to power dynamics where power relations are manifested in mutual dependency, cooperation and synergy among the actors. These are often not highlighted as part of power. Silva (2007) noted that power is mostly often seen as negative and limiting successful achievement of organisational goals. However, it is useful to consider positive aspects of power such as mutual dependency, cooperation and synergy as part of power and establish the type of power relation being exercised. Table 3.2 summarises the typology of power relations using the analogy of exercise of power between A and B.

Table 3.2: Summary of typology of power relations (Avelino & Rotmans, 2011)

Power relation type	Manifestation of power relations		
Power over	A depends on B but also depends on A=> A and B have power over each other <i>Mutual dependency</i>	A depends on B but B does not depend on A=> B has power over A <i>One-sided dependency</i>	A and B do not depend on each other => A and B has no power over each other <i>Independency</i>
More/less power to	A exercise power more power than B, but A and B have similar, collective goals => <i>Cooperation</i>	A exercise more power than B, while A and B have mutually exclusive goals => <i>Competition</i>	A exercise more power than B, A and B have independent co-existent goals => <i>Co-existence</i>
Different power to	A's and B's different power exercises enable and support one another => <i>Synergy</i>	A's and B's different power restrict, resist or disrupt one another => <i>Antagonism</i>	A's and B's different power exercise do not (significantly) affect one another => <i>Neutrality</i>

As can be seen in Table 3.2, in cases of more or less power among actors, power relations may be analysed in checking if there are one-sided dependency or completion or antagonism. For instance, Nules and van Audenhove (1999) highlight the role of international development agencies (the World Bank, ITU and UNECA) in supporting African countries to become information societies. The study showed one-sided dependency where African countries were supported to formulate policies and obtain conditional loans that the international development agencies offered. However, the support did not consider the social and cultural consequences of ICT programmes that were promoted through the assistance (Nules & van Audenhove, 1999).

Power relations can also manifest where there is independence, co-existence and neutrality. For example, in Private Public Partnerships, government, large corporations and small organisations operating in the telecommunications sector can collaborate, for example, in ICT infrastructure roll-out projects. The partners both have power, but different kinds of power which they mobilise to influence each other. This view of power supports understanding of possibilities of change or alternatives practices that can benefit all actors (Avelino & Rotmans, 2011). However, such arrangements require the relations to be natured and managed (Fischer, 2003).

Further, actions of actors related to power are associated with authority, autonomy, domination, hegemony, influence, manipulation, sanctioning and legitimation (Dowding, 2012; Sabherwal & Grover, 2010). Others have termed the exercise of power in such forms as politics where power is viewed as negative and a means for sanctioning behaviour that does not conform to the norms of the organisation (Doolin, 2004; Silva, 2007). Contrary to this view, Howarth (2010) argues that when actors exercise their power, actions associated with power can be accepted, contested or resisted, leading to social change. Therefore, power should also be considered as positive because it can support change (Foucault, 1980).

3.2. Summary of theories on power

As demonstrated in Section 3.1 on definitions and perspectives of power, there are also many theories of power that have emerged from different disciplines. Influential theorists who have studied power include Dahl (1957), Parsons (1967), Weber (1978), Giddens (1984), Foucault (1980), Clegg (1989) and Lukes (2005) (See Table 3.3). The theorists have looked at different aspects of power (for instance, resources, processes, social structures and meaning) in different contents (for instance, in organisations, communities and society) (Dhillon, Caldeira & Wenger, 2011; Silva, 2007).

Dahl (1957) suggested that power between agents is where one actor causes the other to act in a way which one would otherwise not do. Power in this context is viewed as causality and observed behaviour. However, others have criticised such view of power and argued that it does not consider social structures in which the actors operate

(Introna, 1997; Silva, 2007). This has a limitation in the understanding of power beyond resources. Parsons (1967) extends the resources dimension of power and proposes that power is a resource for achieving collective action in a social system. Such power is viewed as positive and used to maintain order in society.

Weber (1978) views power as the ability to impose one's will over others. This form of power supports control and instrumentalism of actors to achieve rational decisions. Criticism for the resource-based view is that it does not consider historical and cultural dimensions of the actors when exercising power (Morill, 2008). Researchers, including Avelino and Rotmans (2009; 2011), have noted that the resource-based view of power misses the dimensions of the self-interest and common interests of the actors. Giddens (1984) suggests that power is the capacity of actors to act (human agency) and that structures (social rules, norms and values) enable and limit the actions of the actors. This perspective has also received criticism that it does not consider the enduring relations of actors and the complexity of the theory to link the concepts and empirical data when analysing power (Silva, 2007).

Table 3.3: Summary of power theories and their criticisms

Theorist	Key assumptions about power	Criticisms
Dahl (1957)	Power is exercised to cause those subjected to power to follow those in power	Mechanistic view of power which focuses on agents and causality without consideration of social structures (Introna, 1997; Silva, 2007)
Parsons (1967)	Power is the ability of actors to mobilise resources and achieve the desired goals	The view of power does not differentiate common interests and self-interests of the actors (Avelino & Rotmans, 2009)
Weber (1978)	Power is the ability to impose ones will over others in a social action	This view neglect the historical and cultural context of society in which social actions takes place (Morill, 2008)
Giddens (1984)	Power is the use of resources to achieve the desired goal. Agency and structure enable or constrain the way actors exercise power in a social system	Limited consideration of enduring relations among actors and too abstract and complex to apply in empirical studies (Clegg, 1989; Walsham, 1993)
Clegg (1989)	Power circulates within actors who sustain, maintain and transform power	Complexity of the circuits of power framework which requires large amount of empirical data (Silva & Backhouse, 2003)
Lukes (2005)	Three dimensions of power concentrating on intentions, non-behaviour and interests of actors	Limited details on effects of culture and social context of the actors (Introna, 1997)

Another theory of power is Critical Social Theory (CST). The theory views power as constituted in language, discourses, practices and knowledge within society which constrain or enable human conditions (Foucault, 1980). CST aims to understand and highlight social conditions and physical constraints so that actors are aware of their interests, own needs and can change their situations (Ngwenyama & Lee, 1997; Stahl, 2008). One criticism of CST is that there is no one method for using the theory to analyse power and that theorists of CST in some cases do not detail how the theory can be used in other studies (Kvasny & Richardson 2006). This in part explains why there are few studies that have used the theory within information systems discipline (Richardson & Robinson, 2007).

In summary, the theories on power offer different dimensions that studies can draw on. The selection of the theory depends on the objectives of the study (Wodak & Meyer, 2016). The current study argues CST is more suitable to analyse power relations in the context of national ICT policy. Before discussing the reasons why CST was selected for the study, it is necessary to detail the description of the theory. This is presented in the subsequent subsection.

3.3. Critical social theory (CST)

Critical social theory (CST) aims at explaining and challenging established human social conditions that lead to oppressive forms of control that prevent free and just existence of individuals, organisations and society (Klein, 2009). These conditions may be hidden interests and agendas, or deep-rooted practices, and structures in a social system. Kinchloe and McLaren (2005:288) highlight a more comprehensive description of CST that demonstrates the contexts where human conditions that may be problematic: *“A critical theory is used in particular issues of power and justice and the ways that the economy, matters of race, class and gender, ideologies, discourse, education, religion and other social institutions and cultural dynamics interact to construct a social system”*. The description captures well issues that are of interest to researcher when applying the theory. Consequently, CST supports understanding and explanation of social conditions that limit humans to flourish and support new ways of thinking and how things can be improved (Cecez-Kecmanovic, 2011; Mitev, 2006).

CST draws its traditions from a number of methods and approaches that are aimed at raising concerns of inequality and injustice in social structures of society. The critical traditions include Marxism, feminism, ethnography, hermeneutics and postmodernism (McGrath, 2003). CST has many variations due to the diverse sources of theoretical grounding from which it draws; the theory evolves continuously and involves ongoing development through critique (Kinchloe & McLaren, 2005; Myers & Klein, 2011). Arguing for this position, it is highlighted that: (i) *“there are many critical theories, not just one”* (ii) *“the critical tradition is always changing and evolving”* (iii) *“critical theory attempts*

to avoid too much specificity as there is room for disagreements among critical theorists” (Kincheloe & McLaren, 2005:287).

Using CST, researchers can produce knowledge for revealing and explaining deep-rooted and structural contradictions of a social system (Cecez-Kecmanovic, 2005). Based on the premise that social and human conditions must be improved, key themes of the studies in this perspective are enlightenment, emancipation, power as ideology, discursive power/linguistics, impact of desire and economic-determinism (Kincheloe & McLaren, 2005; Myers & Klein, 2011; Orlikowski & Baroudi, 1991). Enlightenment aims at revealing competing power on who gains or loses in a particular situation in a social system. Emancipation is exposing the use of power in preventing social actors from shaping decisions that affect their lives in a social system. Power as ideology aims at highlighting issues of domination perpetuated through cultural forms, meaning and rituals that produce consent of the status quo in a social system, e.g., where social actors are passive and manipulated as victims. Power as linguistic or discursive is the process of exposing language as a form of regulation and domination through discursive practices in a social system. CST can be used to explain behaviour of people related to impact of desire (Kincheloe & McLaren, 2005). A person’s behaviour is analysed in relation to issues of power, identity and emotions that give rise to domination and shaping of consciousness. For example, exposing destructive and oppressive forces through cultural institutions. Economic-determinism relates to highlighting economic factors that affect and shape everyday life experiences of actors in a social system. Instrumental or technical rationality is aimed at exposing situations that are taken for granted for human factors, rather than focusing on technology, procedures and methods to understand the value of choice in social systems (Kincheloe & McLaren, 2005). Similarly, Alvesson and Willmott (1992) extend the dimensions of critical intentions to include resisting technological centred and objective views, counteracting discursive closures and revealing partiality of shared interests in organisations or communities. As a result of the different views of the intentions of CST, there are different focuses in the works of the critical theorists including Jürgen Habermas, Michel Foucault, Pierre Bourdieu (Myers & Klein, 2011). The work of the theorists has been widely applied in information systems and visible in information systems-centric journals (see Falconer, 2008; Richardson & Robinson, 2007). Each author focuses on a different aspect of the critical perspective.

Table 3.4 summarises categories of critical research, Habermas concentrates on Communicative Action, Foucault focuses on power relations and micro-practices; and Bourdieu concentrates on practices and culture. However, Bednar and Welch (2008) extend the categories of CST in information systems to include the work of Claudio Ciborra and Bateson as a fourth perspective which focuses on critical systems thinking. In summary, critical systems thinking approach consider the critical hermeneutics and

understanding of context. Systems comprised collective entities are explored where individuals are regarded as unique within social relations. The individuals make sense of their processes and actions; and reflects on their experiences and practices. One of the aims of studies using this perspective is to expose privileged view that ignore alternatives and stimulating reflection (Bednar & Welch, 2008b; Bednar & Welch, 2012).

Table 3.4: Categories of critical research (Bednar & Welch, 2012)

Category of critical research	Focus on emancipation of others	Focus on self-emancipation by free the mind from internal power influence	Focus on foundations of discriminatory stratification	Focus on self-reflection from unique individual perspectives	Focus on expression of systematic improvisation and bricolage by unique individuals
Reference work	Habermas	Foucault	Bourdieu	Bateson	Ciborra
Focus of theoretical attention	Communicative action	Recognition of power	Power structure	Autonomous and self-reflection systems	Exploratory and creative emotional systems
Perspective	Shared understanding	Inter-impact of the individual	Social-political impact	Self-awareness and understanding	Emergent expression

Without being exhaustive of all the theorists, the discussion in the study concentrates on Bourdieu, Habermas and Foucault as these have addressed the concept of power and are the most visible in IS literature (Myers & Klein, 2011; Richardson & Robinson, 2007). The aim is to demonstrate and appreciate the way the theorists have conceptualised power, highlight their limitations and show the appropriateness of the chosen approach to study power. The following subsections present a summary of concepts of power from the views of Bourdieu (1994), Habermas (1984) and Foucault (1980).

3.3.1. Bourdieu's symbolic power

Bourdieu's theory of practice suggests concepts that can be used to explain domination, control and power in society. These include habitus, field and symbolic capital, symbolic power and symbolic violence (Bourdieu, 2013). In summary, habitus refers to mental structures that are internalised in people and structure their perceptions, values, attitudes and actions. In other words, habitus influences the ways of thinking and

acting and becomes taken for granted. These are acquired through inculturation and acculturation to a particular social group over time. Fields are associated social and political spaces or settings where actors engage, negotiate and compete for resources. People draw on symbolic capital (cultural resources that people use to generate social privilege or advantage over others) to exercise power. Access to resources causes or maintains how society is organised. Symbolic power is *“the constructing of social reality which is invisible power exercised only with complicity of those who do not know that they are subject to it even that themselves exercise it”* (Bourdieu, 1994:163).

A number of studies have employed concepts from theory of practice as theoretical lenses to interrogate issues on ICT and development and information systems development (for example, Krauss, 2013b; Kvasny & Keil, 2006; Levina & Arriaga, 2014). Krauss (2013b) articulates power dynamics in the world-views of stakeholders on an ICT4D initiative. The study focused on understanding the values of a South African community and Western development world-views of a practitioner. The study showed that Western world-views exerted symbolic power on the need of a South African local community to develop (improve position, capital and interests). However, there were collisions of world-views because the local community had its own principles, values and controls that were associated with the initiative. Most important was to support the social capital of those in power at the community level. Hence, there was resistance to the Western world-views (Krauss, 2013b). This example shows the limited perspective on the activities of the ICT initiative in a wider context. The study does not address broader policy issues on the effects of symbolic power in the initiative such as institutional setting and decision-making at provincial and national level and at international level since it was a donor-funded initiative. Others have argued for a broad perspective of studies on ICT initiatives and have called for studies that consider policy issues (Ordonez, 2015; Thompson & Walsham, 2010).

3.3.2. Habermas Theory of communicative action

Theory of communicative action (TCA) aims at understanding of language as a fundamental component of society and focuses on structures of discourses (Habermas, 1984). TCA supports analysing structures for discourses and how discourses are produced and reproduced in a social system (Ngwenyama & Lee, 1997). TCA proposes communication in concepts for social action, interests, life world, social systems and regulation (Chang & Jacobson, 2010). Thus, TCA concentrates on communication and highlights principles of which discourses should be oriented to achieve a common understanding between the speaker and the listener (ideal speech situation) (Stahl, 2004; Wall, Stahl & Salam, 2015).

There are different purposes for speech which lead to social action. The types are instrumental, communicative, discursive and strategic actions (Habermas, 1984).

Instrumental action aims at reaching rational objectives where communication may be oriented towards manipulation of others. Communicative action aims at achieving mutual understanding among actors. Discursive action aims at achieving joint action among actors. Strategic action aims at influencing other actors to achieve the goals or desires of one actor (Hansen, Berente & Lyytinen, 2009; Ngwenyama & Lee, 1997). In communicative action, the process of enacting meaning can be examined using four validity claims: legitimacy, sincerity, truthfulness and comprehensibility. Legitimacy is when communication or claims conform to the social norms and cultural values. Sincerity presumes that content of utterances reflects the genuine intentions of the speaker. Truthfulness is when communicative utterances are justifiable to the listener and the truth claims can be justified by facts; and comprehensibility ensures that communication is intelligible to the listener and free of jargon (Habermas, 1984; Wall, Stahl & Daynes, 2014).

TCA has been applied in IS research related to policies to understand issues of domination and assumptions in policy declarations (for example studies by Hassan, 2016; Metfula, 2013; Nyemba & Chigona, 2012). Metfula (2013) analysed the effect of the ICT policy network on the policy process of Swaziland. The study drew concepts from TCA to interrogate policy documents and interviews from 16 policy actors from government, the private sector and international development agencies. The study showed that the policy process was dominated by a political agenda and that conformists were recruited to speed up the policy process. However, the study did not consider the implementation of the policy and the stakeholders outside the policy network. Hassan (2016) analysed the ICT policy of Bangladesh using TCA. The study showed that the ICT policy did not consider the wider context of development presented in other policies. There was inadequate articulation of costs and benefits outlines in the policy. In addition, some of the policy statements were ambiguous, missing practical and technical evidence to justify the implementation of the policy. Further, not all stakeholders listed in the document were included in the policy implementation initiatives. The study recommended similar studies to be conducted in other countries because the results could not be generalised (Hassan, 2016).

There are criticisms about the TCA. Mitrovic (1999) argues that the theory reduces the complexity and constraints of the nature of society. It is suggested society is more complex and cannot be understood by language alone: *“Habermas has simplified too much the social life of modern society by reducing it to pure laboratory conditions thus depriving it of real and contradictory dialects of special and general interests, most of all, of class contradictions”* (Mitrovic, 1999:222). From this statement, it appears that TCA may not highlight other contextual issues that may be inherent in a social system beyond language. Others have noted the limitations of the concept of inclusion and truths and the public sphere in contemporary communication systems (Dahlberg, 2013; Dunne,

2009). Understanding of social and historical context in which discourses and discursive practices emerge may aid in revealing the hidden assumptions and beliefs that have been widely acceptable and limiting alternatives views in a social system (Ngwenyama & Lee, 1997). Thus, TCA may not adequately address issues related to historical context and social practices which form part of policy implementation. It is necessary to analyse policy activities beyond language (Wall, Stahl & Salam, 2015).

3.3.3. Foucault's power/knowledge

Against the dominant view of power (juridical-discursive model), *"where one speaks of power, people immediately think of a political structure, a government, a dominant social class, the master and the slave"* (Foucault, 1982:291), Foucault considers power as a relational force moving in multiple directions which are unpredictable (Foucault, 1980). He extends understanding of power as a relation between actors and that power is exercised in the relations and not being held by a single actor. In Foucault's view: *"Power is employed and exercised through a net-like organisation. And not only do individuals circulate between its threads; they are always in the position of simultaneously undergoing and exercising this power"* (Foucault, 1980:98). Power takes different forms that are exercised rather than being held, possessed, exchanged and given (Hook, 2007). Power exists in practices, techniques and procedures for actions which are enacted between actors (the how of power rather than the what, where and whose of power) (Foucault, 1980).

The exercise of power in organised actions is effective through knowledge that is legitimate in a social system (Avgerou & McGrath, 2007). The knowledge structures how social reality is perceived and inform discourses. For instance, actors must have knowledge in order to participate or influence a discourse in a social system. Hence, knowledge can be enabling or limiting to exercise of power and participation in social life (Jager & Maier, 2016). Foucault considers that *"The exercise of power creates and causes to emerge new objects and accumulates new bodies of information (. . .) the exercise of power perpetually creates knowledge and conversely, knowledge constantly induces effects of power"* (Foucault, 1980:51/52). Thus, power and knowledge are inseparable. In this view, knowledge may be traced in the genealogy of social and physical events, accidents and deliberate actions in a social system (Foucault, 1977). The knowledge is systematically produced and may support sustaining networks of meaning which regulate and control the conduct of actors in a social system. This knowledge is not functional or a scientific statement, but knowledge that is widely accepted in a social system. The practices as a result of knowledge may be perceived as normal in a social system (Kendall & Wickham, 2004).

Resistance also forms part of power. Foucault argues that: *"Where there is power, there is resistance, and yet, or rather consequently, this resistance is never in a position of externality in relation to power"* (Foucault, 1978:95). Three views on resistance are suggested where

resistance may be perceived: as a possibility, necessary and improbable; as spontaneous, savage, solitary, concerted, rampant and violent; as a compromise, interested and compromising. The relations of power as a network may also depend on resistance which may be in the form of an adversary, target and support as points in the power network. Resistance may spread over a period of time within individuals and organisations forming part of the power network. The spread of resistance may lead to new social practices in a social system (Foucault, 1978).

Foucault's views of power relations can be explained through concepts of discourse, problematisation, regimes of truth and technologies of the self (Foucault, 1980; Foucault, 1982). These concepts are closely related and have been evolving in the major works of the author. For example, Foucault uses the concept of discourse in analysing prison systems, education setting and government of population (Burrell, 1988; Garrity, 2010). The following subsections summarise these concepts.

(a) Discourse

The concept of discourse has been evolving in the work of Foucault and defined differently. Discourse is a set of statements that are created in a systematic way to create an account of social reality (Foucault, 2003). Further, discourse is related to practices that support creation of knowledge about a particular topic in a particular time (Foucault, 1980). Hajer (2005:300) suggests a more encompassing definition of discourse as *"an ensemble of ideas, concepts, and categories through which meaning is given to social and physical phenomena, and which is produced and reproduced through an identifiable set of practices."* From the description, discourse is perceived as a way of thinking, talking and acting on some aspects of social life in a social system through language and social practices. The concept of power is central to the understanding of discourse as an enabling and constraining force responsible for the way in which the social world can be talked about and for shaping actions of subjects (*inter alia* actors as individuals and collectively (Jager & Meir, 2016:112)) (Foucault, 1980).

Discourses are applicable in the context of public policy where there are social rules governing the way policy statements are determined, on a particular topic and at the time they are made in a given context (Chang & Jacobson, 2010; Hewitt, 2009). The discourses give meaning to social and physical events in the policy process, frame the way of thinking and legitimatise the actions of policy actors. Thus, a discourse may create power structures that are relevant for freedom and actions for policy actors when executing policy activities (Ingold, 2011; Winkel, 2012).

(b) Problematisation

Problematisation is the engagement of thought that is triggered by questioning the meaning, conditions and goals of a domain initiated when the domain of actions becomes uncertain or problematic (Foucault, 1982). Problematisation highlights

difficulties in human conditions and paradoxes, through questioning how discourses and practices become true or legitimate in a social system. Problematization may initiate critical reflection of the policy actors and form the basis of care of the self. Individuals may apply different techniques in critical reflection such as meditation, memorising of the past, examining conscience, and assessing representations in the mind (Bacchi, 2009; Foucault, 1984). Critical reflection may also consider relations of actors with others and interrogate hegemonic practices in a social system (Avgerou & McGrath, 2007; Motion & Leitch, 2007).

(c) Regimes of truth

With the view that knowledge and power are not separate, the regime of truth is conceptualised as knowledge or power that is legitimate and supports institutions in a social system (Foucault, 1980). Knowledge may emerge from members of the community which may limit or enable them to take actions, thereby exercising their power. The process may result in change which may transform power relations (Leclercq-Vandelannoitte, 2011). The actors who do not conform to dominant regimes of truth may be sanctioned or disciplined or marginalised. However, dominant regime of truth can be challenged when actors exercised power and new discourses may emerge in society. Knowledge is important, in this case, to foster such change in the dominant regimes of truth (Avgerou & McGrath, 2007).

There are strategies which influence the way regimes of truth are elected, organised and canonised. The strategies are (i) exclusion, (ii) internal, (iii) limiting access (Motion & Leitch, 2007). Exclusion strategies are interpretations of reality which can be aimed at banning or discrediting actors from a discourse. For instance, providing a distinction between truth and falsehood reflected as formal rules and respective interdictions. Internal strategies regulate the flow of interactions in a discourse through the recreation of myths or stories, taking a standpoint on a discourse and supporting rules and customs that support certain discourses in a social system. Limiting access to a discourse are obstacles that utterances have to overcome in the form of rituals, discursive clubs, and doctrines and societal adoptions. Rituals are practices and language which an actor should consider when participating in a discourse. Discursive clubs are private, associated with only certain actors that are allowed to participate in a discourse. Doctrines have elements that are used to include or exclude actors in participating in a discourse. Social adaptation is when actors learn about a discourse in order to participate in the discourse (Motion & Leitch, 2007; Winkel, 2012).

(d) Technologies of the self

Technologies concerned with how individuals in a social system develop knowledge about themselves (Foucault, 1982). The technologies are also referred to as "*a set of discourse practices*" (Motion & Leitch, 2007: 267). Individuals develop knowledge about

themselves and that knowledge is used to understand and transform their situation. There are four types of technologies: technologies of production, technologies of sign systems, technologies of power, and technologies of the self (Foucault, 1988). Technologies of production relate to the process for producing, transforming or manipulating things and formation of an identity. Technologies of sign systems are strategies and practices that support the use of signs, meaning symbols and signification. Technologies of power relate to power imposed on the individual that determines the conduct of the individual to submit to certain ends or domination. Technologies of the self is the process through which individuals effect their own means or others through operations on their own bodies, souls, thought and beings to transform themselves and attain happiness, wisdom, purity, perfection and immobility (Foucault, 1994). While the four types of technologies are closely related, the study will discuss technologies of the self to understand the role of individuals or with the support of others act when exercising power in the context of policy implementation.

The technologies of the self may be useful in understanding the moral codes of policy actors and stakeholders through their interactions and how they exercise power over others (Arribas-Ayllon & Walkerdine, 2008). The policy actors and stakeholders may strive to be ethical subjects through acting upon themselves, testing, monitoring and improving their conduct (Foucault, 1984).

3.3.4. Application of power/knowledge in information systems studies

A number of studies in information systems have used concepts from the work of Foucault to analyse ICT policies (Chini, 2009; Stahl, 2004), discourses on ICT and development (Hayes & Westrup, 2012; Pozzebon & Pinsonneault, 2012; Wilson, 2002), and implementation of information systems (Avgerou & McGrath, 2007; Doolin, 2004). Chini (2009) draws on the concepts of government and knowledge; regimes of truth and subjugated knowledge to understand the implementation of ICT programmes in Greece. Wilson (2002) employed the power/knowledge nexus to interrogate documents from international development organisations. The study demonstrated that ICT and development discourses focused on information poverty, legitimate information and knowledge, and a catch-up approach to development. Kenny (2014) analysed the role of power in an international Non-governmental Organisation (NGO) working on ICT for development in Kenya. The study drew concepts from Foucault's power/knowledge and critical development theory to understand the macro practices in an ICT4D initiative. In another study, Avgerou and McGrath (2007) provide a historical account of the implementation of and IS innovation in a public organisation in Greece. The study analysed power relation and politics in the implantation process using the concepts of power/knowledge (Foucault, 1980) such as regimes of truth, care of the self and aesthetic of existence. Despite a growing body of literature that demonstrates the

diversity in application of the concepts of Foucault's work within the IS discipline, Willcocks (2006:291) argued that *"Foucault's work still awaits the further application it deserves in the ICT studies, it is strange that this theorisation of knowledge, power and discourse have not been more productively ..."*. This implies that there is still need for Foucauldian-informed ICT studies to analyse power issues in development, application and regulation of information systems.

While there is growing application of Foucault's work on power, there are also critics of the author who argue that his approach to power fails to identify different forms of power that may operate at the micro and macro levels of society because power is not distributed equally on these levels (Stahl, 2004). Another limitation is the lack of clarification on the context in which power may be linked to social groups or institutions (Allen, 2000; Swingewood, 2000). Nonetheless, it is argued that the idea that power is not fixed but conceptualised as a relationship, a capability with individuals, groups and institutions, provides a good theoretical lens to understand the conduct of individuals and their engagements in social and institutional spheres (Avgerou & McGrath, 2007; Wall, Stahl & Salam, 2015). This approach may also be appropriate to gather in-depth understanding power relations in the implementation of policies.

3.4. Justification for selecting power/knowledge to analyse power relations

As demonstrated in Section 3.3.1, symbolic power is rooted in the resources perspective of power. In the context of policy implementation, this may mean the capacity of policy actors to influence policy activities. However, this perspective of power ignores the historical and social context of how power is used when policy stakeholders work together on a policy over a long period of time (Fischer, 2003; Olsson, 2009). Section 3.3.2 summarised TCA and highlighted its focus in language and power. Although this perspective is useful, Stahl (2004) argues that TCA is well suited for analysis of macro-level activities in a social context. The focus on power in terms of language and ignoring practices can be limiting in the understating of power relations among policy actors because of the influence of social structures and historical context (Howarth, 2010). Hence, there is a need to understand power as relational, where policy actors act as dispersal agencies through knowledge, discourse and self-reflexivity (Avgerou & McGrath, 2007; Caldwell, 2007).

Significantly, the ideas of Foucault's view on power as a theoretical lens may be ideal in understanding power relations in a policy implementation setting. Foucault covers the understanding of power from a more holistic view beyond the human agency, and he includes social structures (Hook, 2007). The view that power is not possessed but exercised in a relation is ideal to establish how policy actors exercise and are affected by power in the policy implementation setting. In addition, the exercise of power from both top-down and bottom-up opens up the analysis of power beyond a centralised

view in cases where there are oppression, violence and domination in policy implementation. Further, power is not viewed as only oppressive but productive. In this case, the exercise of power creates subject positions within discourses that govern and constitute the practices of policy actors to disrupt or challenge power relations. This process may result in ways of executing policy activities (Fischer, 2003; Foucault, 1980).

By drawing Foucault's concepts on power, context, social and political influences, institutional histories, and social practices may be examined to understand how power relations affect policy implementation (Hewitt, 2009; Sharp & Richardson, 2001). This may also address part of the domination of TCA (Habermas, 1984) in the IS discipline for which others have argued the need for diversity and "*to avoid becoming locked in Habermasian discourses*" (Brooke, 2002:52).

3.5. Appropriating power/knowledge in analysing power relations

Analysing power relations can be a complex task because in some cases the power relations are hidden or difficult to identify (Foucault, 1980; Dowding, 2012). It is necessary, therefore, to envisage how power relations can be analysed. However, Foucault does not provide a prescription on how power relations should be analysed, like many critical theorists. The author argues that theoretical prescriptions limit analytical value of his work (Foucault, 1980; Foucault, 1994). Instead, Foucault suggests that his work should be used like a toolbox where different concepts can be used, suited for the issues being addressed in a study (Motion, 2007). In this vein, the study appropriated the concepts from power/knowledge (Foucault, 1980) concentrating on discourse, problematisation, regimes of truth, and technologies of the self. The concepts were selected as analytical tools that can support understanding and explain complex historical and social processes of power relations in the context of national ICT policy implementation. The concepts were appropriate to understand how power relations influenced the recruitment of stakeholders, the practices, techniques and procedures that stakeholders used to transform themselves and influence others in the policy implementation activities (Heikkinen, Silvonen & Simola, 1999; Wodak & Meyer, 2016). The analytical concepts are summarised in subsequent subsections.

3.5.1 Discourses in policy implementation

As summarised in Section 3.3.3 (a), discourses in the context of policy implementation can delineate part of knowledge that affects the possibilities of policy stakeholders on what to think, say and act. Discourses contain contradictions and tensions which can challenge prevailing social conditions and support new ways of thinking and acting (Bacchi, 2009; Powers, 2009). Discourses can be analysed in various ways, including scrutinising text (policy documents and legislative documents), verbal communication (press statements, reports and interviews) and observing cultures, norms or practices. The multi-dimension view of discourses supports the means of comparing data to avoid

biases when establishing which discourses are privileged or marginalised (Powers, 2007; Wodak & Meyer, 2016).

The discourses will be analysed focusing on how certain concepts emerge and become part of the policy implementation process, the assumptions or presumptions of the concepts, what is missing or hidden in the use of the concepts and the practices that emerge in the policy implementation as a result of the discourses (Bacchi & Bonham, 2014; Verdegem & Fuchs, 2013).

3.5.2. Problematisation in policy implementation

While the concept of problematisation has been widely used among social theorists such as Michel Callon for Actor Network Theory (Callon, 2009) and Mats Alvesson for problematisation methodology (Alvesson & Sandberg, 2011), this study concentrates on the work that is premised on critical social theory and in the work of Foucault (Foucault, 1980; Foucault, 1984). This is important to maintain consistency with the other concepts selected from the same author as theoretical underpinnings for the study.

Problematisation can be applied to understand how problems related to policy implementation are addressed at the individual level and how they influence the exercise of power through discourses (Foucault, 1982). Deacon (2000) argues that when individuals are engaged in thought about a problem, thought extends from mental, cognitive and linguistic phenomena to include social practices. Hence problematisation is rooted in social practices (Deacon, 2000; Foucault, 1982). Bacchi (2009) extends the concept of problematisation to focus on policies at the institutional level. She argues that policies represent consensus of policy stakeholders after contestation of ideas in responding to policy problems. However, the policy declarations represent the subconscious about the social problem they intend to address (Bacchi, 2009; Bacchi, 2015).

Problematisation also leads researchers to interrogate the premise and assumptions about problems that are constituted in a discourse (Bacchi, 2009; Foucault, 1977). Knowledge forms part of discourses and in turn, discourses can limit what policy-makers can think, say and act when formulating and executing policies to address social problems. The representation of problems in policies can affect what is executed; it is important to understand the discourses and knowledge and how the problems are framed in the policy. This can be achieved through a set of questions which Bacchi (2012:21) calls "What's the problem presented to be?". Some of the questions are: What is the problem presented in the policy? What are the presuppositions or suppositions underlying the problem? What is left unproblematic or silent or thought differently? What are the effects on the representation of the problem? (Bacchi, 2009; Bacchi, 2012).

3.5.3. Regimes of truth in policy implementation

On the premise that power and knowledge are closely related, as summarised in section 3.3.3, knowledge is used in social practices which institutions try to maintain. The dominant knowledge becomes the regime of truth (Avgerou & McGrath, 2007; Foucault, 1980). The regime of truth can be analysed in how institutional settings and dominant discourses enable or limit the roles of policy stakeholders in policy implementation. Further, new discourses around policy programmes and processes can be identified and elucidate how they are undermined and subjugated. In other words, the strategies that policy stakeholders use to influence, question and resist policy decisions and actions that are in line or in contrast with their interests and roles can be analysed (Introna, 2003; Leclercq-Vandelannoitte, 2011).

3.5.4. Technologies of the self in policy implementation

What individuals do to make their life meaningful, coherent with widely acceptable norms and practices in policy implementation is significant (Foucault, 1980). The policy actor's 'way of being' through certain practices where individuals work on their needs and wishes has implications on the way they exercise power with others and institutions. When policy stakeholders accept or resist certain discourses, it may mean that they support or undermine certain regimes of truth that can influence their ways of thinking and act towards themselves and others (Heikkinen, Silvonen & Simola, 1999; Willcocks, 2006).

Care of the self can be analysed looking at the tensions between the values of policy actors and the demands or expectations in the policy processes and programmes; and how individuals maintain their self-worth in their various roles within policy implementation activities. Further, how individuals contribute to their constitution of their identity and the various subject positions they occupy when conducting policy implementation activities (Avgerou & McGrath, 2007; Motion & Leitch, 2007).

3.5.5. Resistance in policy implementation

Foucault does not provide a specific operationalisation of resistance in examining resistance in the exercise of power (Hook, 2007). It is important to understand resistance as part of power relations in the context of the policy process. From sociology and organisation studies, there is considerable literature that has attempted to conceptualise means for assessing resistance in an organisation setting. For example, based on circuits of power, means for resistance include noncompliance, non-acknowledgement, escape, voice, replacement and productive resistance (Modol, Rezazade & Sese, 2012).

The study considered means of resistance (Coetsee, 1999; Meissonier & Houze, 2010) which conceptualise four types of resistance at the individual level. Apathy resistance is the behaviour of subjects in terms of disinterest and inaction towards a situation.

Passive resistance holds that actors delay in taking actions voluntarily. Active resistance is when subjects engage in the expression of opinion and negotiations to improve situations. Aggressive resistance relates to actors taking actions as boycotts and inactions in normal routines as a means for demanding change. The types of resistance are considered in relation to power where individuals are engaged in power relations when exercising power: *“Resistance to power does not have to come from elsewhere to be real, nor is it inexorably frustrated through being the compatriot of power. It exists all the more by being in the same place as power; hence, like power, resistance is multiple and can be integrated into global strategies”* (Foucault, 1980:142). The different types of resistance support the analysing power in relation to regimes of truth and technologies of the self in policy implementation activities.

3.5.6. Summing up analytical concepts for power/knowledge

In summary, power/knowledge will be employed to analyse relations of power using the concepts of discourse (statements, text, images and ideas that shape the way of thinking and acting about policy), problematisation (the premise and assumptions that are rendered problematic which policy attempt to address), regimes of truth (knowledge and practices that are widely acceptable in a social setting that influence the exercise of power) and technologies of the self (individuals self-realisation and motivation that shapes their way of being and exercise of power towards themselves and others) that are closely related. It was important to relate the analytical concepts to the research questions (outlined in section 1.3) because the scope of the study was framed around the key question and sub-questions.

Analytical concepts can support researchers in identifying what is important when observing empirical phenomena (Avgerou, 2005). In this view, the focus of empirical observation was noted to ensure that the phenomena of policy implementation could be identified and analysed. Therefore, policy processes (day to administrative activities that are carried out in implementation agencies to address policy activities), programmes (specific policy activities are executed in the implementation agencies with specific policy objectives and outcomes in a specific time frame) and politics (exercise of power for those in authority to obtain support in achieving policy objectives) were considered in this study because the form key categories of policy implementation activities (Howlett, McConnell & Perl, 2015; Jann & Wegrich, 2007; Marsh & McConnell, 2010). The policy process, programmes and politics (as areas of empirical observations) should be applied with caution to avoid limiting the insights that could emerge from the empirical phenomena. Outcomes are the results can emerged when the policy stakeholder’s exercise of power in the policy programs, processes and politics (Marsh & McConnell, 2010). Table 3.5 summarises the concepts used in analysing power relations in the context of policy implementation.

Table 3.5: Summary of analytical concepts for power/knowledge used in the study

Research questions	Concepts	Focus for empirical observation	Critical stance
SQ1		Stakeholders recruitments	
	Discourses Problematization	▪ Stakeholders identification	Inclusion or exclusion
		▪ Selection of stakeholders	Privileging or marginalising
		▪ Interests and roles of stakeholders	Enabling or constraining
SQ2		Programmes, processes & politics	
	Regimes of truth	▪ Institutional settings	Enabling or limiting
		▪ Collaborations and interactions	Privileging or marginalising
		▪ Communication	Dominating or silenced
		▪ Decision-making	Manipulation or constructive support
	Technologies of the self	▪ Conduct of policy actors	Accepting or resisting
		▪ Practices of policy actors	Allowed or sanctioned
		▪ Norms and values	Acceptable or deviance
SQ3		Outcomes	
		▪ Outcomes of power relations	What has changed and why? Who are affected and why?

A critical stance can be taken as the basis that can make a researcher pay attention to particular issues around a concept. The insights emerging from the description and explanations for the analytical concepts (for instance responses to questions around the concepts or secondary data categorised under the concepts) can be scrutinised to highlight power relations (Alvesson & Deetz, 2000; Arribas-Ayllon & Walkerdine, 2008). Others have suggested a set of questions that researchers can use to take a critical stance when analysing policies (see Bacchi, 2009; Bacchi, 2012; Verdegem & Fuchs, 2013). As outlined in Table 3.5 (column 4), the study considered critical stance and the conditions of possibilities for power relations in the context of policy implementation. The common questions used in similar policy studies were appropriated around the suggested critical stance such as Who is included or excluded? What is enabling or limiting? Who is privileging or marginalising? What is acceptable or deviance? Who is complying or resisting? (Verdegem & Fuchs, 2013).

3.5.7. Key assumptions for the analytical concepts of power relations

It was necessary to outline the key assumptions on how the selected analytical concepts could be applied when analysing power relations in the context of national ICT policy implementation. First, national ICT policy implementation attracts different stakeholders, as outlined in Section 2.5. The stakeholders communicate, interact, make decisions and assign meaning to policy objectives as part of participation in policy implementation (Hewitt, 2009; Ingold, 2011). In addition, the stakeholders engage in bargaining and negotiations over policy decisions drawing on different resources which enable or constrain the way they exercise power (Howlett 2007; Matland, 1995). In this view, understanding the discourses, problematisation and regimes of truth on the translation of policy goals into actions can support articulation of power relations. For example, in identifying dominant or marginalised discourses informing articulation of challenges the policy aims to address and regimes of truth that are privileging or excluding policy stakeholders.

Second, observations of power relations among stakeholders in interactions, communications and decision require the understanding of context and historical perspective (Resigil & Wodak, 2016; Silva, 2007). Hence, it was necessary to consider stakeholders having worked together over a period of time and the presence of their relations being recognised. Third, while it is suggested that power is not a resource that people possess (Foucault, 1980), there was cautions in the conceptualisation of discourse that it may be related to materials (Hardy & Thomas, 2014; Hook, 2007; Jager & Maier, 2016) which actors draw from to exercise power. The materials become resources when meaning is assigned to them and form part of social reality. The resources in themselves are not power but, when used in exercising of power, become power-laden (Avelino, 2011; Avelino & Rotmans, 2011). Power relations should be analysed beyond access to resources (Foucault, 1980). Fourth, technologies of self related to being where policy actors may aspire for certain values or needs when engaged in policy implementation activities. This process can be done consciously and unconsciously where policy actors reflect on themselves, their motives and aspirations to determine their being and relations to others (Smith, 2015).

3.6. Summary of the chapter

This chapter has discussed Critical social theory (CST) and how it can be applied in the analysis of power relations in a context of policy implementation. The power/knowledge (Foucault, 1980) was identified as an appropriate approach of CST that may provide a more holistic view of power relations among actors. Although the Foucauldian perspective provides mechanisms for understanding power relations in a social system, the author does not provide prescription on how to apply the concepts. This chapter appropriated the concepts of discourse, problematisation, regimes of truth

and technologies of the self for analysing power relations in the context of ICT policy implementation. The key assumptions in the application of the analytical concepts are summarised.

Chapter 4

Research methodology

4. Introduction

This chapter outlines the research methodology of the study. Section 4.1 presents a summary of characteristics of qualitative research. Section 4.2 outlines the philosophical assumptions which informed the design of the study. The discussion concentrates on ontological and epistemological stances of the researcher. Section 4.3 discusses critical research in information systems. Section 4.4 presents the research strategy for the study and justification why a single case was appropriate for the study. Section 4.5 highlights the data collection techniques used in the study. Section 4.6 summarises data analysis procedure employed in the study. Critical discourse analysis (CDA) approaches were discussed and the reasons why the Foucauldian approach was chosen for analysing data of the study. Section 4.7 discusses the validity and reliability in qualitative research and how they were addressed in the study. Section 4.8 summarises how the researcher addressed ethical issues in the study. In Section 4.9 consideration of generalisations of the findings were addressed in the study. Section 4.10 presents the summary of the chapter.

4.1. Qualitative research

The study adopted qualitative research to gather in-depth understanding and explanation of power relations among stakeholders in national ICT policy implementation (Myers, 2013; Yin, 2011). Unlike quantitative research, which concentrates on the systematic measuring or observing of a phenomenon using hypothesis and numerical methods, qualitative research uses qualitative data obtained through interviews, documents and observations to explain and understand peoples' motivations and actions in a social phenomenon (Myers, 2013). Mixed methods which combine qualitative and quantitative methods are proposed as a third category in response to the call for methodical pluralism in information systems discipline (Venkatesh, Brown & Bala, 2013). Quantitative research was dominant in the information systems discipline in the 1980s and 1990s. However, qualitative research is now gathering wide acceptance in top IS-centric journals (Sarker, Xiao & Beaulieu, 2013).

The qualitative research fitted well with the aims of the study in analysing qualitative data in the policy documents and narratives from the policy stakeholders. The data presented in policy documents as text and discourses (Bacchi, 2009; Fairclough, 1995) that informed the motivations and actions of policy stakeholders in the execution of policy activities was analysed (Jann & Wegrich, 2007; Weible & Sabatier, 2007). In

addition, qualitative data presented the historical account of the context for national ICT policy, the record of policy stakeholders' experiences, perceptions, social relations and their description of events was analysed (Myers, 2013; Patton, 2002). Understanding of the context was necessary before the researcher took a critical stand to highlight power relations and question common ideas and assumptions in policy implementation (Bednar & Welch, 2012).

4.2. Philosophical assumptions for the study

A researcher plays an important role in a study and personal beliefs, assumptions, experiences and worldviews influence the way the study is designed and conducted (Creswell, 2013). The philosophical stance of the researcher supports situating the inquiry in a more coherent and systematic manner. This debate in literature focuses on three concepts: (a) Ontology as beliefs of nature of reality and humanity (b) Epistemology relating to how knowledge is acquired (c) Methods regarding the way of conducting a valid scientific inquiry (Cecez-Kecmanovic, 2005; Tuli, 2011). It is important to clarify these concepts in the context of this study and these are summarised in subsequent subsections.

4.2.1. Ontological assumptions

Ontology forms the basis the way the researcher makes claims and assumptions about social reality e.g. its existence, characteristics and interactions (Myers, 2013). Ontology determines the way the empirical and the real world are researched. Lee (2004:6) posits that: *"One's belief about what comprises the real world has an effect on what one seeks to observe, what one subsequently observes, how one explains what one observes, and the reasoning process by which one performs each of these"*. Thus, ontology attempts to answer the questions relating to the characteristics of things perceived to exist or the nature of reality (Guba & Lincoln, 1994). There are two broad positions on perceptions of nature of reality: objectivism (an independent reality from the researcher) and social constructionism (reality as a result of social processes and the meaning that people assign to it) (Tuli, 2011).

In this study, the perceptions of reality were premised on social constructionism where reality was perceived to be subjective. The assumptions led to articulate the historical and contextual issues for the national ICT policy implementation process. The process relates to the interpretation of policy declarations or text which informs actions that shape the social relations and behaviour of the stakeholders (Bacchi, 2000; Myers, 2013).

4.2.2. Epistemological assumptions

Epistemological assumptions attempt to address the issues related to the nature of knowledge and how it can be obtained and can be summed up in the questions *"what is the nature and relation between the knower or would-be knower and what can be known?"*

(Guba & Lincoln, 1994:98). Answering these questions requires the researcher to take an ontological stance. For example, the assumptions about objective reality correspond to knowledge being independent of the knower and can be obtained through instruments that represent measures. The assumptions about subjective reality relate to the knower who engages with those who have the knowledge. The process leads the researcher to sense-making and interactions with participants who are asked to describe the meanings that they assign to social practices or artifacts in a given context (Howcroft & Trauth, 2004). As outlined in the previous section, this study was positioned within the subjective ontology and for epistemology, the researcher interacted with policy stakeholders to obtain subjective meaning that they assigned and enacted in the policy implementation process (McGrath, 2005; Orlikowski & Baroudi, 1991; Silva, 2007).

4.2.3. Methodology and methods

The preference of the researcher on ontology and epistemology on a study informs the methodology and methods. It is important to clarify these terms as they are often used interchangeably in literature. Methodology in this context is *“the overall strategy of conceptualising and conducting an inquiry and constructing scientific knowledge”* (Cecez-Kecmanovic, 2005:37) while methods are specific techniques for collecting and analysing data. Further, ontology and epistemology assumptions employed in empirical studies and practice in discipline over time become a research paradigm or a worldview. There are many ways of categorising research paradigms across disciplines (Burrell & Morgan, 1979; Guba & Lincoln, 1994).

In information systems discipline the Orlikowski and Baroudi’s (1991) typology of research paradigms is widely used and categorise research paradigms into positivistic, interpretive and critical. A positivist research paradigm is premised in objective reality and an inquiry using this paradigm aims to examine formal propositions in quantifiable measures. Inferences are drawn from a representative sample of the population. An interpretive research paradigm focuses on subjective meaning that people assign to their situations to understand processes and contexts (Walsham; 1995; Walsham, 2006). The critical research paradigm assumes that reality is socially constructed and the aim is to highlight issues of alienation, domination and to improve human conditions (Myers & Klein, 2011; Myers, 2013).

Given that the research problem was centred on power relations, critical research paradigm was considered appropriate for analysing issues of domination and exclusion among the policy stakeholders in the implementation of national ICT policy (Cecez-Kecmanovic, 2011; Mansell, 2010; Myers & Klein, 2011). The critical research paradigm can support articulating deep-rooted social practices inherent in the policy implementation and highlighting taken-for-granted issues and hidden assumptions for possibilities of stakeholders to take corrective actions (Myers, 2013; Stahl, 2008). The

positivistic research paradigm could not sufficiently explain the subjective meaning of policy declarations, processes, institutions and practices that influence policy implementation because it concentrates on analysing objective and value-free facts, testing theories or hypotheses which can lead to universal laws that are generalised across time and space. While interpretive research paradigm can support analysis of in-depth subjective views, experiences, meaning in the daily lives of actors in a particular setting, it is argued that the research paradigm does not highlight hidden and taken-for-granted assumptions about power and may maintain the status quo (Cecez-Kecmanovic, 2005; Silva, 2007).

4.3. Critical research in information systems

Critical research in information systems is comprised critical methodologies, critical intentions and use from critical theories to explain and support the change of oppressing human conditions in use of ICTs in organisations and society (Myers & Klein, 2011; Stahl, 2008). While there is diversity in critical theories and critical intentions (summarised in section 3.3), consideration of theory and methodologies raises the challenges for researchers when conducting critical research in information system. There are two standpoints on the topic.

In summary, on one hand, others support that critical research methodology for information systems is necessary to better justify the methods (techniques of data collection and analysis) that can support the construction of relevant knowledge claims about a phenomenon (Cecez-Kecmanovic, 2001; Cecez-Kecmanovic, 2005; Cecez-Kecmanovic, 2011; McGrath, 2005). This view leads to studies that are explicit in terms of theory and methods. On the other hand, others argue that suggesting critical research methodology in information systems can be limiting as the traditions of critical research avoid prescriptions to open up debate that can support further research (Marrow & Brown, 1994; Stahl, 2004). Instead, the focus should be on theory that can support what to pay attention to when observing a phenomenon as Avgerou highlight the link between theory and evidence: "*The critical research process is an interplay between theories and empirical evidence*" (Avgerou, 2005: 107). Studies conducted under this view sometimes do not provide specific details on methodology but outlines more details on critical theory (Kvansy & Robinson, 2006; Richardson & Robinson, 2007).

There is diversity of critical research studies in information systems despite the differences in choices of theory and methodologies (Grix, 2004; Sarker, Xiao & Beaulieu, 2013). For example, critical research on national ICT policies have applied a broad range of critical theories such as Theory of Communicative Action (for example, Hassan, 2016; Metfula, 2013; Nyemba & Chigona, 2012) and Power/knowledge (for example, Stahl, 2004; Wilson, 2002), governmentality (for example, Chini, 2009) and neo-Gramsci theory (see Chiumbu, 2009). Further, different methods such as interviews (for example,

McBride, Stahl & Elbeltagi, 2010; Metfula, 2013) and document analysis (for example, Hassan, 2016; Nyemba & Chigona, 2012) have been applied. From these few examples, it is noted that the choice of theory and methodology may be different, depending on the critical stance taken in the study and that studies related to national ICT policy have been explicit in their methodologies.

The current study considered a theory that could explain power relations and methodology that could support interaction with participants to obtain first-hand information on national ICT policy and using secondary data to understand the historical background of phenomenon. This approach to methodology was consistent with related studies on national ICT policy to extend knowledge on this topic. Further, the methodology fitted well with the aims of highlighting common sense knowledge, assumptions and limiting issues on participation of stakeholders in national ICT policy implementation (Cecez-Kecmanovic, 2011).

4.3.1. Principles for conducting critical research in information systems

The study adopted a set of principles for conducting critical research in information systems (Myers & Klein, 2011). This was necessary to capture common tenets that form critical research in information systems in the study to maintain consistency. However, the researcher was cautious about taking the principles as canons but allowed flexibility and reflection in the research process. The summary and application of the principles for conducting critical research in information systems (Myers & Klein, 2011) are summarised as follows.

(a) Using core concepts of critical social theories

This principle relates to use of concepts and ideas from Critical Social Theory (CST) to inform data collection and data analysis. The study used core concepts from CST on power/knowledge (Foucault, 1980) including discourse, problematisation, regimes of truth and technologies of the self. The concepts informed the design of interview guide for data collection and data analysis.

(b) Taking value position

Value position relates to issue that the study aims to address or improve and may include supporting open democracy, equal opportunity and discursive ethics. The study took a value position on power relations to expose the issues of exclusion and domination of stakeholders when participating in policy implementation activities.

(c) Revealing and challenging prevailing beliefs and social practices

It was important to identify important beliefs and social practices and challenge them with arguments and evidence. As outlined in Section 2.5, there are simplistic notions that participation of stakeholders could mitigate some of the problems of policy implementation without consideration of power relations. The study was aimed at

understanding power relations among stakeholders and used concepts from power/knowledge (Foucault, 1980) to highlight assumptions that are limiting policy implementation outcomes.

(d) Supporting emancipation

Emancipation relates to the orientation of the study towards facilitation of realisation of human needs and potential, self-reflection and self-transformation (Myers & Klein, 2011). The study involved policymakers as part of participants in semi-structured interviews so that challenges influencing power relations in policies are brought to light and initiated debate for improvements. However, the researcher was cautious of the existing social norms in the policy implementation agencies which if challenged could also lead to unintended consequences.

(e) Improvement in society

Improvements to society can relate to individuals, organisation and society in general. Interaction with participants during the interviews partly raised awareness on some of the challenges that were inhibiting successful policy implementation outcomes and ideas how things could be done differently in the policy implementation agencies. The study proposed recommendations for policymakers on improving the national ICT policy implementation process.

(f) Improvement in social theory

Theories are fallible and improvements in social theories are possible. The study employed CST (Foucault, 1980), it is hoped that the theoretical propositions that emerged from the study can be used in another context to address new theoretical reasoning and initiate debate on analysing power relations in national ICT policies.

In summary, the study adopted core concepts from CST, drawing from the work of Foucault (1980) on power/knowledge, discussed in Chapter 3. The concepts informed the conceptualisation on power relations and were used in the development of research questions, an interview guide and a framework for data analysis. The value position for the study was based on the notion that participation of stakeholders in the policy implementation was not value free (Fischer, 2003). There were taken-for-granted assumptions which required to be revealed as they affected the policy implementation process. Caution was taken on the contradictions that were inherent in the national ICT policy implementation, as in any social process, and the potential for distortions and conflicts which could have led to new social forms (Myers & Klein, 2011; Ngwenyama & Lee, 1997).

4.3.2. Approach to theory in the study

The use of theory can guide how a phenomenon can be observed in a study. Theories can be used as a lens for observing, interpreting and analysing data, as noted in the

following statement: *“Theories give researchers different ‘lenses’ through which to look at complicated problems and social issues, focusing their attention on different aspects of the data and providing a framework within which to conduct their analysis”* (Reeves, Albert, Kuper & Hodges, 2008:337). This statement captures the different roles of theory and the study considered the roles of the selected theory in line with research questions (Yin, 2009).

While there are different roles of theory, Gregor (2006) suggest five types of theories in information systems: theories for analysing (describing what), explaining (describing how and why), predicting (what will be), explaining and predicting (what is, how, when and what will be) and design and action (how to do something). Another competing classification of theories categories theories into descriptive, explanatory and predictive (Blaikie, 2007). Gregor (2006) seems to capture the three categories of the theories. However, Blaikie (2007) argues that the difference between descriptive and explanatory theories is blurred. In this view, descriptive theory aims at presenting an accurate account of phenomena while explanatory theory *“seeks to account for patterns of observed social”* (Blaikie (2007:71). The explanatory role of theory supports describing a pattern of possibilities in a phenomenon. The predictive role of theory supports suggesting certain outcomes under specific conditions (Blaikie, 2007). Considering that the study was premised in a critical research paradigm, an explanatory approach to theory was considered appropriate in order to describe how and why power relations among the stakeholders in the context of policy implementation. Consequently, CST supported the scope of analysis for the empirical phenomenon (Miles & Huberman, 1994).

Despite identifying the role and category of theory in the study, it was necessary to understand how the theory could be used. Hence, the strategies of logic in applying theories was considered. Blaikie (2007) suggests four main strategies of logic for applying theories: inductive, deductive, abductive and retroductive. The aim of abduction strategy is to describe characteristics and patterns of events or phenomena. The process begins with observations and data collection, analysed to provide descriptions that related to the research questions. In deduction strategy, a theory is tested or falsifies claims about a phenomenon. The theory is identified and questions are developed to guide the data collection. The data is analysed to explain the context of interest or to deduce hypothesis. The retroductive strategy aims at understanding the underlying mechanisms of events to an observed phenomenon. The events are documented and a model is produced to describe in detail the context and possible mechanisms that give rise to the events (Blaikie, 2007; Dubois & Gadde, 2002). Abduction strategy is used to explain causal mechanisms to observed events where a model is corroborated with participants using everyday language leading to development of a theory (Blaikie, 2007). Each approach is suitable for the specific aims of a study.

The deductive strategy was selected to guide the current study. In line with the first principle for conducting critical research in information systems (recall Section 4.3.1(a)), the deductive strategy supported the research to draw concepts and ideas from power/knowledge (Foucault, 1980). The concepts were useful in explaining power relations in the context of national ICT policy implementation and were used to develop an interview guide. The questions attempted to capture how the stakeholders were recruited, their roles in national ICT policy implementation, their interactions and views on decisions and policy activities. Further, the analytical constructs from power/knowledge were useful in data analysis to highlight and explain power relations among policy stakeholders (Blaikie, 2007; Gregor, 2006).

4.3.3. The role of the researcher

The researcher employed a reflexivity strategy when conducting the study. Reflexivity is the application of self-conscious criticism when conducting critical research (Myers & Klein, 2011). The researcher questions his or her ontological and epistemological assumptions and preferences (Cecez-Kecmanovic, 2001). These include political, ideological agendas for conducting the study, personal experiences, values and beliefs (Brooke, 2002; Howcroft & Trauth, 2004).

The key points of reflexivity considered in the study are summarised as follows. First, understanding one's own engagement with respondents where sources of conflicting views, beliefs and potential for change were identified during the process of interacting with respondents. Second, a comparison between current experiences with relevant experiences: comparing the circumstances and experiences of respondents or organisation. Third, developing a mutual understanding of differences in interpretations and explanations of materials: understanding of the gathered data or materials during the study. For instance, What did the respondents mean? What did they do? How does one help them? The researcher was cautious in the interpretation of the data and presenting the results, recognising the differences in background knowledge or life histories and experiences of respondents or roles of organisations in the policy activities (Avgerou, 2005; Cecez-Kecmanovic, 2001).

4.4. Research strategy

This section presents the research strategy selected for the study and justifications for why the single case study was chosen. The section also highlights units of analysis for study and a summary of the sample of respondents.

4.4.1. Case study research strategy

The study used a case study as a research strategy. Case study strategy is used to examine real-life events of a complex social phenomenon to obtain a holistic and meaningful view of the situation (Yin, 2009). Case studies are appropriate in answering

'how' and 'why' questions which may lead to generation of in-depth details of the phenomena. Case study research strategy was chosen because (a) the research questions (how questions) fitted well with the case research strategy (b) policy implementation was a real-life event involving different policy stakeholders working together to achieve the policy goals (c) the case study research strategy supports multiple data collection techniques which can provide historical and social context of a particular setting (Baxter & Jack, 2008; Myers, 2013; Walsham, 1995).

There are different types of case studies in literature that can guide how a research is conducted (Thomas, 2011). For instance, Stake (1999) suggests three types of case studies: intrinsic, instrumental and collective. An intrinsic case study is used to learn about a problem of a phenomenon and usually the study does not develop a theory. Instrumental case study examines a phenomenon to understand and explain a problem and may help researchers to refine a theory. Collective or single case study extends an instrumental case study to use a single case or more than two cases to compare the results (Stake, 1999). This study used the instrumental case study to generate deeper understanding of power relations in policy implementation using the analytical concepts of power/knowledge (Foucault, 1980). In addition, the study was aiming at developing propositions for explaining power relations in the context of ICT policy implementation. The instrumental case was considered appropriate to develop explanatory propositions of power relations in the context of policy implementation.

Case studies have gained prominence in information systems discipline and are premised on different philosophical assumptions such as a positivistic research paradigm (e.g., Dube & Pare, 2003), interpretive research paradigm (see Walsham, 1995; Silva & Fulk, 2012) and critical research paradigms (for example, Doolin, 2004; Hekkala, Stein & Rossi, 2014). The categorising of case studies based on research paradigms shows that positivistic case studies dominate the discipline. Interpretive case studies have been increasing and critical case studies remain scarce (Chen & Hirschheim, 2004; Keutel, Michalik & Richter, 2014; Orlikowski & Baroudi, 1991). In a recent study on use of case study research strategies in information systems, Keutel et al. (2014) argue that critical case studies are not comprehensive enough; the study concentrated on analysing positivistic and interpretive case studies. However, the exclusion of case studies that used a critical research approach leaves a gap in knowledge on the understanding of critical research informed case studies. Some studies have profiled the prevalence of critical research in IS-centric journals (see Falconer, 2008; Richardson & Robison, 2007) and highlight critical research-informed case studies. However, there is a need for researchers to provide comprehensive details in critical research informed case studies. The study considered the need to provide details on the case study strategy in relation to selected the critical research paradigm. In addition, the study joins the debate on the

discussion of single case and multiple cases to appreciate their differences (Baxter & Jack, 2008; Yin, 2009).

4.4.2. Single-case or multiple-case study

A single-case focuses on a context and applies a holistic approach to gather in-depth insights from the phenomena (Walsham, 1995; Walsham, 2006). Single-cases are usually used to analyse unique or extreme cases and there is much focus on establishing the unit of analysis to demonstrate the uniqueness of the case. Sub-units within the single-case can be analysed to gather more details on the case. Data emerging from the sub-units can be analysed between the sub-units or across the sub-units to improve the quality of the results (Baxter & Jack, 2008; Walsham, 1995).

With a multiple-case study, different contexts for cases are analysed, concentrating on settings for each case and across the settings. The results are compared to note the differences and similarities between the cases (Yin, 2009). The approach can generate reliable and robust results but may be time-consuming and require more resources (Baxter & Jack, 2008). Appreciation of the differences in single-case and multiple-case studies led to the selection of the case study approach that was appropriate for this study.

4.4.3. Justification for selecting single case

A single case can be useful for a study that aims to provide an in-depth explanation of a phenomenon in a specific context using a theory (Walsham 1995; Walsham, 2005). A single case can offer a possibility of applying the results from a study to a theoretical statement in another similar setting (Klein & Myers, 1999; Lee & Baskerville, 2003; Walsham, 1995). This study employed a single-case strategy. Malawi represented an extreme case "*highly unusual manifestations of phenomenon of interest*" (Patton, 2002: 279) for national ICT policy in low-income status countries for a number of reasons.

First, the country had support from United Nation Economic Commission for Africa under the African Information Society Initiative to formulate its national ICT policy. However, the process has taken a long time (from 2001 to 2013). Second, the country has changed its political leaders over the past 20 years during which four administrations led the government. The period for government turnover coincided with the formulation of the national ICT policy. Third, the country is attempting to recover from economic hardship experienced between 2009 and 2012 due to poor governance that led to donors withdrawing financial support (Cammack, 2012). There were high expectations from the policy stakeholders, especially government and international development agencies after resuming financial aid, on the role of ICTs in supporting socio-economic development. These points represented an information-rich phenomenon (Walsham, 1995) which, to the knowledge of the researcher, has received

less attention by information systems researchers. There are still limited explanations for these points. Hence, the case had the potential to provide data for a typical case and an unusual case.

The in-depth focus on a single case yielded data that revealed the status of the national ICT policy and power relations among stakeholders. Hence, multiple data collection techniques supported the diversity of perceptions and multiple realities of the phenomenon. It was necessary for the study to highlight both the strengths and weaknesses of the case (Patton, 2002; Thomas, 2011; Walsham, 2006).

4.4.4. Unit of analysis

It was necessary to establish the unity of analysis to clarify the phenomena under investigation and provide scope for the study using the case study strategy. In this study, a unit of analysis is a lower level abstraction of a case which constitutes specific information that a case study attempts to reveal (Grunbaum, 2007). From the definition, the theme of the case (studied phenomena) is identified in which the author argues that there is ambiguity between a unit of analysis and a case. Without having a clear understanding of the terms can lead to challenges in designing and implementing a case study (Yin, 2009).

To elaborate this debate, the argument based on deductive logic noted that the unit of analysis is identical with a case (Feagin, Orum & Sjoberg, 1991). Miles and Huberman (1994) offer a similar position that unit of analysis and case are the same in case study. In contrast, case studies based on naturalist enquiries view unit of analysis and case as separate. In this context a case is a subject (a practical and historical unit of interest) and the unit of analysis is the object (an analytical frame) by which the study is conducted and illuminates the case (Stake, 1999; Thomas, 2011). This study selected the naturalist enquiries view; the case for the study was policy implementation and the unit of analysis was power relations. This position fitted well with the constructionism which aims at understanding subjective meaning of reality (Stake, 1999). Patton (2002) posits that a unit of analysis is what you are able to say about at the end of the study. The study suggested propositions for power relations in the implementation of national ICT policy.

4.4.5. Sampling of respondents

The study employed purposeful sampling to select respondents who would provide information relevant to the implementation of national ICT policy (Myers, 2013; Patton, 2002). The criteria for sampling in qualitative research (Miles & Huberman, 1994) was used as a guide in selecting respondents who influenced and were interested in the national ICT policy. The criteria for selection sampling posit that the sample should be relevant to the research question and to the theoretical framework. The sample should

provide information about the empirical situation, that would support generalisations and be trustworthy in the explanation of the results. In addition, ethical issues should be considered and the sample that is feasible for the researcher (Miles & Huberman, 1994). Table 4.1 summarises the criteria for sampling in qualitative research.

Table 4.1: Application of criteria for sampling (Miles & Huberman, 1994)

Elements of selection criteria	Application in the study
Sample being relevant to theoretical framework and research question	Selection of respondents was based on stakeholders who were engaged in national ICT policy activities over a period of time (Sabatier & Weible, 2007)
Sample that may generate information about the phenomena	Respondents that would provide relevant information on ICT policy were selected and included representative of stakeholders from different levels of society (e.g., micro and macro levels)
Sample that should enhance generalisation	Respondents with diverse background from different domains of the ICT policy were selected (Marcelle, 2000)
Sample that may produce trustworthy descriptions or explanations	Selection of respondents who were engaged in policy decisions and understand policy issues (Matland, 1995)
Sample that is ethical	Respondents who were willing to provide their views or opinions participated in the study and the details of respondents were not disclosed when presenting the findings to ensure their anonymity (McNabb, 2010)
A sample plan that is feasible	Ensuring diversity in the selected sample using the available resources (Myers & Avison, 1997)

The sampling included consideration of research questions and theoretical framework and this was achieved through selecting participants who were engaged in the national ICT policy activities over a period of time. This was important to understand the nature of relations that were established among the policy stakeholders rather than a once-off encounter.

The researcher selected respondents that would provide information related to national ICT policy implementation. It was also necessary to have the respondents with diverse background and different roles in the national ICT policy to enhance the analytical generalisations that would emerge from the sample. Only respondents who were willing to participate in the study formed part of the sample and the researcher ensured the anonymity of the respondents. The researcher ensured diversity of respondents in the sample while considered the sample that was feasible with the available resources.

At the beginning of the study, the researcher did not have a clear idea of whom to include in the sample. Secondary data was used (five copies of the policy documents and the national development plan obtained from government departments) to produce

a list of potential respondents. A taxonomy approach (Nickerson, Varshney & Muntermann, 2013) was used which began with identifying literature on stakeholder identification. The steps of identifying stakeholders were outlined and compared to note common steps. Table 4.2 summarises the steps in creating a list of stakeholders.

Table 4.2: Summary of steps for creating a list of stakeholders

Author(s)	Stakeholder Identification							
	Preparation				Initial			
	Goals	Create a list	Identify	Categorise	Assign roles	Participation	Manage	Evaluation
Bryson, 2004	✓		✓	✓	✓		✓	
Bailur, 2006			✓	✓	✓			
Archterkamp & Vos, 2007	✓	✓	✓	✓				
Reed et al., 2009			✓	✓		✓		
Poel, Kool & van der Giessen, 2009	✓	✓	✓	✓	✓	✓		
Luyet et al., 2012			✓	✓	✓	✓	✓	✓
Andre et al., 2012			✓	✓	✓	✓	✓	

The different steps of identifying and selecting stakeholders were clustered into preparation and initial. The secondary data was used with the first five steps. The policy goals were identified and assigned to codes. Similarly, the stakeholders listed in the documents were assigned to codes. The policy goals and codes of the stakeholders were linked to the potential interests of the stakeholders in the policy. The list of stakeholders was generated based on codes and later refined to ensure that there were no redundancies; a total of 87 stakeholders were identified. These were grouped into 14 categories based on the similarities in interests for the policy goals. The groups included academia, regulators, ICT sector organisations, consumers, the media, telecom operators, government departments, law enforcement, investors, donors and rural communities. The list of the categories for stakeholders and occurrences of codes in the analysed documents is summarised in Table 4.3.

Altogether 32 organisations and individuals were identified as potential respondents for the interviews. The researcher considered the representation of the identified categories, the location of the organisations and available resources that could be used to contact the stakeholders. There was a potential bias in the list of the selected stakeholders. The list of potential respondents was confirmed with government officials at the beginning of the data collection process to overcome the challenges for bias in the sample.

Table 4.3: Summary of stakeholder’s categories and occurrences of codes in documents

Category	Examples of organisations	Occurrences in documents					Grouped
		D1	D2	D3	D4	D5	TOTAL
1. Investors	Public private partnership commission of Malawi	0	0	0	0	1	1
2. Law enforcement agencies	Malawi police services	0	0	1	1	0	1
3. Government departments	Office of President and Cabinet, Ministry of Information, Ministry of Finance, Department of E-Government	0	7	26	3	2	31
4. Politicians	Media and Communications Committee	0	0	0	0	1	1
5. Legal institutions	Malawi Law Commission, Industrial Court	0	0	1	1	0	1
6. Private sector	Electricity Supply Commission of Malawi, Chamber of Commerce and Industry	0	5	13	13	6	19
7. Academia	Universities and Colleges	4	5	6	7	1	9
8. Regulators	Malawi Bureau of Standards, Malawi Censorship Board, Malawi Communications Regulatory Authority	1	1	5	5	1	5
9. The media	Malawi Broadcasting Corporation, Television Malawi	0	1	2	4	0	4
10. Consumers	Consumer Association of Malawi, Fair trading Commission	0	1	6	5	2	7
11. Telecom operators	Cellular communications operators, internet service providers, Telecom operators association	0	3	2	2	3	3
12. Donors	International donor organisations, International non-governmental organisations	0	0	2	2	2	2
13. Rural communities	Farmers radio listeners clubs, Community ICT committees	0	0	0	1	2	2
14. ICT sector	ICT Association of Malawi, private organisations	0	1	1	1	1	1
							87
D1= Vision 2020, D2=National ICT policy 2003, D3=National ICT4D policy 2006, D4= National ICT policy final draft 2009, D5=National ICT policy 2013							

The list was revised and new respondents were also identified based on the recommendations from the respondents and issues emerging from the interviews. For

example, if respondents did not have up-to-date or adequate information on an issue they recommended interviewing certain organisations or individuals. The respondents consisted of national ICT policy stakeholders from international development agencies (representing the meso level of society); government ministries and departments and ICT sector organisations (representing the macro level of society); and consumer organisations and non-governmental organisations (representing the micro level of society). It was important to maintain diversity in the sample because of the national ICT policy addresses issues at different levels of society as outlined in Section 2.1. Further, the study considered that the sample should generate diverse data on policy implementation. For instance, data from government departments and organisations outside government. A detailed list of respondents is attached in Appendix 1.

Table 4.4: Summary of respondents in the study

Component	No. of respondents*	No. of interviews
Gender		
Male	39	37
Female	6	6
Level of society		
Meso	2	2
Macro	33	31
Micro	10	10
Total	45	43
*In two interviews there were more than one respondent		

As summarised in Table 4.4, the respondents in the study were mainly male. Part of the reasons was that the respondents emerged from the government (ministries and departments) as primary key stakeholders. There were few women in the government who were holding positions at policy and decision-making levels. The majority of the respondents emerged from the macro level where main policy activities were conducted, micro level participants interacted and presented the interests of the policy beneficiaries.

4.4.6. Research time-frame

The time-frame for the study was cross-sectional and data were collected once from the respondents (Myers, 2013; Patton, 2002). Part of the reason for adopting the cross-sectional approach was due to limited resources and time constraints. During the study, the researcher was stationed at the University of Cape Town, South Africa between February 2012 and August 2015. Two trips to Malawi were made for data collection. The first trip was in July to August 2013 and the second in December 2013 to January 2014.

4.5. Data collection techniques

In line with the qualitative research approach, the study employed two data collection techniques: documentary review and semi-structured interviews (Creswell, 2013; Myers, 2013). These techniques allowed the researcher to explore the national ICT policy process context and obtain narratives from the respondents (Walsham, 1995; Walsham, 2005). The techniques are described in detail in the subsequent subsections.

4.5.1. Archival/Secondary data

The study considered secondary data to gain an understanding of the historical background and context of the national ICT policy implementation (Bowen, 2009; Myers, 2013). The secondary data was sourced from government ministries and departments and other national ICT policy stakeholders' organisations. Documents from international development organisations related to the national ICT policy were sourced from the websites. Other documents were sourced by e-mail. For example, documents for AISI were requested by email from the United Nations Economic Commission for Africa (UNECA) Headquarters in Ethiopia.

The process for sourcing documents yielded 37 documents. It was challenging for the researcher to decide on which documents to focus on and how best to use those documents. The research questions and objectives influenced the focus and use of the documents. The researcher considered documents that would provide the context and historical details of the national ICT of Malawi (Myers & Klein, 2011). Hence, the documents were categorised into key documents, supporting documents and reference documents. Use of multiple documents in such a manner is common in similar studies on ICT policies (such as Hall & Lofgren, 2004; McBride & Stahl, 2010; Verdegem & Fuchs, 2013).

Key documents were produced in the course of the national ICT policy process (e.g., national ICT policy drafts and the policy implementation plan). Supporting documents were materials that informed the formulation and implementation of ICT policy activities (e.g., national development plans, legislative documents, policy formulation framework documents and sector policies). Reference documents were materials that supported primary data that emerged during the interviews to confirm decisions, events, actions and activities in the ICT policy process (e.g., reports, minutes of meetings and terms of references for projects).

As summarised in Table 4.5, regional development strategies and reports from international development agencies were included in the secondary data. The documents were useful to understand how the ideas for initiating the national ICT policy development had emerged and if there were any external influences in the policy implementation. (A detailed list of documents is attached in Appendix 2).

Table 4.5: Summary of documents analysed in the study

Category	Description	Examples of documents	Focus
Key documents	Documents that present events, intentions, decisions and actions for policy activities	National ICT policy draft (2003)	ICT development
		National ICT for development policy (ICT4D) (2006)	ICT development
		National ICT policy final draft (2009)	ICT development
		National ICT policy (2013)	ICT development
		National ICT policy implementation plan (2013)	ICT development
Supporting documents	Documents that catalyse the formulation of the policy and informed the key documents	Vision 2020 (1998)	National development
		Communication sector policy (1998)	Telecom development
		Communications Act (1998)	Legislation for ICT
		Rural telecommunication policy (2002)	Telecom development
		Malawi growth and development strategy I (2006)	National development
Reference document	Documents that were used to help establish the meaning of claims in the key documents	Malawi National Assembly standing orders (2003)	Organisation procedures
		ECA - Towards an information society in Africa (2003)	Regional report
		ECA - Policies and plans on information society (2007)	Regional report
		Report on study tour to Rwanda development (2013)	Department report

The documents covered the period between 1998 and 2013. The first version of the national policy was released in 2001 and the policy objectives were re-formulated in subsequent versions of the document, released in 2006 (while the policy document has a title – National ICT for Policy Development – the document was based on the previous version of the policy document (see Makoza & Chigona, 2013b)) and 2009. The key documents in this process were the final national ICT policy and the implementation plan released in August 2013.

4.5.2. Semi-structured interviews

Semi-structured interviews were considered appropriate for the study because they provided the opportunity to ask the respondents for clarification on issues being discussed and to obtain feedback instantly (Myers, 2013; Myers & Newman, 2007). An interview guide was developed to support the semi-structured interviews. The interview questions were based on the constructs from the power/knowledge (Foucault, 1980) guiding the study. The interview guide was checked by an experienced

researcher. Two pilot interviews were conducted to identify any shortfall of the interview guide. The interview guide was revised to address questions specific for the policy stakeholders (for example, specific questions for the government departments and questions relevant to organisations outside government). An example of the interview guide is attached in Appendix 3.

The semi-structured interviews were conducted in the organisations of the respondents and at times that were convenient for them. The researcher asked for consent and approval from the respondents for all the interviews. The semi-structured interviews lasted between 30 and 90 minutes each. They were in English as the official business language in Malawi. In some cases, the respondents used Chichewa (a vernacular language of Malawi) to emphasise key points. Most of the semi-structured interviews were audio-recorded, but in some cases, the respondents opted for the interviews or specific comments not to be audio recorded. The researcher took extensive notes during and after each interview. The field notes were used to note key points or issues that required further clarification.

Altogether, 43 semi-structured interviews were conducted in two phases. The first phase was conducted between July 2013 and August 2013; 34 interviews were conducted, of which three were informal where there were no predetermined questions or use of the interview guide, and questions emerged from the conversations (Patton, 2002). The informal interviews were crucial to gain background information on the policy processes in the context of the government of Malawi and to gain feedback on the proposed list of key informants on national ICT policy. In the subsequent interviews, the researcher arranged the interviews through appointments and the purpose of the study was explained to the respondents by telephone and e-mail. This arrangement allowed the respondents to prepare for the interviews.

The researcher reflected on the process data collection process, focusing on the effectiveness of the analytical concepts, the questions in the interview guide and the data emerging from the interviews. The researcher realised that the semi-structured interviews did not include the views of politicians. This led to conducting a second phase for the interviews. Nine semi-structured interviews were conducted between December 2013 and January 2014. The second phase applied the same procedures and instruments used in the first phase.

In some cases, where there was more than one respondent, group interviews were conducted (Myers & Newman, 2007). The semi-structured interviews with officials from the Ministry of Information and Civic Education and the Malawi Communications Regulatory Authority consisted of two senior members of each of these organisations. This arrangement addressed the issues of accuracy of the facts the respondents presented during the interviews. The respondents were able to confer with each other

on the issues being discussed during the interviews. In one case it was not possible to conduct a face-to-face interview and an e-mailed interview was employed (Meho, 2006). The researcher corresponded with an official from UNECA in Ethiopia. There were no country offices for UNECA in Malawi.

The implementation of national ICT policy was a long process. Therefore, the respondents had time lapses in recalling events and their experiences in the process of the national ICT policy implementation. To deal with this challenge, where possible the researcher provided a copy of the questionnaire before interviews. The aim was to allow respondents time to reflect on the policy implementation process. The respondents presented views for their organisations as opposed to personal views. The views were mainly on the organisations' interests, decision-making, practices and roles in the implementation of the national ICT policy. In eight interviews, the respondents provided documents that supported the facts presented during the interviews. The documents included copies of minutes of meetings, reports and copies of policy documents.

The question regarding the number of interviews in qualitative research has generated debate in literature (Francis et al., 2010; O'Reilly & Parker, 2013). The number of interviews to be considered adequate in a study depends on a number of factors, such as availability of financial resources, time, respondents willing to participate in the study and the nature of the study (Francis et al., 2010; Guest, Bunce & Johnson, 2006). The study considered the concept of saturation where the interview guide (questions grouped according to the analytical constructs of power/knowledge) was used as a theory-sensitising tool (Klein & Myers, 1999). During the interviews, the researcher recalled the key constructs from the analytical concepts and related the constructs to the responses from the respondents. The interviews were considered adequate when new themes were no longer emerging from the interviews. The field notes were used to note the emerging themes from the interviews (Guest, Bunce & Johnson, 2006).

4.6. Data analysis

Data analysis involved transcribing, cleaning the data set and interpreting the raw data to establish meaning (Patton, 2002). The field notes were typed and all the interviews were transcribed. The researcher requested electronic copies of the secondary data from the respondents. Where electronic copies were not available, the researcher scanned the hard copies into electronic format. The data cleaning ensured that all documents were legible and not redundant. Qualitative data analysis software (Atlas.ti version 7) was used to support storing all the empirical materials at a single repository. The software supported the researcher in navigating around different documents in a quick manner, creating a hierarchy of code assigned to the text and querying the data using query tools and visualising concepts that were emerging from the data to explain the meaning

of the data. Further, the software provided a means of recording interpretations and activities in the data analysis process using a memo feature. There were different options for qualitative data analysis software, but Atlas.ti was selected because the researcher had undergone a training programme on using this software.

There were a number of options for the methods for data analysis related to qualitative research such as content analysis, thematic analysis and Critical Discourse Analysis (CDA). The selection of methods for data analysis depends on the nature and objectives of the study. The study was rooted in qualitative research and a critical research paradigm (Cecez-Kecmanovic, 2011). CDA was considered appropriate because it supports analysis of historical, contextual and social conditions of a phenomenon to reveal deep-rooted structures and assumptions that are taken as common knowledge that limit awareness of the needs and interests of actors (Myer & Klein, 2011; Wodak & Meyer, 2009). Further, policy contains text and language which are interpreted and form the basis for policy activities or actions. The process may lead to power abuse, domination and inequality in the policy implementation process. CDA was appropriate because it has techniques that can be used to analyse hidden meanings and assumptions in the text which other qualitative analysis approaches such as context analysis, do not address. Thus, CDA supported analysis of text and practices to unravel power relations among the stakeholders in the context of national ICT policy implementation (Fischer, 2003; van Dijk, 1993). Details for CDA are discussed in the subsequent sections.

4.6.1. Critical Discourse Analysis (CDA)

CDA is *“deliberately probing the relations of causality and determination between (a) discursive practices, events, text and (b) wider social and cultural structures, relations and processes”* (Fairclough, 1995:135). From the description, it shows that CDA is premised in Social Theory suitable to analyse power, ideology and critique (Wodak & Meyer, 2009). There are different methods in application of CDA depending on the objective of a study as indicated in the following statement: *“(. . .) CDA does not constitute a well-defined empirical method but rather a bulk of approaches with theoretical similarities and research questions of a specific kind”* (Wodak & Meyer, 2009:29).

Information systems studies have applied different approaches of CDA. For example, Habermasian, Foucauldian and Fairclough Approaches (Stahl, 2004). Foucauldian informed CDA was considered ideal because of the nature and objectives of the study. As outlined in section 1.3, understanding power relations is important when stakeholders are engaged in policy implementation activities. Participation is portrayed as neutral or value free and that it can lead to successful policy outcomes. Issues about hidden motives, agendas of different actors, the capacity actors to mobilise resources and influence the will of others, and norms and practices within institutions that support or limit activities of stakeholders, are not discussed when participation is

suggested. Thus assumptions and challenges related to power in participation are taken for granted (Fischer, 2003). Thus, using CDA, the researcher was able to understand the taken-for-granted issues of power relations in the context of national ICT policy implementation.

CDA was applied in two phases. The first phase was analysis of policy documents to highlight the discourses, political structure and institutional structure and how they influenced action emerging from the policy declarations (Canary, 2010; Cohen et al., 2002). This was important to understand the key policy implementation activities and the roles assigned to the policy stakeholders and organisations. The second phase was the analysis of the text which emerged from semi-structured interviews. The researcher was able to compare intentions in the policy declarations and confirm the practices of policy stakeholders and their relations. The process led to the uncovering of hidden meaning, differences in the intentions in the policy declarations and what actually happened in the policy implementation agencies, taken-for-granted issues and power relations dynamics among the policy stakeholders, using a systematic analysis of data (Wodak & Meyer, 2009).

4.6.2. Justification for using Foucauldian Discourse Analysis (FDA)

The FDA approach is based on concepts of archaeology and genealogy which address power relations (Foucault, 1972; Foucault, 1980). Archaeology highlights the formation and transformation of a discourse (its objects, concepts and statements) over a period of time. Genealogy extends from archaeology to explore the effects of power on discourses and the strategic exercise of power for individuals on themselves and others in a relationship (Foucault, 1980). The concepts used in FDA were consistent with analytical concepts selected to analyse power relations as outlined in Section 3.5.6.

In addition, FDA was selected for the study for the following reasons. First, public policy as a discourse (system of meaning) led to competition for social change in society. Structural change meant shifting influence between discourses. In this case, power or knowledge shifted between structure and agency, resulting in power relations issues. FDA was ideal in articulation of discourses and power relations between structure and agency (Hewitt, 2009; Sharp & Richardson, 2001). Second, public policy process led to the creation of documents that informed social practices and communication between policy stakeholders during policy formulation and implementation. Policy processes produced a combination of text and communication, action and social practices. This implies that policy processes, discourses as systems of meaning containing norms, practices of communicative acts, knowledge, and unspoken power relations may be complex. FDA was suitable to analyse power from different perspectives beyond institutional structures (Sharp & Richardson, 2001). Third, the FDA approach focuses on power as a constituent of a discourse and the reason why actors or

agents participate in a discourse. Analysis of discourse in this context focuses on the deconstruction of ideas in rational communication and questioning of self-image on underlying assumptions and realities in society (Stahl, 2004).

4.6.3. Method of Foucauldian Discourse Analysis (FDA)

Arribas-Ayllon and Walkerdine (2008) suggest a way of doing FDA but offer caution on taking the approach as a set of formal principles. The methodical guidelines comprise five steps: selecting a corpus, problematisation, technologies, subject position and subjectification. The steps are summarised as follows.

- (i) **Selecting a corpus:** Discourses that represent rules and statements are selected based on discursive objects, relevance, likely conditions, historical context and identity. Examples of text that may be collected include policy documents, newspaper articles, semi-structured interviews, ethnographic observations and description. The aim is to select a corpus that is relevant to research questions and contains text that represents the diversity of discursive practices over a period of time.
- (ii) **Problematisation:** This is the process of revealing problematic discursive objects and practices. Power relations and knowledge are exposed through analysis of different discourses. Problematisation allows the researcher to take a critical position and to analyse how discursive objects are governed and constituted.
- (iii) **Technologies:** Technologies are concerned with practical human conduct focusing on government of the self and others. Technologies may be analysed from two perspectives: (a) analysis of power on human conduct from a distance, (b) analysis of power in terms of the self on how humans regulate and enhance their own conduct.
- (iv) **Subject position:** This is consideration of cultural dimension in a discourse for realising the truth. Discourses are perceived to be constitutive objects with contradictions at times which offer avenues for truth. Subject position offers identity of persons within the structure of rights and duties in social interactions.
- (v) **Subjectification:** Ethics are constituted for the self-formation used to analyse how subjects transform themselves within acceptable practices or conscious ethical goals. The analysis also considers understanding of subjects and authority which the subjects regulate themselves.

A hermeneutics cycle was applied in the interpretation of the text. A hermeneutics cycle in the interpretation of text relates to the concept that textual meaning of a part is understood in the context of the whole and that meaning of the whole is accessible through parts (Myers & Klein, 2011; Wodak, 2011). In consideration of understanding of parts of text as context of the whole, there were iterations in the data analysis process.

The researcher went back and forth from reflection to the data to question the themes and patterns emerging from the data. The results from the document analysis and interview transcripts were compared to verify the consistency of the results (Heracleous, 2006).

4.7. Validity and reliability

Validity and reliability originate from positivistic research approaches. The four main approaches used in positivistic case studies are: construct validity (correct measurement of constructs), internal validity (causal relationships), external validity (defining generalisable domain), and reliability (replication of operations of the study) (Yin, 2009). Qualitative case studies focus on gathering an in-depth understanding of the phenomena and that the process may be applied to similar situations (Lee & Baskerville, 2003; Myers, 2013). Validity and reliability are applied when designing a study, during data collection and while analysing to ensure that the results from the study are credible (Golafshani, 2003). Validity and reliability of the study are discussed in the subsequent subsections.

4.7.1. Validity in qualitative studies

Qualitative studies' validity is concerned with trustworthiness of results to be applied in a different context rather than generalisation of results to a wider population (Miles & Huberman, 1994; Patton, 2002). Trustworthiness in qualitative research is concerned with three concepts: credibility, dependability and transferability (Lincoln & Guba, 1985). Credibility relates to how well the data and process address the focus of the study. For instance, selection of context, participants and data for the study. Dependability is consideration of changes over time in the context of the study, e.g. dealing with risks of inconsistency during the data collection process. Transferability is the extent to which the findings can be replicated in another setting or group of participants.

Creswell and Miller (2000) propose techniques for validity in qualitative study. These include triangulation, member checking, rich description, researcher's reflexivity and peer debriefing. Application of validity techniques depends on the paradigm assumptions of the researcher (Creswell & Miller, 2000). In line with critical paradigm, this study employed triangulation: member checking, rich description and researcher reflection. These were applied during the research design, data collection and data analysis phases.

During data collection and analysis, multiple sources of data were used to confirm and enrich the results. Documents, interviews and field notes were used in these processes. An experienced researcher checked the research instruments and samples of the data collected during the first phase of interviews. Six copies of transcribed interviews were

sent to the respondents for verification during the first phase of the interviews. Only two responded and the limited response was attributed to the lack of time for the respondents as they were preoccupied with their own activities. Nonetheless, the two respondents provided useful feedback on the quality of the responses. The researcher summarised and confirmed key points at the end of the interviews as a way of checking the facts gathered during the interviews.

Field notes were produced in addition to the audio data that were gathered during the interviews. These were used to provide a rich description of the context of the study during the data analysis phase. The researcher reflected on the process for data collection and analysis. This involved questioning of the personal beliefs, values and biases, so as not to influence the processes and results of the study (Creswell & Miller, 2000; Golafshani, 2003).

4.7.2. Ensuring reliability of findings

Reliability is concerned with the stability of findings. The procedures for conducting the study are documented to ensure that if the process were repeated, it should yield the similar results and conclusions (Lincoln & Guba, 1985). The documented processes were followed all the time during the study to avoid biases and to minimise errors (Miles & Huberman, 1994; Patton, 2002). The researcher documented the procedures for conducting activities in the study. The copy of the protocol for conducting interviews is in Appendix 4.

4.7.3. Application of member checking in study

The study used member checking to ensure that the research topic was relevant to practice. The researcher presented the research topic and obtained feedback from ICT policy experts during the Research ICT Africa Young Scholars Workshop in Nairobi, Kenya in April 2011. The researcher also discussed the research topic with local ICT experts and policymakers during the Stakeholders Consultative Conference for the Regional Communication Infrastructure Project of Malawi (RCIPMW) held in Lilongwe, Malawi in November 2011. Table 4.6 summarises the profile of the experts and policy-makers.

Table 4.6: Summary of profiles for member checking participants

Event	Experts designation	Organisation	Interest in policy as
Research ICT Africa Young scholars workshop, Nairobi, Kenya (April, 2011)	Chief Executive/ Adjunct Professor	Research ICT Africa, South Africa	Policy practitioner
	Professor	University of Nairobi, Kenya	Academic
	Team Leader	LIRNEasia, Sri Lanka	ICT4D researcher
RCIPMW stakeholders Consultative meeting, Lilongwe, Malawi (November, 2011)	Principal secretary	Ministry of Information and Civic Education	Policymaker
	Principal secretary	Department of E-Government	Policy implementation agency
	Chief Executive Officer	PPP Commission of Malawi	Partnerships in policy implementation
	Board member	Malawi Communications Regulatory Authority	Telecommunications regulator

4.8. Consideration for research ethics

Research ethics may be described as “*the application of moral standards to decisions made in planning, conducting and reporting results of research studies*” (McNabb, 2010:69). From the description, four areas of research are identified where research ethics may be applied. These are during the planning stage; while conducting data collection; while conducting data analysis; and when reporting the results (Neuman, 2000). The following four principles may be considered as part of ethics in the research process (McNabb, 2010): truthfulness, thoroughness, objectivity and relevance. Truthfulness ensures that the researcher does not lie, deceive or use any means of fraud in the research. Thoroughness relates to making sure that the design of the research is complete and accurate to guarantee that there will be no harm to participants when conducting the research. Objectivity is the ability of the researcher to remain objective and impartial during the course of research and to avoid issues of bias and personal opinions in the design and when conducting the study. Relevance ensures that the value for conducting the study contributes to the body of knowledge.

The study considered the four principles for research ethics. The researcher obtained approval from the following organisations: Research Ethics Committee of the University of Cape Town approved the study to ensure that the study was relevant and conformed to academic standards. The Chief Secretary in the Office of the President and Cabinet, the government of Malawi approved the study for the researcher to engage participants from government ministries, departments and other stakeholders of the national ICT policy. The National Commission for Science and Technology approved

the study to ensure that there were no ethical issues in the process of the study (see Appendix 5).

The researcher informed the respondents of the purpose of the study during the data collection process and a consent form was signed as an agreement between the researcher and the participant (see Appendix 6.2). Participation in the study was voluntary. The researcher ensured honesty and avoided bias to ensure that the results reflected the realities of the context of the study. In line with critical research methodology, self-reflection was applied after each interview (Cecez-Kecmanovic, 2001). The researcher ensured that privacy and anonymity of respondents were maintained when presenting the results of data analysis for the study. In the Chapter 6 for research findings, the illustrative exemplars from the interviews were referenced using codes (denoted as INT-number) instead of using real names of the respondents to maintain anonymity (McNabb, 2010; Neuman, 2000).

4.9. Consideration for generalisation in the study

Generalisation of research results has been a major concern in qualitative studies (Lee & Baskerville, 2003; Tsang & Williams, 2012). Generalisation is the reasoning that draws inference from a particular observation or setting (Polit & Beck, 2010). Similarly, generalisation is a form of general views from a particular instance (Lee & Baskerville, 2003; Seddon & Scheepers, 2012). The descriptions indicate the application of research results from one setting to another setting. However, application of generalisation of research results may differ based on the ontological and epistemological assumptions of the researcher. Understanding philosophical views of the researcher is crucial to determine the type of generalisation of a study (Patton, 2002; Yin, 2009).

In positivistic studies, generalisations are based on statistical representation of the sample to the population, thus generalising from a sample to a population and from subjects of the experiment to experimental findings (Yin, 2009). In qualitative studies, generalisations aim to provide a rich understanding of a particular case. Generalisation, in this case, aims at better explanation for concepts of a particular context of interest (Polit & Beck, 2010; Tsang & Williams, 2012). Case studies can be used to provide generalisations in qualitative studies (Flyvberg, 2006; Walsham, 1995). Transferability is related to a generalisation of cases where the findings from one case can be used in a different enquiry or a different social setting (Polit & Beck, 2010; Walsham, 2006). The concept of transferability was applied in this study. Rich descriptions of the case and procedures in the study were recorded to ensure that the study could be applied to another setting (Lee & Baskerville, 2012; Lincoln & Guba, 1985; Walsham, 1995).

Generalisation can also relate to events or social settings of interest, concepts, models and theory in a study. Lee and Baskerville (2003) propose four types of generalisations, based on the notion that generalisations for empirical statements can represent data or

observations of a phenomenon. Theoretical statements can describe the existence and relationships of entities which cannot be directly observed (Lee & Baskerville, 2012). The four types of generalisations are summarised as follows: Empirical to Empirical (EE) generalisations: generalisations made from data or observations to other empirical statements. Empirical to Theory (ET) generalisations: generalisation made from observations or other descriptions to theory. Theory to Empirical (TE) generalisations: generalisations of a theory confirmed from one setting to another. Theory to Theory (TT) generalisations: generalisation of concepts or theory to another theory.

In line with the concept of transferability, the study was aimed at generalising concepts from one setting that be used to describe another setting. For example, Theory to Empirical (TE) generalisations (Lee & Baskerville, 2003). Constructs from CST (Foucault, 1980) were used explain power relations in the implementation of national ICT policy. The propositions that emerged from the study could be applied in another setting (Lee & Baskerville, 2012; Seddon & Scheepers, 2012; Walsham, 1995).

4.10. Summing up the research design for the study

The research design for the study considered a holistic view of issues related to scientific research design to achieve rigour and quality (Lincoln & Guba, 1985). Key issues in the design for the study can be summarised in presentation of the concepts such as ontology, epistemology, research strategy, approach to theory, data collection techniques, data analysis and consideration for generalisations from the study. These were selected in consideration of the research questions and research objectives. Application of these concepts are summarised in Table 4.7.

Table 4.7: Summary of research design

Component	Dimensions			
Ontology (reality)	Objective		Subjective✓	
Epistemology (knowledge)	Positivistic		Interpretive	Critical✓
Research strategy	Survey	Action research	Ethnography	Case study✓
Approach to theory	Inductive	Deductive✓	Retroductive	Abductive
Data collection techniques	Document review✓	Structure interviews	Semi-structured interviews✓	Open-ended interviews
Data analysis (CDA approaches)	Fairclough CDA	Wodak CDA	Foucauldian CDA✓	Van Dijk CDA
Generalisations	Empirical to Empirical	Empirical to Theory	Theory to Empirical✓	Theory to Empirical

In summary, the study used a qualitative approach to power relations in the implementation of national ICT policy. Critical research paradigm was considered appropriate to examine issues of domination and alienation in the policy implementation process. Qualitative data was used to gather the historical context and insights from the policy stakeholders on the policy implementation process. Policy documents and semi-structured interviews were used in the study. The data were analysed using Critical Discourse Analysis. The two sets of data were compared to improve the quality of the results. Ethical issues were considered when developing and conducting the study to ensure there were no effects to the respondents and organisations that participated in the study.

Chapter 5

Case description for national ICT of Malawi

5. Introduction

This chapter summarises the context of Malawi. The chapter outlines the development of the national ICT policy to provide a historical perspective to the policy implementation. The chapter is structured as follows. Section 5.1 summarises the demographic profile of the country, followed by Section 5.2 with the discussion on the nature of the country's ICT sector. Section 5.3 outlines the legal and regulatory frameworks supporting the activities of the ICT sector. Section 5.4 highlights the public policy development process of Malawi. Section 5.5 summarises the national ICT policy development process. Section 5.6 presents the summary of the chapter.

5.1 Demographic profile of Malawi

Malawi, located in the south-east of Africa, has a population of approximately 16.7 million people (World Bank, 2016). The country is categorised under low human development in the HDI rankings, at position 173 out of 188 countries (UNDP, 2015). The majority of the population (80%) live in rural areas and depend on subsistence agriculture for their livelihoods (NSO, 2015). The country faces challenges related to human development such as low literacy levels; lack of food security; environmental degradation; high unemployment among the working age group (18–55 years); the impact of HIV/AIDS and poor governance in public services; and political and economic instability (Bichler, 2008; Makoza & Chigona, 2012).

The challenges directly affect the adoption and use of ICT services. The country has low teledensity scores and ICT services are predominantly accessible to those residing in urban centres. The majority of the population residing in rural areas has limited access to ICTs and inadequate disposable income to acquire ICT services (costs of which are high as compared to other countries in the SADC region) (Mtingwi & van Belle, 2013). Table 5.1 summarises the teledensity of Malawi.

Table 5.1: Summary of teledensity of Malawi (ITU, 2016; MACRA, 2015)

Indicator	Value
Fixed line teledensity	0.26%
Mobile phone teledensity	35.34%
Internet teledensity	9.3 %
Fixed broadband teledensity	0.05%
Radio teledensity	44.5%
Television teledensity	10.9%

The government of Malawi, international development agencies and private sector organisations are working towards the development of infrastructure to improve access to ICTs. The government initiated the national ICT policy to drive the development of ICT infrastructure, to improve adoption of ICTs in economic sectors and to improve access to ICTs for rural dwellers (Bichler, 2008; Kanjo, 2008).

5.2 ICT sector of Malawi

The ICT sector is important in the provision of technologies that are used to process, transmit or receive information in other service sectors, e.g. finance, banking, utilities, health and tourism (Davis & Schaefer, 2003). The ICT sector of Malawi comprised three sub-sectors: Telecommunications, Broadcasting, and Postal services. Organisations in the telecommunications sector include fixed telephone line network operators; mobile phone network operators; Internet service providers and ICT hardware suppliers and repairs services; IT consulting firms; and ICT training providers. The broadcasting organisations include public, private and community radio and television stations. Postal services comprise public and private couriers.

Like many economies in sub-Saharan Africa, the Telecommunications sector in Malawi has undergone reforms (Fink, Mattoo & Rathindran, 2002). Some of the changes in the sector were privatisation and liberalisation. The state-owned main telecommunications provider Malawi Post and Telecommunications Corporation (MPTC) was privatised in 1995. This led to the split of MPTC into: (i) Malawi Telecommunications Limited (MTL) the fixed line telephone operator, and (ii) Malawi Postal Services Cooperation (MPC). MTL was the main fixed-line telephone operator and MPC focuses on postal services. Telecom Networks Malawi (TNM) was established in 1995 as the first 149 mobile phone network operator with government owning about 40% of the shares and Malaysia Telekom owning 60% of the shares (Clarke, Gebreab & Mgombelo, 2003). Airtel Malawi (formally Celtel and Zein) was licensed in 1998 as second mobile phone network operator. Access Limited was licensed in 2010 as a second fixed-line telephone operator. Although other companies have been licensed (GMobile in 2010 and Celcom in 2012), only two Mobile Network Operators (MNOs) are operational (Makoza & Chigona, 2012).

The broadcasting sector has also been transformed. The Malawi Broadcasting Corporation is the main public broadcaster, established in 1964. Its services include radio and television (formerly known as Television Malawi). The broadcasting subsector has also been liberalised which has led to the establishment of many radio and television stations. There are about 33 licensed radio stations and eight licensed television stations. The media houses have different licences such as public, private and community licences (MACRA, 2014). Faith-based organisations, non-governmental organisations and civil society organisations dominate the ownership of private radio

stations. Despite the media houses (about 77) being licensed, there are a high number of media houses (about 45) which are not yet operational (MACRA, 2014). Part of the reason is the high cost of equipment which is usually imported. MPC is the main provider of postal services with infrastructure across the country; it houses some of the telecentres in rural areas (Chikumba, 2011).

Table 5.2: Profile of the Malawi ICT sector (MACRA, 2014; NSO, 2015)

Subsector	Operators	Services	Examples	No. of users/ Coverage
Telecommunications	Fixed telephone line network operators	Fixed telephone lines and leased lines services	MTL	190,977
			Access Limited	36,318
	Mobile phone network operators	Mobile phone services 3.75G & Mobile money payment services	TNM	1,919,599
			Airtel Malawi	2,500,000
Internet Service Providers	Internet services	About 22 licensed	-	
Broadcasting	Public broadcasters	Radio and television	Malawi Broadcasting Corporation	Country-wide
	Private broadcasters	Television	About seven TV and nine radio stations	Country-wide and regional
	Community broadcasters	Radio	About 17 radio stations	Country wide, regional and community
Postal services	Public courier	Mail and parcel delivery	Malawi Postal Corporation	International and national
	Private couriers	Parcel delivery	About 12 licensed couriers	International and national

There has been an increase in the number of licenced private couriers. At the time of this study, there were about 12 couriers which made the domestic courier services more competitive. However, the challenge is that there are also unregistered operators in the sector and that courier services are concentrated in urban centres. The growth of the ICT sector has not been consistent over the past decade (see Figure 5.1). The 28.3% growth in 2003 could be attributed to government commitment in the development of the sector through the introduction of a national ICT policy. The limited growth in the subsequent years could be partly due to changes in government administration where the priorities for development were in agriculture, health, education and trade. The ICT

sector was perceived as a secondary sector that supported the other sectors (Makoza & Chigona, 2012).

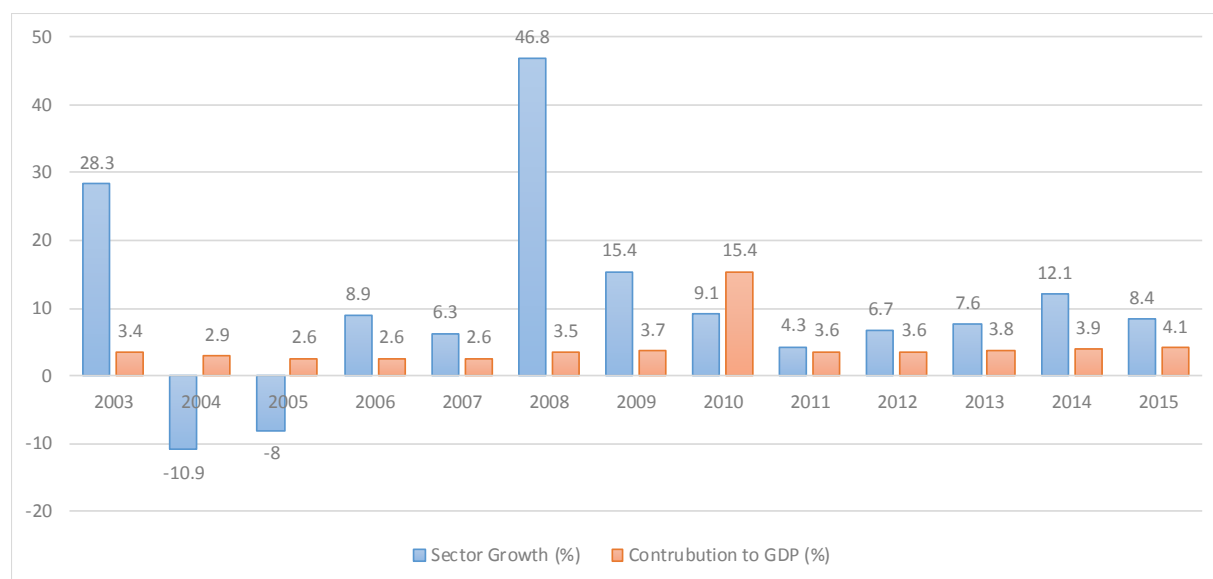


Figure 5.1: Sector growth and contribution of the ICT sector to GDP (RBM, 2016)

The sector resumed growth in 2006, with a growth of 46.8% in 2008; however, the growth decreased in subsequent years. The ICT sector contribution to gross domestic product was the same from 2005 to 2007 and then rose from 3.5% in 2008 to 3.8% in 2010. The relationship between sector development and contribution to Gross domestic Product remains unclear.

5.3 Legal and regulatory frameworks of ICTs

The Communications Act (1998) is the main law used in the sector and addresses issues of registration of telecom operators. The Act supports the implementation activities for national ICT policy. It also provides the mandate for Malawi Communications Regulatory Authority (MACRA) to regulate the telecommunications, postal and broadcasting sub-sectors. The roles of MACRA include issuing telecommunications licences to operators, promoting fair competition among telecommunications operators, protecting consumer interests and ensuring quality of telecommunications services, management of spectrum and promoting universal access through the provision of ICT infrastructure to rural communities (Bande, 2011; Kauka, 2010).

There are a number of legislations which affect the operations of the ICT sector and implementation sector policies. The legislations support addressing operational issues in the ICT sector such as consumer protection; fair pricing of ICT services; corruption; and fraudulent practices and copyright. The legislations have not been updated to address emerging changes. The legal frameworks are not adequate in addressing new

challenges that have emerged with advances in technology. The challenges include information security, data protection, privacy and digital signatures. The government is revising the Communications Act of 1998 and formulating the Electronic Transactions Management Bill of 2012 to address the new challenges in the ICT sector (Bande, 2011). The situation leaves ICT policy implementation that requires legal mandate not being executed. Table 5.3 summarises the pieces of legislation affecting ICT sector.

Table 5.3: Summary of legislations affecting the ICT sector

Legislation	Description	Areas affected
Copyright Act (1989)	Regulating anti-piracy measures and promoting copyright enforcement on literary, drama, musical and artistic work	<ul style="list-style-type: none"> • Software licensing • Copyright and patents for digital content production and distribution • Music and software piracy
Communication Act (1998)	Promoting the regulation of ICT, broadcasting and postal services	<ul style="list-style-type: none"> • Licensing of ICT, Broadcasters, Postal operators • Spectrum management • Consumer protection • Universal access to ICT services
Competition and Fair Trade Act (1998)	Supporting fair competition in providing goods and services	<ul style="list-style-type: none"> • Competitive sector for ICT services • Consumer protection of ICT users
Corrupt Practices Act (2004)	Promoting prevention of corruption in public and private sector organisations and communities	<ul style="list-style-type: none"> • Disclosure of interests for public and regulatory institutions on ICT investment projects and services
Anti-Money Laundering Act (2006)	Preventing financing of serious crimes and terrorist activities; and combating money laundering	<ul style="list-style-type: none"> • Mobile money payments • E-Commerce regulations
National Registration Act (2009)	Compulsory registration of births, deaths and marriages of citizens	<ul style="list-style-type: none"> • National Identification • SIM Card registration
Electronic Transactions Management Bill (2012)	Recognition of digital data and certificates in supporting financial electronic transactions	<ul style="list-style-type: none"> • Data protection • Digital certificates • E-Waste regulations • Cybercrimes

5.4 Public policy development process of Malawi

Policy process may vary according to context and the sequence of policy activities in the process are iterative (see Section 2.3). The Malawi government has a generic process

for developing its public policies to address socio-economic development needs of the country. The process begins with identification of social or economic problems in communities or sectors, and development of a policy agenda follows. The line ministry responsible for the policy develops a concept paper.

The line ministry, with support from the office of the President and Cabinet (Policy Monitoring and Evaluation Unit), reviews the concept paper and conducts impact assessment and consultations with policy stakeholders. A committee of Principal Secretaries reviews the proposed policy document (Cabinet Paper) before it is presented to cabinet. The minister of the line ministry presents the cabinet paper to the cabinet for discussion and approval. The approved policy is then gazetted (GoM, 2002). Figure 5.2 summarises the policy development process of the government of Malawi.

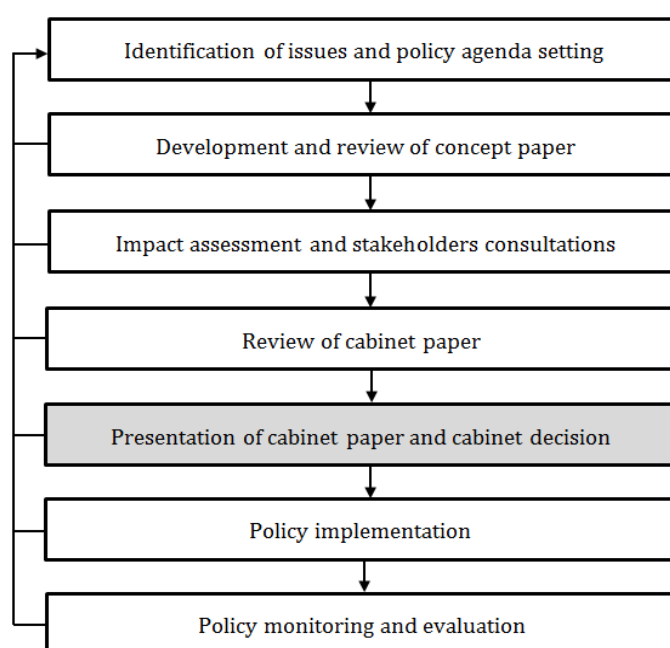


Figure 5.2: Policy development process for government of Malawi

National policies are categorised into (i) policies that do not require backing of a law, and (ii) policies that require laws. The policies that do not require law are implemented through process, programmes and politics soon after the cabinet endorses and adopts the policy. The policies that require backing of a law involve the office of the Attorney-General in formulating the Bill. The Attorney-General publishes the bill and circulates it for 21 days before it is discussed in the National Assembly. The bill is then discussed and passed into a law in Parliament and the State President assents to the approved law. The policy is implemented once the law is passed. The policy is monitored and

evaluated over a period of time to address new challenges in society or the sector (GoM, 2002).

The distinct feature of the policy process for the government of Malawi is the cabinet approval of the policy phase which is different from the models highlighted in the literature (see Figure 2.2). Thus, the policy process may differ based on the specific context in which it is implemented. For the context of Malawi, Cabinet approval of the policy is crucial in the policy process. Policy approval means the commitment of cabinet to the policy in terms of national budget allocations, political will and consideration of existing government policies. If policy is not approved there may be limited activities in translating the policy intentions into policy programmes.

5.5 National ICT policy development process

The national ICT policy development process began in 2001. The government of Malawi appointed the Malawi National ICT policy Committee to oversee the drafting of national ICT policy. The Data Processing Department (now Department of Information Systems and Technology Management Services (DISTMS)) under the Ministry of Finance coordinated the development of the policy. DISTMS was responsible for the national ICT policy formulation and implementation. DISTMS with experts from UNECA under the African Information Society Initiative (AISI) and United Nations Development Programme (UNDP) conducted nation-wide consultative meetings with policy stakeholders. The consultative meetings drew stakeholders from the public sector, private sector organisations, NGOs and academics. The aim of the meetings was to gather input from the stakeholders on the formulation of the national ICT policy.

The National Information and Communication Infrastructure (NICI) formulation process was adopted in the policy development process. The NICI formulation process provides a roadmap for African countries to address challenges related to the information society and globalisation. The framework promotes the integration of ICT strategies in supporting the attainment of national and sector policy objectives. The NICI formulation process has the following components:

- **Framework:** a baseline survey is conducted to identify challenges for information economy and society and how to address the problems
- **Policy:** details on government policy commitment on use and development of ICTs
- **Plans:** details on how the policy commitments are translated into government programmes and initiatives.


The NICI formulation process components were aligned with the policy development process of the government of Malawi. The policy development process was customised to match with the functions of government ministries and departments. The socio-

economic development policies and strategies were also considered in the policy development process.

The Malawi National ICT Policy Committee produced the first draft of the national ICT policy which was presented to the committee of principal secretaries. The policy draft (cabinet paper) was discussed and later submitted to the Office of the President and Cabinet for approval. The Minister of Information (now Ministry of Information and Civic Education) presented the cabinet paper for consideration of approval and adoption by the cabinet. The cabinet decision for approval and adoption of the national ICT policy was recorded and conveyed to stakeholders for implementation. The first policy draft of the national ICT policy was released in 2003.

The national ICT policy development process was iterative. Subsequent versions of the policy were produced after the first draft. The National ICT Working Group (NICTWG) was formed in 2006. It was composed of members from government departments, academia, NGOs, Civil Society Organisations (CSOs), ICT interest groups and members of organisations from the private sector. The main role of NICTWG was to review the national ICT policy draft (2003) and national ICT issues (Kanjo, 2008). The group produced a draft of National ICT for Development Policy which was based on the national ICT policy (2003). In 2008, the NICTWG revised the National ICT for development policy (2006) and the final version of the national ICT policy was released in 2009. In the period during 2011 and 2012, the NICTWG reviewed the final draft of national ICT policy (2009) and the national ICT policy and its implementation plan was approved and adopted by cabinet in August 2013. The national ICT policy development took a long time (see Table 5.4).

Table 5.4: Timeline of national ICT Policy for Malawi

Malawi national ICT policy timeline				
				
2001	2003	2006	2009	2013
Appointment of national ICT Policy Committee	Release of national ICT policy draft	Release of national ICT for Development policy (ICT4D) draft	Release of national ICT Policy final draft	Release of national ICT Policy & implementation plan

A number of economic events shaped the development of the national ICT policy. For example, the government of Malawi signed the SADC ICT Declaration in 2001 that was aimed at accelerating ICT infrastructure development, regulations and harmonisation of policies. The country also participated in the World Summit on Information Society (WSIS) of 2003 and 2005. WSIS emphasised the need for developing ICT infrastructure in low-income economies. In 2006, the country signed the New Partnership for African

Development (NEPAD) ICT broadband infrastructure network protocol which was aimed at supporting the development of ICT infrastructure to support economic activities. Consideration of the protocols, participation in ICT international forums and ICT infrastructure investments influenced government and policy stakeholders to revise and develop the national ICT policy (Makoza & Chigona, 2012).

5.5.1 Political events and national ICT policy development process

Political events in the country shaped the development of the national ICT policy. The country holds presidential and parliamentary elections every five years. Notably, the presidential and parliamentary elections of 2004, 2009 and 2014 coincided with the policy development timeline. Government turnover through the electoral cycles affected the national ICT policy development as each administration had its own development agenda and priorities. This meant that each administration viewed the national ICT policy differently. The policy had to be aligned with government development agendas based on the political party manifesto of the ruling party. Hence, some of the policy goals needed to be revised to fit the development agenda of the government of the day. Table 5.5 summarises government turnover in Malawi.

Table 5.5: Summary of government turnover in Malawi

Period	Sitting President	Development agenda	Policy activities
1994-2004	Dr Bakili Muluzi (United Democratic Party)	Poverty alleviation (Poverty alleviation strategy - 2002)	Adopted the first draft of national ICT Policy in 2003
2004-2012	Professor Bingu Mutharika (Democratic Progressive Party)	Economic growth (MDGS I – 2006 to 2011)	Initiated the national ICT for Development Policy in 2006 Adopted the final draft of national ICT Policy in 2009
2012-2014	Dr Joyce Banda (Peoples' Party)	Economic recovery and economic growth (MGDS II – 2012 to 2016)	Adopted the national ICT Policy in 2013
2014-Present	Professor Peter Mutharika (Democratic Progressive Party)	Economic growth (MGDS II – 2012 to 2016)	Continued the development agenda for the previous DPP government

The period 1994 to 2004 was the first decade of democracy and the main development agenda was poverty alleviation. The first draft of the policy (2003) was produced during that period. The national ICT for Development Policy (2006) was produced during the administration of Professor Bingu Mutharika; this focused on economic growth as its development agenda. The national ICT for Development Policy was revised to the final draft of the national ICT Policy. The administration of Dr Joyce Banda concentrated on

economic recovery and adopted the national ICT Policy (2013). The administration of Professor Peter Mutharika, elected in 2014, continued to implement the economic growth development agenda. Interestingly, all the development agendas have some elements of ICTs.

5.5.2 The national ICT policy document and its key themes

The output of the national ICT Policy process was the final version of national ICT policy (2013) and its implementation plan. The final version of the policy document outlines ten thematic areas. The policy main objective is to support deployment and use of ICTs in accelerating the socio-economic development of the country. The policy addresses the challenges related to the three sub-sectors: telecommunications, broadcasting and postal sub-sector. Telecommunications includes providers of ICT services to other economic sectors e.g. financial services, agriculture, education and health. The key area of focus is ICT infrastructure development to overcome inadequate access to ICTs, the high cost of services and delivery of services. Table 5.6 summarises the themes in the policy.

Table 5.6: Summary of themes in the national ICT policy

Themes	Description
1. Strategic ICT leadership	Promoting leadership that will support the policy process, provide awareness, oversight and political will on ICT issues
2. Human capital development	Supporting skills development using ICTs in areas of health and education
3. E-government services	Providing public services using ICT and enhance oversight functions of government
4. ICT in industries	Supporting growth industries through use of ICT to promote development of goods and services
5. ICT infrastructure	Developing ICT infrastructure to improve access and reduce cost of communication
6. ICT in priority growth sectors	Integrating ICT in agriculture, tourism and mining as sectors that contribute towards economic growth
7. Responsive ICT legal, regulatory and institutional framework	Developing legal instruments to support the use of ICTs and harmonise regulatory frameworks
8. National security	Developing capacity to deal with ICT security issues such as cyber-crimes, digital frauds and terrorism
9. International cooperation	Cooperating with other countries to establish relations and participation in regional and international ICT forums
10. Universal access of ICT and other related services	Developing ICT infrastructure and services to enhance access to ICT for both rural and urban dwellers

The broadcasting sub-sector concentrates on promoting the development of local content and supporting networking for the print and electronic media to address the lack of human capacity and local content. The postal sub-sector focuses on addressing challenges of universal access in rural communities and attempts to support the public postal operator to cover operational costs and improve the postal services.

5.5.3 ICT investment programmes related to national ICT policy

The government of Malawi introduced ICT development interventions with support from international development agencies. The projects are aimed at supporting access to information which may improve decision making for individuals and businesses in social and economic activities (Kauka, 2010). Some of the interventions are Rural Connectivity (Connect a constituency program), Virtual Landing Point, Telecentres in urban and rural areas and Schoolnet Malawi. State-owned enterprises, private sector organisations, NGOs and faith-based organisations (FBOs) invested in ICT infrastructure initiatives which are addressing some of the objectives of the national ICT policy. For instance, ICT infrastructure, ICT in industries and universal access to ICTs. Malawi Switch Centre developed Malawi Link Network (a fibre network linking two commercial cities of Malawi), while Malawi Telecommunications Limited installed a fibre network connection between the three regions of the country. Malawi Electricity Supply Commission of Malawi (ESCOM), the main supplier of electricity in the country, installed a fibre connection on the electricity grid. Table 5.7 summarises the description of the interventions.

Table 5.7: ICT access interventions in Malawi

ICT access intervention	Description	Citation
Schoolnet Malawi	A project providing computers to schools and also providing training and support to ICT teachers	Isaacs, 2007
Rural connectivity	Establishment of internet connectivity centres in rural areas, e.g. Mphepo and Khudze villages in Kasungu and Mwanza districts respectively	Kauka, 2010
Malawi Virtual Landing Point	Regional Communications Infrastructure Program of Malawi Project (RCIPMW) funded by World Bank. Aim of the project is to provide alternative Internet gateway connection to the undersea cables (EASSy).	Kauka, 2010
Telecentres	Establishment of telecentres, some housed in post offices. Examples of telecentres: Balaka, Salima, Karonga, Mulanje and Nkhotakota districts	Chikumba, 2011

Another initiative is the MARLEN project which provides Internet connection for higher education institutions in Malawi. FARM Radio is an example of an NGO that

develops radio programmes for rural farmers, some of which include content on how to use ICTs. The initiatives are specific to the needs of the organisations and communities. Hence, in some cases, the initiatives are not in line with the national ICT Policy but require regulation from government.

5.5.4 Challenges in Malawi national ICT policy development process

Section 2.7 summarised the challenges in the national ICT policy process. Like other African countries, the policy implementation process of Malawi is faced with challenges. Some of the problems that are inhibiting the policy implementation process are limited financial resources leading to over-reliance on donor funding; lack of leadership to guide the policy implementation activities; absence of legal and regulatory frameworks to support ICT initiatives; and lack of political will which affects prioritising of ICT initiatives (Kanjo, 2008). The challenges are similar to those being experienced in other African countries such as Tanzania (Twaakyondo, 2011), South Africa (Mashinini, 2008) and Nigeria (Adeyeye & Iweha, 2005).

5.6 Summary of chapter

The chapter presented the summary of the demographic profile of the Malawi and the nature of the telecommunication sector. The legal and regulatory frameworks affecting the activities of the telecommunication sector were outlined. The process for development of national ICT policy was summarised and it was noted that the national ICT Policy was developed over a long period of time. ICT investment initiatives were outlined to indicate how they were addressing some of the policy objectives of the national ICT policy.

Chapter 6

Research findings

6. Introduction

This chapter presents the results of the analysis of empirical materials. It provides historical context and insights from the policy and presents power relations as key focus for the analysis. Thus, it identifies and highlights the effects of power relations in the recruitment of policy stakeholders, the strategies of stakeholders used in exercising power in policy activities and decision making, and details the outcomes of power relations. The results integrate the concepts of power/knowledge analytical concepts in the narratives of policy implementation activities.

Section 6.1 outlines the discourses in the national ICT policy and the problems the policy attempted to address. To understand the historical and context of the national ICT policy, it was necessary to provide a background on discourses that informed the formulation and implementation of the policy and what the problems that the policy intended to address. This is an extension of the debates on different perspectives on ICT policy and development (Section 2.2) and national ICT development process in the context of Malawi (Section 5.5). Section 6.2 summarises how the policy stakeholders were recruited for policy implementation. Section 6.3 highlights the roles, interests of stakeholders and the institutional settings for policy implementation. Section 6.4 presents the scope of policy implementation activities that were analysed in study. Sections 6.5 highlights power relations in policy programs. Section 6.6 outlines power relations in policy processes. Section 6.7 highlights power relations related to politics. Section 6.8 summarises the key findings of the data analysis. Section 6.9 is the summary of the chapter.

6.1. Problematisation: how and why the national ICT policy?

Problematisation of the policy begins with highlighting the discourses that framed the problems presented in the national ICT Policy and the critique of the assumptions or premise of the solutions presented in the policy. The analysis relied on secondary data because the data supported the historical tracing of concepts, events and practices that gave rise to the conditions that were constituted as problematic. The analysis of problematisation using secondary data was consistent with other studies that have explored problematisation in relation to ICTs and policies (Avgerou & McGrath, 2007; Bacchi, 2009; Bacchi, 2012). The analysis focused on poverty and economic performance discourses because they were key in the national ICT Policy.

Poverty and poor economic performance have been key challenges for the government of Malawi since the 1980s. Locally, poverty was conceptualised as lacking the basic

resources to meet the daily basic needs such as food, clothing and shelter (MPRS-2002). The people living in rural areas were affected most because they depend on subsistence farming and casual labour for their income. In most cases, the rural dwellers lived below poverty line and could not afford ICT services which have become necessary in supporting economic and social activities.

Malawi is landlocked and the country depends on agriculture as the main source of income for the economy. Agriculture supports food security and seasonal employment. In the late 1990s and early 2000, the country faced the problem of economic growth related to poor economic performance in agriculture production caused by severe drought and effects of falling prices of agricultural products at the world markets and other related problems:

“The economy of Malawi has not performed well because of the negative impact brought about by various challenges including those associated with the level of ICT development. As a result, the economy is characterized by high dependence on agricultural sector, low growth rates, coupled with a balance of payment difficulties, poor physical, communications and social infrastructure development and problems associated with heavy debt burdens and huge public and social expenditure budgets” (NICTP-2006)

The government had been exploring alternative economic activities (for example, mining and tourism) to complement agriculture and it proposed using ICT as a catalyst to support productivity and efficiency in the economic sectors. The government of Malawi considered ICT policies and strategies as a means of addressing the situation: *“Without appropriate ICT policies and strategies, the developing countries risk worse socioeconomic status that can be promoted by the digital divide” (NICTP-2003)*. It was assumed that failure to take action could lead to a worsened economic condition where production in the economic sectors will decline.

The government of Malawi subscribed to the modernisation discourses. The discourses formed part of development agendas. The country attempted to emulate some economic activities of advanced economic countries, e.g. market liberalisation, privatisation of government enterprises and focusing on ICT investment. These ideas were highlighted in development strategies of the country, for instance. Vision 2020 of 1998, Poverty Reduction Strategy of 2002 and the Malawi Growth and Development Strategy I of 2006. The Communications Sector Policy of 1998 that also informed the development of the national ICT Policy concentrated on technology investments and liberalisations of the ICT sector to promote participation of private sector organisations. While there was liberalisation of the ICT sector, ICT infrastructure investment was left predominantly to the private sector organisations that focused their services in urban areas. The ICT services concentrated in urban areas because of low demand for services in remote and rural areas that could not meet the return on ICT infrastructure investment. The situation led to high cost of services and most of the rural areas did not

have access to ICT services. The government felt that it was its responsibility to improve the plight of the people living in rural and underserved areas to have access to ICTs and alleviate poverty. Further, there was urgent need to be part of the global economy that was supported by ICTs and avoid being excluded from the global markets.

The presuppositions of the role of ICT to address poverty and improve economic growth, in a way, reflected the development discourses at regional and global levels. The Government of Malawi participated in the global and regional discourses through the ratification of declarations and protocols. Globally, the Millennium Development Goals (MDGs) of 2000 that emphasised on the integration of ICTs to support the attainment of the goals. At regional level, the country signed the SADC ICT protocol of 2001 which emphasised the importance of the catalysing role of ICTs in achieving social and economic development. The national ICT policy solutions were based on modernisation of the economy using ICT as highlighted in the following examples of statements from the versions of the policy documents:

“The contribution will be through the modernization of the economy and society using information and communication technologies as an engine for: accelerated sustainable development and economic growth; social and cultural development; national prosperity; and global competitiveness.” (NICTP-2003)

“In today’s competitive environment it is not possible for any country including Malawi to remain competitive without using ICTs to support and sustain the development process” (NICTP-2006)

“This also means that without the use of ICT it will be extremely difficult for Malawi to develop a vibrant, globally competitive industrial and services sector in the emerging new economic order” (NICTP-2013)

It is noted that the national ICT Policy focused on the thematic areas listed in Table 5.6 as solutions to the problems that were grouped into (i) ICT infrastructure (ICT infrastructure development and responsive ICT legal, regulatory and institutional frameworks), (ii) industries development (ICT in industries and ICT in priority sectors), (iii) human capital (Human capital and Strategic ICT leadership) (iv) governance (E-Government development, International cooperation, universal access and national security). Infrastructure development was related to promoting ICT investment to address high cost of services and urban and rural ICT access divide. Human capacity was about the development of strategic leaders for ICT at national level and addressing the skills shortage in the ICT sector. Industry development was about promoting the adoption of ICT to support business processes activities in the sectors. Governance was related to supporting the use of ICT in the delivery of public services and promoting standards.

It was observed that the proposed policy solutions did not adequately address the

problems of poverty and development. For instance, the ICT infrastructure theme focused on the supply side with limited consideration of sustainability of the public ICT services and solutions to the basic infrastructure required to operate ICTs especially in rural areas. The proposed solutions for human capacity theme ignored the legal mandate of those in ICT leadership and transfer of knowledge in ICT policy programmes from foreign experts to local experts and ICT skills development for the rural dwellers to maintain demand for ICT services. The industry development solutions were silent on ethical, cultural and social issues that might arise from the use of ICTs. The solutions for governance did not outline how the balance in interests between international agencies and local needs will be achieved.

The national ICT policy solutions, in part, had dominant views that focused on meeting external needs (e.g., globalisation and development that emulates advanced economies) and with limited in depth details and articulation of local realities. The discourses around the solutions represent external knowledge about development which became regimes of truth for those in authority and political positions within government structures. Thus, the views that ICT can support addressing poverty and economic performance through modernisation were privileged. It was noted that the views on development and poverty from the regional and international development were taken as given without being questioned to understand their appropriateness in the local context. It appears that government subscribed to the ideas for modernisation while downplaying the local understanding of real needs of the marginalised communities. The government accepted the ideas of modernisation as a means for maintaining good relations with donors to retain access to loans and budget support which are crucial to meet the costs of the delivering public services and implementation of policy programmes.

In summary, the discourses of modernisation, technology, development and economic shaped the problematisation of the national ICT policy. The ten thematic areas presented in the national ICT policy responded to the country's challenges in line with the discourses. The thematic areas in the national ICT policy were categories into ICT infrastructure, human capacity, industry development and governance. The discourses around the four categories were further analysed in relation to recruitment of stakeholders and execution of policy activities.

6.2. Recruitment of stakeholders in the policy implementation

The process for identifying and selecting stakeholders to participate in the implementation of national ICT policy was influenced by the power relations among recruiters and the stakeholders being recruited. Both groups of stakeholders had different capabilities and access to resources that were mobilised to exercise power in the recruitment process. The recruiters used different strategies to decide on the

inclusion of stakeholders in the policy implementation activities. The excluded stakeholders also used strategies to influence their inclusion in the policy implementation activities. This section begins by considering the process of recruitment and roles of the stakeholders.

6.2.1 How the recruitment of stakeholders was done

The E-Government Department was the implementation agency for the national ICT policy in accordance to the Communications Act of 1998. The other roles of the department in the policy implementation included supporting public and private organisations in the adoption of ICTs, coordinating policy activities and preparing the budget for national ICT policy programmes and processes. The department was responsible for recruiting stakeholders for national ICT policy implementation. It identified and selected stakeholders that participated in the execution of policy activities. Although the E-Government Department had the mandate to recruit the stakeholders, there were specific ICT policy activities that were not directly related to the core activities of the department. The department collaborated with other government agencies and international development agencies to recruit stakeholders based on the nature of policy activities. Consequently, there were a broad range of approaches for recruiting stakeholders for the policy implementation. The recruitment of stakeholders were categorised into formal and normalised approaches.

6.2.2 Formal recruitment of stakeholders

The formal recruitment of stakeholders was the processes of identify, selecting and approval of stakeholders that participated in the policy implementation. The government as custodian of the policy were responsible for the recruitment and used their legal mandate to control the process. The key activities in the formal recruitment were identification of stakeholders, selection of stakeholders and inviting stakeholders.

(a) Identification of stakeholders

The first step was identification of potential stakeholders for the policy implementation activities. The E-Government Department used focus groups, interviews and snow-ball techniques to identify stakeholders. The focus groups comprised a small number of officials from E-government department and other ministries and departments (for instance MICE and Ministry of Justice) who brainstormed the interests, influence and potential contributions of the prospective stakeholders. The following excerpt highlights the technique of brainstorming:

“We identify individuals or organisations who are dealing with cybercrimes or cyber related business. We come up with the list and write those institutions that we are developing a cyber-law and that the organisation could serve as experts which will assist us to come up with the law. Then they nominate a person” (INT-3)

The recruiters conducted interviews with potential stakeholders from organisations outside government and in other government departments to check the relevance of their participation in the policy implementation activities. The interviews were both face-to-face and in some cases telephonic. The recruiters ensured that the stakeholders included participants from the ICT sector and those affected by the policy:

“Management conduct meeting with other government ministries and departments, sector organisations and communities that are affected by the policy. From there they select the stakeholders” (INT-41)

“We have no specific criteria for selecting the stakeholders but we interview and invite some of organisations that are affected by the policy” (INT-17).

Snowball was used to identify stakeholders that were active in the ICT sector and that could be affected by the policy. A list of licensed telecommunications operators from MACRA was used to identify and select the potential stakeholders. The list included mobile network operators, radio and television stations and amateur radio operators. The following are examples of statements for snowball approach.

“We look at the sectors players who are interested and their potential and we use the list from the regulator to check the organisations which were licensed” (INT-17)

“We had a meeting and later we were invited, because they [Government] wanted institutions like us [academics] to be involved in the national ICT policy. First, they just called us for a short meeting. I cannot recall which year, but I think it was two years ago and then we received an invitation from the Office of President and Cabinet” (INT-5)

The E-Government Department submitted the list of potential stakeholders to Policy Monitoring and Evaluation Unit (PMEU) in the Office of the President and Cabinet (OPC) for verification. In addition, the PMEU identified stakeholders from various government ministries and departments.

While diverse techniques were used to identify potential stakeholders for the policy implementation, the E-Government Department considered knowledge that was systematically produced to sustain the networks on meaning, and to control and regulate the conduct of potential stakeholders in the ICT sector. Thus, only the knowledge that was considered legitimate and formed part of the regimes of truth was considered in relation to national ICT policy and intended goals. For example, they used information from legitimate sources such as MACRA to identify potential stakeholders. The use of a list of licensed operators from MACRA could be limiting. First, there were other ICT service providers that did not require registration with the regulator, for instance. ICT training providers, software development companies and IT hardware suppliers and support vendors. Second, the list excluded potential stakeholders that could support other themes of the policy (for example, ICT skills

development and governance issues) because it was based on the policy theme for ICT infrastructure.

(b) Selection of stakeholders

The second step was the selection and approval of policy stakeholders. The PMEU played a crucial role in policy activities including approval of policy stakeholders, policy activities and acted as a point of contact with line ministries on policy matters. The unit was important in the public policy process: *“Because these are the custodians of the policy at macro level, at government level [...]”* (INT-16). This meant that the PMEU ensured that all government policies are harmonised, not in conflict with other policies and were in line with the government development agenda.

The PMEU used the interest-influence matrix to verify the stakeholders for a particular policy. Respondents highlighted the documents that were used in verifying the potential policy stakeholders:

“Office of the President and Cabinet have developed guidelines for policy development including selecting stakeholders. It is intended to assist those in leadership and management positions tasked to formulate policies” (INT-39)

“You can meet someone in the Office of the President and Cabinet that can give some documents. There is a document which they are developing which is not yet finalised they call it Executive guide to decision making that is used in the policy process” (INT-16)

The PMEU revised the list of potential stakeholders from the E-Government Department. The list of potential stakeholders was revised based on the interests and influence of the individuals or organisations: they included (a) stakeholders that were to be closely managed and required to be fully engaged and satisfied in the policy activities (b) stakeholders that were to be informed and needed to be satisfied in relation to volume of information (c) stakeholders that were to be monitored to ensure that the stakeholders were adequately informed (d) stakeholders that were to be kept satisfied to through basic communication. In addition, the criteria for inclusion of stakeholders were their potential contribution towards the policy activities, e.g. financial resources and expertise on issues related to the national ICT policy. The selected stakeholders were mainly decision makers in their respective organisations, those who could understand policy issues and make recommendations to government. Hence, the selection of stakeholders for the policy implementation was restricted to stakeholders from formal organisations that were registered with authorities and followed government regulations. The approved list of selected stakeholders was sent back to the E-Government Department.

(c) Inviting stakeholders

The third step in the recruitment process was inviting the selected stakeholders to participate in the policy activities. The E-Government Department sent out invitations to the individuals and organisations that were selected to participate in the policy implementation activities. The invitations were sent via e-mail, memos and telephone calls. In some cases, the PMEU invited the stakeholders to participate in the policy implementation activities.

While the sequence of the formal process of recruiting policy stakeholders appears to be straightforward and impartial, there were potential biases in the activities for identifying and selecting policy stakeholders. The E-Government Department and PMEU exercised power in deciding the stakeholders that were included and excluded from the policy implementation activities. The selection focused on stakeholders that were from formal organisations (that were registered with authorities and followed government regulations) and their potential contribution towards the policy activities. The government officials acted in conformance to the common interest of the government of the day. In this case, their roles in identifying and selecting stakeholders were based on the legal mandate for their departments.

Some stakeholders that were left out in the initial process of identifying and selecting stakeholders demanded their inclusion in the policy implementation. The demanding stakeholders included government agencies and other organisations outside government, for example the local ICT associations. The demanding stakeholders were aware of the policy activities and exercised power in influencing the E-Government Department to be included in the policy implementation activities:

“We imposed ourselves in the national ICT policy process as ICT Association. [...] we heard about the policy and we talked to DISTMS. From that time, we have been invited to attend the meetings for the national ICT policy” (INT-8)

“These decision makers seem to forget us, always we have to knock on their doors. We reminded them that you are really forgetting an institution that should help with development of the policy” (INT-6)

The demanding stakeholders perceived that the policy could affect their activities and the value of their contribution towards policy implementation activities. The E-Government Department included the demanding stakeholders in the policy activities for a number of reasons. These include previous engagement of the demanding stakeholders, lack of human capacity in the implementation agencies and government drive for promoting participation.

First, the government departments including E-Government Department and OPC had engaged some of these stakeholders in the development of national development strategies, such as Vision 2020, the Poverty Reduction Strategy of 2002 and the Malawi

Growth and Development Strategy I of 2006. For instance, the local ICT Association participated in ICT sector activities where the members of the association interacted with government officials:

“We also organised World ICT day and participated in several international conferences in Tanzania also hosted one international conference. We also have annual meeting and boot camps” (INT-8)

“We interact with government concerning issues of ICT in the sector, we contact the Principle Secretary [of E-Government Department] who influence government to take action” (INT-2)

There was contact between demanding stakeholders and government officials in other ICT sector activities before recruitment of stakeholders for policy implementation. The demanding stakeholders demonstrated the capabilities in their previous engagement in other policy activities and interactions in sector activities.

Second, the implementation agencies were facing challenges in human capacity where there were a number of unfilled positions in the departments because of staff turnover:

“[...] the problem in terms of human resources and qualified staff. There are still some gaps and in the public sector it is also the issue of numbers because we do not attract qualified staff especially in civil service. I think may be our package, there are some attractive packages out there. We may have a member of staff today, tomorrow they may go” (INT-21)

Some of the staff had left the implementation agencies to work in the private sector and outside the country. To an extent, the government benefited from the skills of stakeholders from the private sector to address part of the problem of inadequate skills.

Third, part of government agenda was to promote participation of private sector and stakeholders affected by the policy. Participation of stakeholders was emphasised in the Communications Act of 1998 and Communications sector policy of 1998 which informed the development of national ICT policy. Participation was promoted to support governance where government perceived the need to open the decision-making space to include those who are affected by public policies, including the national ICT policy:

“In a democracy, such consultations are of fundamental importance [...] to ensure that the policy enjoys the widest possible support of, and acceptance by the people and stakeholders on whom it is envisaged will make an appropriate impact” (CA-1998)

“We interact with other stakeholders in the policy implementation because they provide advice on options for implementing policy objectives. Their participation is considered in relation to the impact of the policy on other areas of the government and the mandates and activities of the ministries” (INT-41)

Specific to policy implementation, participation of stakeholders was considered because it supported in obtaining feedback from those affected by the policy activities. Thus, the participation of stakeholders was highly valued and formed part of the discourses for the ICT policy implementation.

6.2.3 Normalised recruitment of stakeholders

Other approaches to recruitment of stakeholders were embedded or normalised in the government procedures and processes. The normalised approaches meant recruitment processes through the practices that were routinely incorporated in the work of government departments and other organisations that formed part of the policy stakeholders. These approaches included appointment of stakeholders and recruitment of stakeholders through compliance.

(a) Appointment of stakeholders

According to the Constitution of Malawi, the President appoints members of the Cabinet; members of the Cabinet are usually also elected members of Parliament from the ruling party. In some cases, a member of the Opposition parties can be appointed in the Cabinet. Some of members of the Cabinet belonged to the Cabinet Committee on Media and Communications (CCMC), which was responsible for leading on issues related to ICT policy and telecommunications. The minister of MICE chaired the CCMC.

The President had also the mandate to appoint board members of statutory corporations. Statutory corporations were public organisations that were established through an Act of Parliament to provide services to other sectors and the general public. The Human Resources Department and OPC conducted part of the recruitment process where a proposed list of names for the potential board members was identified. The list was based on professional background of the potential board members:

“In normal circumstances OPC with department of Human Resources Department would identify people in various sectors based on their professional background and experience. The people are requested to submit their curriculum vitae to OPC” (INT-38)

In some cases, the potential board members were requested to submit their curriculum vitae to OPC which submit the documents to the President through the Secretary to the Cabinet. The appointed board members were provided an orientation training program. Apart from appointed board of directors, the composition board of directors for the statutory corporations included ex-officials from the line ministries in the government. The Communications Act of 1998 suggested the composition of the board of director and inclusion of senior officials from government departments: *“The Authority shall consist of a Chairman and other six members appointed [...] the following members ex officio (i) the Secretary to the OPC (ii) the Secretary for MICE” (CA-1998).*

Some of the statutory corporations relevant to the ICT policy implementation are listed in Table 6.1. The statutory corporations in a way are linked to the ICT sector and influenced the activities of the policy and the stakeholders. The statutory corporations supplied services including network infrastructure, the supply of electricity, broadcasting services, promoting fair competition, consumer protection and regulating the sector. These services provided by the statutory corporations were significant because they addressed part of the national ICT policy goals. For example, ICT infrastructure investment and regulation of the ICT sector.

Table 6.1: Examples of statutory corporations and their services in the ICT sector

Statutory corporation	Services to ICT sector	Source
Malawi Electricity Supply Commission (ESCOM)	Supplier of electricity and voice and data connectivity	INT-26
Malawi Postal Services Corporation (MPC)	Postal services and housing telecentres	INT-27
Malawi Broadcasting Corporation (MBC)	Public broadcaster for television and radio	INT-32
Malawi Communications and Regulatory Authority (MACRA)	Telecommunications regulator	INT-24
The Competition and Fair Trading Commission	Promoting fair trading and consumer protection	INT-9
Copyright Association of Malawi (COSOMA)	Copyright of production, broadcasting and sound recordings	INT-28, INT-29

The inclusion of appointed board members and ex-officials from line ministries in a way reinforced gatekeeping of government interests and influence on the activities of the statutory corporations in private sector of Malawi and ICT sector in particular. The presence of political appointees and government officials on the boards of directors compromised the independence and autonomy of the statutory corporations. The government indirectly retained control for influencing the operations of the statutory corporations. The autonomy of such institutions would ensure transparency and accountability in the organisations and the ICT sector.

The Media and Communications Committee (MCC) of Parliament was another organisation that recruited politicians into the national ICT policy activities through the normalised approach. The committee was crucial in policy oversight for the national ICT policy. The committee comprised elected members of Parliament who were appointed by political parties represented in Parliament. The composition of the committee was based on the proportion of the representation for the political parties in the National Assembly. For instance, a political party with the largest number of

members in the National Assembly would have more members in the MCC. The criterion for selection of the potential members of MCC was professional background related to some of the functions of the committee:

"[...] members are selected based on their interests and professional background. At times also because of they come from political parties, political issues may come into play when it comes to their membership" (INT-31)

Although one of the criteria for selection of the members was professional background, not all the recruited members of the committee had a professional background for media and ICT policies. The situation could have created issues of capacity in some of the oversight roles of the committee related to ICT policy.

The process excluded political parties that were not represented in Parliament. Only the politicians whose political parties were represented in Parliament were recruited and engaged in the ICT policy oversight. Thus, the participation of politicians in ICT policy implementation favoured political parties that were in Parliament and especially the big parties. The politicians that were not Members of Parliament had limited opportunities of influencing national ICT policy implementation activities. Table 6.2 summarises themes related to the appointment of politicians and the board of directors in the organisations that had influence in the national ICT policy.

Table 6.2: Example of approaches for appointing policy stakeholders

Approach	Description	Examples of statements
Cabinet appointment	The State President appoint members of Cabinet	<i>"There shall be a Cabinet consisting of the President, the First-Vice President, the Second Vice-President and such Minister and Deputy Minister as may, from time to time, be appointed by the President "</i> (COM-1998)
Appointment of board of directors for statutory corporation	The President appointing board of directors for statutory corporations	<i>"The President shall appoint the members of the Board of the Authority from a list of not less than three and not more than five names submitted to the President by the Public Appointments Committee"</i> (CA-1998)
		<i>"The board of the directors are for MBC are recruited by the head of state according to the Communications Act [...]"</i> (INT-32)
Appointment of parliament committee members	Political parties in National Assembly nominating representatives in the parliamentary committees	<i>"With regard to MCC which is a departmental committee, for the members they have to be selected in the committee. First they need to belong to a political party and the political party will submit a name to the business committee which selects and approves the members to belong to a particular committee"</i> (INT-31)
		<i>"Parties represented in the National Assembly shall designate, through the Whips, to the Business Committee members of their parties for membership to Committees"</i> (SO-2003)

(b) Recruitment of stakeholders through compliance to policy support

Another approach for the recruitment of stakeholders was engaging stakeholders as part of meeting requirements of donor funded programmes or loans from international financing agencies. The government benefited from AISI funded by UNECA. Policy experts were engaged to support the local technical committee that was developing the ICT policy: “[...] we have been having consultants at particular points to support the policy activities; I recall we had a consultant hired by UNECA” (INT-20). The policy experts supported the technical committee in the development of national ICT policy using the NICI framework and other policy programmes.

The government could not fund some of the policy implementation programmes e.g. ICT infrastructure investment. Part of the solution was to seek support from donor agencies and obtain loans from the international development and financing agencies. However, part of the conditions for the support was to recruit and include stakeholders to mitigate risks of programme failure:

“The Recipient [Government of Malawi] shall carry out the project in accordance with the arrangements, procedures and guidelines set out in the project implementation manual [...]. The recipient shall ensure that the Privatization Commission is maintained at all times during the implementation of the project” (RCIPMW-2009).

“The Privatization Commission comes under the oversight of Ministry of Finance but is an autonomous body with an independent Commission. As this project is designed around a Public Private Partnership model, Privatization Commission has been formally appointed by the Government to implement the project. In doing so, it will work closely with the other agencies of Government, including MICE and MACRA” (RCIPMW-2009)

The statements implied that government was required to engage certain organisations as part of the conditions for the project support. The arrangement led to the inclusion of experts, private sector organisations and strategic government departments (for example, Ministry of Finance and Economic Planning that was responsible planning and management of government resources) in the policy implementation activities:

“We are working with the World Bank, the United nations and Danish government. [...] But you know these donors, they have their own conditions, so that they want to have a consultant, their own. They want to engage their own consultant.” (INT-20)

The government had limited choices in the terms of the conditions set by the donors and recruited and engaged stakeholders that were prescribed in the conditions for the financial and technical support for the policy programmes. Thus, donors exercised their power over government in imposing the stakeholders to be engaged in the policy implementation activities.

6.2.4 Summarising the stakeholder's recruitment process

In summary, the recruitment of stakeholders for policy implementation employed a wide range of approaches which can be categories into formal and normalised recruitment of stakeholders. The formal recruitment included steps that respondents acknowledge to be widely used in the government departments. Further, formal recruitment applied different approaches for identifying stakeholders including snowball, interviews and focus groups. The key steps in formal recruitment of stakeholders can be summarised as follows:

- **Identifying stakeholders:** Establishing policy stakeholders that could participate in the policy implementation activities through interviews, focus groups and snowball
- **Selecting stakeholders:** Choosing policy stakeholders that had the potential to contribute towards the policy implementation activities; and verifying stakeholders to assess their suitability for participating in the policy implementation activities
- **Inviting stakeholders:** Relate to notifying the selected stakeholders to participate in policy activities including meetings, collaborations and partnerships
- **Engaging the stakeholders:** Was the process where recruited policy stakeholders influenced the decision and activities for policy implementation activities to address policy goals.

The normalised recruitment of stakeholders were approaches that were not widely acknowledged among the recruiters and had become part of the processes and procedure for government agencies and external organisation engaged in government activities. The normalised recruitment of stakeholders include the appointment of cabinet members, appointment of statutory corporation and appointment of members of parliamentary committee for Media and Communications. In addition, there were also demanding stakeholders, programme requirements. The demanding stakeholders used pressure to influence their inclusion in the policy implementation process. The government also engaged stakeholders in policy programmes as part of the compliance to the conditions of support and loans obtained from international development and finance organisations. The E-Government Department coordinated the activities of the policy implementation which included meetings, programme execution, profiling sector activities, awareness programmes, budgeting, capacity building and consultative meetings. Before discussing the policy implementation activities in detail, it was necessary to highlight the stakeholders that were recruited and their roles in the policy implementation activities.

6.2.5 Recruited stakeholders for policy implementation

A preliminary analysis of secondary data outlined in Section 4.4.5 led to the list of some of the participants for national ICT policy implementation. However, the researcher

confirmed the list of the stakeholders with the respondents during the interviews. The respondents suggested additional stakeholders and highlighted their roles in the policy implementation. The data was analysed to establish the recruited stakeholders and their roles. Members from the following groups of stakeholders were recruited for the policy implementation activities: academia, consumers, government departments, ICT sector organisations, donors, law enforcement agencies, politicians, private sector organisations, the media, rural communities, investors, regulators, legal institutions and telecom operators. Table 6.3 summarises the groups of stakeholders of the national ICT policy and their interests.

Table 6.3: Summary of the groups of the national ICT policy stakeholders

Category	Description	Examples	Interests in policy
Academia	Public or privately funded higher education and research institutions	Universities, colleges, training Institutions and Research organisations	ICT access and use in teaching and learning
Consumers	Private and personal users of ICTs	Home users of ICT, consumers associations	Consumer protection
Government departments	Ministries, departments and divisions for Malawi government	OPC, Ministry of Justice, MICE, Department of E-Government	Delivery of public services using ICT
ICT sector organisations	Private sector organisations that provides ICT services to other sectors	ICT hardware and software companies and ICT training companies	Infrastructure to provide services and fair competition in the ICT sector
Donors	International aid and development agencies	World Bank, UNDP, UNECA & ITU	Supporting socioeconomic development
Law enforcement agencies	Public organisations for maintaining security	Malawi Police Service & Malawi Defence Force	Access to information for maintaining security
Politicians	Members of Parliament and political parties	Parliamentary Media Committee, ministers, political parties	Consumer protection and national development
Private sector	Private organisations using ICT in their operations	Tourism, mining, agriculture and Financial services	ICT access and affordable services
The media	Print and electronic media institutions	Radio stations, TV stations and print media companies	Reporting on ICT issues to promote public awareness
Rural communities	People living in remote areas with limited public services	Farmers, the youth, women and the elderly	Access to ICT to improve their wellbeing

Category	Description	Examples	Interests in policy
Investors	People or organisations willing to put money into ICT schemes in return for profit	Private companies and Individuals	Collaboration with government in providing ICT infrastructure
Regulators	Enforcing laws and standards for ICT services	MACRA and Malawi Bureau of Standards	Promoting standards in the ICT sector
Legal institutions	Organisations responsible for reforms and conducting judicial cases	Ministry of Justice, High Court, Malawi Law Commission and Industrial Court	Promoting the rule of law and human rights
Telecom operators	Organisations providing ICT access to other business organisations and communities	Mobile network operators, fixed-telephone operators and Internet service providers	Collaboration in infrastructure development to maximize profits and fair competition in the sector

The interests of academia in the policy were to support skills development, research and implementation of ICT projects. Consumers' protection organisations presented interests the consumers that included ICT users for personal and business purposes. Their interests were to promote the rights of consumers. The government departments include ministries, departments and divisions which offer services to the private sector and citizens. Their interests were to develop capacity and use ICT in the delivery of public services. ICT sector organisations provided ICT services to other sectors of the economy. The organisations included software houses, hardware suppliers and repair services companies, networks installation and private ICT training providers.

Donors were international development agencies that provided resources (finance, information and experts) used in the ICT policy implementation activities and supported harmonisation of the national ICT policy to the regional and global development agendas. The law enforcement agencies were public organisations that had the legal mandate to enforce law and order and promote the rights of citizens. Their interests in the policy were to support delivery of services and promoting fair use of ICT for individuals and in organisations. The politicians were members of political parties who represented the interests of their electorate in Parliament. Some of the politicians were also being selected to be members of the Cabinet and head the government ministries.

The private sector organisations operated in the different sectors such as finance, mining, tourism, agriculture, transport and services and had interests in ICT. Their aim

was to provide services in return for profit and they used ICT to support productivity. The media were organisations that provide information to the general public using radio, television, internet and print press. The rural communities include the youth, men and women living in remote areas that had limited infrastructure such as road networks, access to utilities such as water and electricity, services like banking and public services (for example, schools and hospitals). Their main activities were subsistence farming and casual labour and the sale of agricultural produce for their household income. The investors were foreign and private organisations that provide capital in ICT projects with the aim of generating a return from their investment. Regulatory organisations were responsible for ensuring standards, procedures and protection of consumers. They also mediated disputes among the organisations that they regulated in the sector. The legal institutions supported the formulation of laws, promoted the protection of human rights and administered court cases related to application and use of ICTs. The telecom operators were private organisations that provide infrastructure for telecommunications and connectivity services including the Internet, fixed landlines, broadband and mobile telecommunication services.

The stakeholders outlined in Table 6.3 shows diversity of participants that were recruited in the policy implementation. However, some of the groups of stakeholders were excluded in the policy implementation. These included representatives of rural communities including village Chiefs, members of development committees, representatives of farmers' associations, rural women, the youth and people with special needs (such as, the blind and the deaf). In the context of Malawi, the village Chiefs act with authority in their communities and play a significant role in awareness of development and social programmes. Other excluded groups were civil society organisations and politicians from political parties not represented in Parliament. Civil societies that work with vulnerable groups were not fully engaged in the policy implementation despite the policy declarations indicating that the organisations formed part of the policy stakeholders. Some of the politicians were excluded in the policy implementation because the composition of MCC was based on representation of parties in Parliament:

"The selection into the committee is on proportional basis according to the political party affiliation. The political party which has the highest number of members of parliament will have the highest number of members in the committee but on proportional basis" (INT-31)

One of the reasons for the exclusion of some groups' stakeholders could be that recruitment processes focused on the organisations that could provide resources (e.g., finance, expertise, information and contacts) as summed up in this statement: *"in a resource challenge environment, such Malawi, donors or development partners are also key players in any Government activity"* (ISPGM-2007). This meant that stakeholders with resources were prioritised in the recruitment over those with limited resources.

However, there was a need to also consider the excluded groups because their input in ideas for policy implementation activities could have been significant in the understanding of the contextual issues.

6.2.6 Power relations in recruitment of stakeholders

Power relations are demonstrated in the decisions of government departments in recruitment process. The officials drew on their legal and institutional roles to decide on inclusion or exclusion of stakeholders. The concept of discourse can be used explain power relations in the findings. Discourse shaped the ways of thinking and acting of the recruiter of stakeholders for policy implementation. The E-Government Department participated in the discourses for ICT infrastructure, development and human capacity. The department officials used their knowledge to exercise power in selecting stakeholders who had the potential to contribute to policy implementation activities. The strategy of power over stakeholders can be noted where E-Government Department used its legal mandate to exercise power over other stakeholders in identifying and selecting the stakeholders.

However, the exercise of power was not absolute but relational where power circulated between the E-Government Department and some of the stakeholders e.g. demanding stakeholders that were excluded in the initial recruitment. These stakeholders mobilised resources including information, contacts and knowledge to influence the officials to consider their inclusion in the policy activities. The concept of technologies of the self can explain part of exercise of power for the demanding stakeholders where there was self-realisation that the policy activities could affect their activities in their organisations and the ICT sector. The demanding stakeholders contested the recruitment process to influence government for their inclusion in the policy implementation.

While the appointment of the board of directors in statutory corporations and mandatory inclusion of stakeholders in the donor-funded ICT investment programmes may appear to be partial, power relations were inherent in these approaches of recruiting policy stakeholders. The appointment of the board members for the statutory corporations was used as a means to access material resources, gatekeeping and a means for blame avoidance. The government recruited politically affiliated elite and political party members that were loyal to the ruling political party but failed to be elected as Members of Parliament:

“Appointment of the board members of statutory corporations has been used by the incumbent governments for political reasons. Members of the ruling party who are loyal to the party or support the party financially are usually rewarded by being appointed a board member of a statutory cooperation” (INT-40)

Moreover, the statutory corporations were being used to support a political party's functions of the government (for example, providing transport, cash and other

materials). The administration maintained access to resources and nominated board members that would support such activities. The members of society who criticised the government on sector issues and other social problems were also appointed as board members of statutory corporations that were underperforming or not related to their professional background. This approach served to silence them. Politicians that were not represented in the National Assembly and the MCC were also excluded from participating in the policy implementation activities, especially in the areas related to policy oversight.

6.2.7 Outcomes of power relations in the recruitment of stakeholders

The outcomes for power relations among stakeholders in the recruitment process were the inclusion of stakeholders that were perceived to have resources that could support the policy activities. Drawing from the Foucauldian concept of discourse, the stakeholders that were initially recruited were those that supported and participated in the modernisation discourse. The key focus on modernisation was on technology, expansion of ICT market through privatisation and liberalisation. Hence, the recruited stakeholders were mainly the elite who could support the government development agenda that was premised in modernisation. Although the government had power to decide on the inclusion and exclusion of stakeholders, the power was not absolute. Some of the excluded stakeholders also exercised their power through a number of strategies. First, the excluded stakeholders mobilised their resources (contact, information, knowledge) to persuade the government to be recruited for the policy implementation activities; second, technologies of self where some of demanding stakeholders maintained practices that supported the awareness of the activities in the ICT sector and maintained contacts with those in government:

"I have been involved in the national ICT policy for the last 15 years. Since I was in the first year at University. I developed interest in ICT and have been closely observing the developments in the ICT sector. When I left University of Malawi. I continued to work in the ICT sector and participated in the activities of ICT Association of Malawi" (INT-02)

The statement demonstrates the practices of the demanding stakeholders that supported them to position themselves as suitable participants for the policy implementation. The demanding stakeholders transformed their ways of being through the exercise of power over themselves and over other policy stakeholders.

Another outcome of recruitment was the inclusion of demanding stakeholders that were from outside the government, for instance donors with resources. The donors mobilised resources to exercise power over government and influenced their inclusion in national ICT policy programmes. The stakeholders with the resources were also in positions that created knowledge that was privileged when exercising their power in the recruitment process.

6.3. The roles of the policy stakeholders in policy implementation

The capacity or ability of stakeholders to perform their roles is influenced by a number of factors including legitimacy and authority. In addition, power relations can affect the way stakeholders perform their roles in policy implementation activities through enabling or constraining what the stakeholders can do. The policy stakeholders mobilised different resources to perform their roles in the policy implementation. There were differences in the capabilities of stakeholders to mobilise resources and influence the policy implementation activities. Hence, some stakeholders dominated the policy implementation while other stakeholders were marginalised.

6.3.1 The categories of the stakeholders

The study considered the roles of stakeholders outlined in literature (Section 2.5.3) and the roles that emerged from secondary data. The roles of the stakeholders were compared to the themes emerging from the interview data. The roles of stakeholders were categorised into providers, supporters, experts, implementers, coordinators, decision makers, regulators and those affected. The providers supplied resources for the policy implementation activities such as finance, human capacity, information and knowledge. The supporters endorsed the ideas of the need to conduct activities that were necessary to develop the ICT sector. The experts were individuals or organisations with high-level knowledge in ICT areas that were engaged to provide services related to ICT policy implementation activities. The implementers were government departments and other institutions that were tasked to conduct policy process and programmes that addressed the ICT policy goals. The coordinators were government departments responsible for ensuring that policy programmes and processes were not redundant and coherent to minimise fragmentation and wastage of resources. The decision makers had control over allocation of resources and directing the course of actions for policy implementation activities to achieve policy goals. Regulators were tasked with enforcing standards and laws in the application and use of ICT in the sector. The regulators generated guidelines and controls to ensure protection of consumers and interests of the ICT sector organisations. The affected were individuals and organisation that would benefit from the implementation of the policy and achievement of policy goals. Table 6.4 provides examples of statements of the roles of the stakeholders.

Table 6.4: Summary of categories of stakeholders in policy implementation

Roles	Category	Examples of statements on roles of stakeholders
Providers	Government departments	<i>"[...] several of them, Malawi Government itself was financing the activities, one time we had the technical committee so funding was going through the committee. United Nations Development Programme was financing some of the activities" (INT-20)</i>
	ICT sector	<i>"[...] to come to a PPP model all components of the project have been done and the private investor was identified through normal procurement, transparent procurement systems" (INT-22)</i>
	Donors	<i>"So I have responded to identification [of RCIPMW], so the initial financing of US\$20 million can come from the World Bank and also Malawi Government" (INT-22)</i>
Supporters	ICT sector	<i>"The main role of the IT Association of Malawi is to align the interests of government, industry and academia" (INT-8)</i>
	Politicians	<i>"The mandate of the Cabinet Committee on Media and Communications should be enhanced to include provision of ICT strategic direction and oversight for Malawi's ICT sector and ensure that ICT is integrated in national development" (NICTP-2013)</i>
	Media	<i>"The programmes involve and tackle development, what the government is doing because we are a mouth piece of government as a public broadcaster and our biggest customer in the government of Malawi. We are there to entertain, educate and inform the public on what they are supposed to know in the democratic society in which we are" (INT-32)</i>
Experts	Academia	<i>"We have done more [...] we supported the consultants, we attended all the consultative meetings, we initiated the writing of the strategic plan [Master plan] [...] recently we were contacted by PPPCM to carryout consultancy work on monitoring and evaluation of the RCIPMW" (INT-25)</i>
	Donors	<i>"[...] the role of UNECA in the ICT policy development and implementation process, that actually has been the main objective in one of its programmes. It has spearheaded the ICT policy development process in many of the countries." (INT-43)</i>
Implementers	Government departments	<i>"[...] that time it was under MICE. [...] the title that MICE got was owner/sponsor of the project and record of borrower is Ministry of Finance." (INT-26)</i>
	Academia	<i>"We are also collaborating with Chancellor College [University of Malawi] on the Television White Spaces Project, which has been tested and implemented at one secondary school" (INT-24)</i>
	Law enforcement agencies	<i>"But as Malawi Police Service which deal with law enforcement and it has a unit which deals with cybercrime" (INT-12)</i>
	Private sector organisations	<i>"PPPCM was given the role of the agent or moderator because the others were the implementers hence there is what we call public interest" (INT-26)</i>

Table 6.4 (Continued)		
Roles	Category	Examples of statements on roles of stakeholders
Coordinators	Government departments	<i>"The E-Government Department is charged with responsibility of accelerating a robust ICT development and utilization in Malawi [...] to coordinate all national ICT programmes to ensure their linkage with national priorities"</i> (NICTP-2013)
Decision makers	Government departments	<i>"MICE who will submit to the Cabinet and from there it will be presented to Parliament for approval into a law"</i> (INT-12)
		<i>"As a regulator we feel we have contributed to the development of the policy draft and waiting for the ministry [MICE] to do necessary approvals and get through the normal government channels"</i> (INT-24)
	Politicians	<i>"Cabinet decision on approval of all significant policy proposal represent a significant or strategically important policy commitment and involve extra-budgetary expenditure that will impact on the government budget"</i> (INT-41)
Regulators	Regulatory organisations	<i>"The Fair Trading Commission has to do with [...], others have taken fair trading in terms of competition but fair trading is actually consumer protection"</i> (INT-09)
		<i>"The capacity of MACRA shall be enhanced to effectively discharge current and additional mandate as a regulatory body on ICTs"</i> (NICTP-2013)
Affected	Rural communities	<i>"Community ICT Committees or Clubs shall be established in communities with responsibility to determine utilization of ICT in demanding and accessing services from relevant authorities; and will contribute towards identification of the needs for ICT centres"</i> (NICTP-2013)

Some of the stakeholders performed multiple roles based on their abilities, knowledge and structural arrangements related to the implementation of the policy. Abilities of the stakeholders were related to the mandate of the positions they occupied within the hierarchies of government. For example, MICE was the line ministry for media and telecommunications. The ministry was involved in projects with the media institutions and was also engaged in the licensing process of telecommunications operators done by MACRA. These roles were based on the mandate from the Communications Act of 1998.

Knowledge of the stakeholders in particular policy domain also influenced the roles that they performed in the policy implementation activities. The E-Government Department as a policy implementation agency did not have the expertise in

formulating ICT-related legislations. The government engaged legal experts in law reforms related to ICT as part of the policy implementation activities:

“At the moment we are reviewing the Communications Act and the Electronic Transactions Management Bill in collaboration with Ministry of Justice and MACRA. It is a World Bank funded project. The World Bank has given money to PPPCM. The PPPCM has engaged MACRA and Ministry of Justice and requested Malawi Law Commission to assist” (INT-3)

This statement points out that a number of institutions specialising in law formulation and reforms were engaged in the policy implementation to apply their special knowledge in the policy implementation activities. The institutions were from government, outside the government and international development agencies. This points to the diversity of interests in the policy activities.

The structural arrangements of the policy implementation activities and functions or processes directly or indirectly affected the stakeholders. For instance, stakeholders with resources e.g. donors were recruited to act as sponsors of policy activities. Stakeholders who were outside government structures and who did not have the legal mandate could not decide on the priorities of the policy implementation activities. In some cases, stakeholders supported or resisted the policy programmes and processes that affected their interests. Considering these points, the study compared the roles of the stakeholders in the different categories (see Table 6.5).

Table 6.5: Categories and multiple roles of the stakeholders

Stakeholders categories	Roles of the stakeholders							
	Providers	Supporters	Experts	Implementers	Coordinators	Decision makers	Regulators	Affected
Academia			✓	✓				
Consumers								✓
Government departments	✓			✓	✓	✓		
ICT sector organisations	✓	✓		✓				
Donors	✓		✓	✓		✓		
Law enforcement agencies				✓				
Politicians		✓				✓		
Private sector	✓	✓		✓				
The media		✓						
Rural communities								✓
Investors	✓			✓				
Regulators				✓			✓	
Legal institutions				✓				
Telecom operators	✓			✓				

Members of the academia were engaged in policy implementation as experts in development of the legal framework and they also collaborated with MACRA in infrastructure development projects such as the Television White Spaces Project. Similarly, ICT sector organisations provided their services to government in policy implementation activities. For example, a telecom and consulting firm was engaged to development of ICT index measures, conducting feasibility studies and evaluation of policy implementation programmes. However, some of stakeholders perceived that it was problematic for some organisations to be performing multiple roles:

“MACRA is the regulator for telecommunications and also the implementer of telecenters, thus the duo role of MACRA as a regulator and policy implementer” (INT-17)

The concerns of the stakeholders were mainly issues for accountability and emphasised the need for the regulator to focus on core activities. One respondent commented that:

“Have you heard about telecentres? Who is championing them? The regulator! Is that a health situation? [...] now should telecentres go wrong, who is going to be responsible? MACRA is involved in a wrong business. [...] telecentres should be left to those who can manage telecentres, MACRA is not there to run business.” (INT-18)

The government departments were responsible for allocating resources for policy programmes and processes through the budget formulation process and execution of the planned policy activities. For instance, the E-Government Department was responsible for preparing budget-related policy implementation activities. The government also controlled the policy activities in deciding the priorities for the policy activities through the Cabinet and the MCC of Parliament. The private sector organisations invested in projects that were addressing some of the policy objectives, for instance, ICT infrastructure investment for private networks that supported the implementation of government projects for connectivity. The roles of the private sector in such situations were providers of resources, supporters of policy activities and implementers.

6.3.2 The institutional settings of national ICT policy

The institutional settings for the ICT policy implementation was premised in the structures of government according to the context of Malawi where government administration was composed of the executive, legislature and judiciary. The executive comprised the Cabinet, government ministries and departments that administered the provision of public services to organisations and the citizens, as summed up in the objectives of the public services: *“To deliver quality services to the republic in an efficient, effective and responsive manner in order to satisfy national aspirations and promote the advancement of the people of Malawi” (MPSC-2012)*. The executive was responsible for decision making, allocation of resources to policy processes and programmes, prioritising policy activities and coordinating the execution of policy activities. The

legislature consisted of elected Members of Parliament and were responsible for the formulation of ICT-related laws and oversight of the implementation of the ICT policy through the MCC. The judiciary comprised courts and legal institutions were responsible for supporting formulations of ICT-related laws. The courts included the High court and the Industrial relations court and their main roles were to administer and decide on court cases from the ICT sectors that were related to regulations and application of ICTs. Figure 6.1 summarises the institutional setting of the national ICT policy of Malawi.

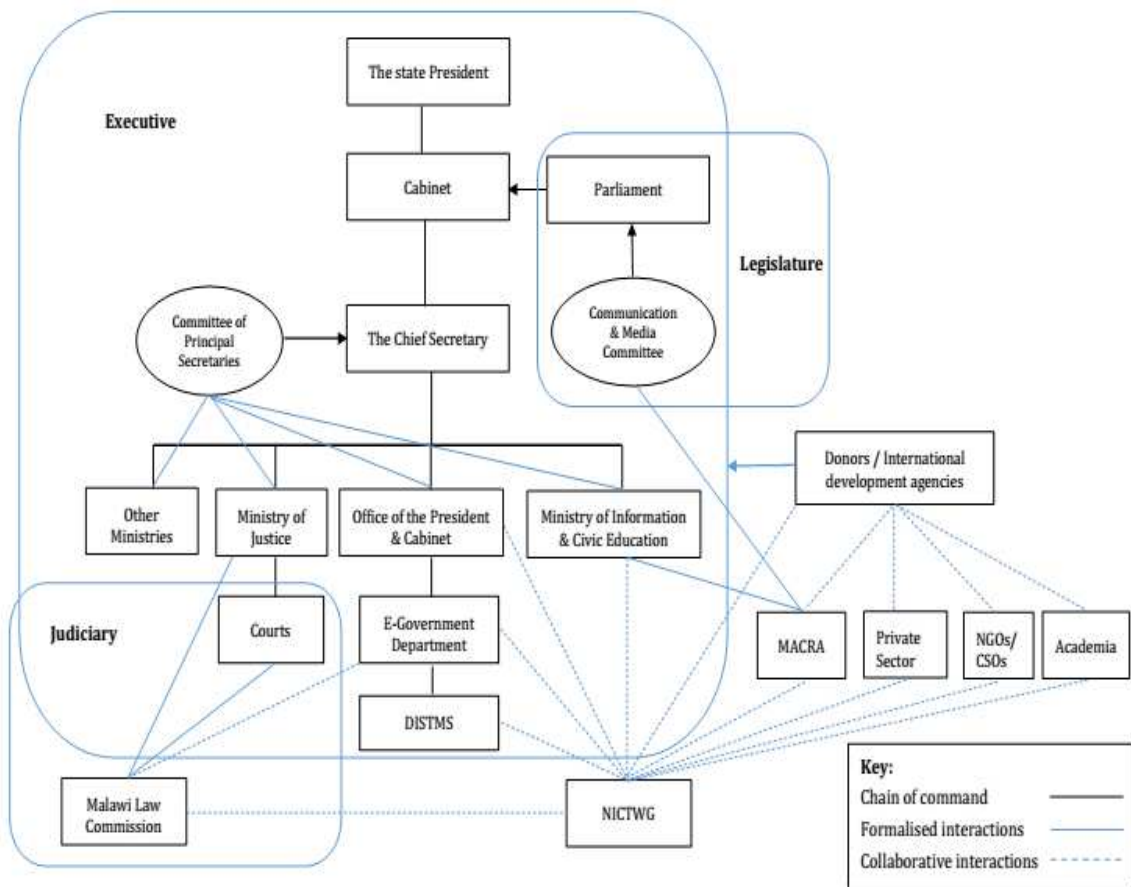


Figure 6.1: Summary of national ICT policy institutional settings

The institutional settings were important in supporting the inter-relations or interactions in the policy implementation activities among the stakeholders. The interactions among the policy stakeholders in the policy implementation activities were categorized into chain of command, formalised interactions and collaborative interactions. Chain of command was based on the formal authority and power within the hierarchies of government. For instance, the Principal Secretaries were reporting to the ministers who were administrative heads of the line ministries. The ministers

represented their respective ministries in the Cabinet (the highest decision making body in government). For instance, the minister of MICE represented E-Government Department and MICE at the Cabinet and performed leadership roles: *“MICE is important as it represents the Media and Communication Committee at the Cabinet level. The minister of MICE is the chairperson of the committee”* (INT-17).

Formalised interactions involved stakeholders sharing information, contacts and negotiations during collective decision making on policy implementation activities. The stakeholders shared information related to activities in the ICT sector, and contacts used to identify other stakeholders with relevant skills that could add value to the policy activities. In addition, the stakeholders negotiated in making collective decisions for the policy implementation. The formalised interactions in some cases had legal binding agreements to ensure commitment and accountability. For example, there were agreements between government and private sector organisations in ICT infrastructure initiatives related to the ICT policy:

“Government is not building a network nor it is becoming an ICT operator [...] Government will offer a long term agreement to the private sector party to provide the needed Internet capacity. The agreement will offer comfort to the private sector as a mitigation against demand risk” (INT-23)

However, power relations were inherent in the formalised interactions as the stakeholders represented different interests in the policy activities. The stakeholders had differences in access to resources that were mobilised to influence the policy implementation activities.

As depicted in Figure 6.1, the NICTWG represented collaborative interactions in the institutional settings of national ICT policy. The NICTWG was composed of members from the government departments and organisations outside government:

“The NICTWG is supposed to be a team of very senior people from various sectors. The idea is that it is supposed to be a multi-sector grouping involving people from the civil service, public sector, civil society, academia, various associations, interest groups, operators are part of the private sector. It was supposed to draw members from high level of their respective organisations so that they can propose policy changes and make decisions” (INT-21)

The diversity of composition of the NICTWG contributed towards differences in the way the policy goals were interpreted and acted in the policy implementation activities. The policy stakeholders strived to perform their roles in consideration of their position within the acceptable norms and rules of government. At the same time, the stakeholders were required to maintain the interests of their organisations. Hence, the stakeholders articulated their practices and conduct of exercise power towards themselves and others.

There were also informal interactions and collaborations carried out outside the government ministries and departments that addressed part of the ICT policy objectives. The activities or collaborations emerging from the informal interactions were carried out without any legal binding agreement. Examples of such collaborations include ICT infrastructure investment initiatives that donors were funding directly to the organisations that represented the policy beneficiaries:

“We requested support from the Internet Society and they gave us some months ago. That project is not controlled by Government; it is not controlled by the regulator; it is a collaboration effort among the Internet Services Providers” (INT-25)

However, discourses and regimes of truth from government in a way affected the activities related to the policy carried out outside the government ministries and departments. For instance, drawing on the discourses on ICT infrastructure investments some stakeholders felt that it was necessary for the government to keep track of all sector activities that were addressing part of the policy goals. Understanding the outcomes of policy-related activities would support government to predict accurate performance of the economy:

“We need a more transparent system for monitoring telecommunications, a system where mobile operators have to declare what they have used to the revenue collectors is not working. The operators may not submit the right usage. For example, this creates challenges where the total bill to be paid to International Telecommunications Union by the government is more than the estimates in the national budgets and affects the predictions for Gross Domestic Product” (INT-2)

The government also indirectly influenced some of the ICT infrastructure initiatives that were not funded by government but were related to the ICT policy through ICT sector regulations. The Communications Act of 1998 provides the mandate for MACRA to register all operators of ICT infrastructure. Hence, some of the ICT infrastructure initiatives could not operate without registration with MACRA. For instance, implementation of ICT infrastructure within a government agency with support from an international organisation had implications for regulations of ICT infrastructure:

“[...] MACRA are the ones that are regulating the telecommunications and you find that because this is a government department it affects us [Law enforcement agency]. I remember International Police sent us a Very Small Aperture Terminal to be used in the Criminal Investigation Department for communication, still more we had to seek permission from MACRA to advise us on the operating license. Every year we renew the license, so we are affected by the regulations of telecommunications enforced by MACRA” (INT-12)

The respondent felt that the relations with MACRA were cordial as the agency did not have any problems because they were a government department. Some of such initiatives were not profiled by the E-Government Department: *“Largely responses to*

problems have been uncoordinated and far part'' (NICTP-2013) and it was difficult to coordinate such projects and establish the contribution towards the policy goals.

In summary, power relations affected the way policy stakeholders performed their roles given the institutional settings for the policy implementation. The institutional settings influenced the subject positions of the stakeholders where the norm and values affected the way the stakeholders performed their roles. The collaborations between government and other organisations outside government influenced the stakeholders thought and acted in the policy activities. Some of the stakeholders had to adapt the government practices in the collaborations while maintaining interests of their organisations in policy implementation activities. Similarly, the policy implementations agencies occupied the positions that required their roles to meet the expectations and interests for the government of the day. The implementation agencies subscribed to common ideas and values within the government structures and met the expectations of those in authority. This meant that implementation agencies had to consider their positions and interests when collaborating with stakeholders that were from outside government.

6.4. The scope of policy implementation activities

There was a broad range of activities for policy implementation. Some of the policy implementations are outlined in Chapter 5. Due to word-limit constraints for the thesis, it was necessary to limit scope for the results. The study focused on policy implementation activities that (i) had rich insights on participation of stakeholders (ii) supported explaining power relations among stakeholders; and (ii) addressed research objectives. This approach was consistent with similar studies on national ICT Policies (Chini, 2009; Chiumbu, 2008). The researcher purposefully selected and analysed the policy implementation activities that met the three points: policy programmes, processes and politics (discussed in Section 2.3.2).

Analysis of the policy programmes concentrated on highlighting power relations in the activities for the RCIPMW and Digital Migration Project. The programmes had characteristics of participation and components that were addressing the implementation of national ICT policy themes for ICT infrastructure, ICT sector development, development of legal frameworks and universal access. Analysis of the policy processes focused on highlighting power relations in the roles of the E-Government Department, MICE, PMEU and MACRA in coordination of national ICT policy implementation. Analysis of politics focused on highlighting power relations in the decision-making and policy oversight for the Cabinet and MCC of Parliament.

6.5. Power relations in policy programmes

Policy programmes were activities carried out to meet specific objectives over a period of time. Stakeholders were engaged in the translation of policy goals into programme

activities and the decisions for allocation and use of resources. The stakeholders had different values and interests that affected the way they exercised power in the policy programmes.

6.5.1 Regional Communications Infrastructure Programme of Malawi (RCIPMW)

The RCIPMW was addressing a number of policy themes including ICT infrastructure, ICT industry development and universal access to ICTs. The Government of Malawi qualified for funding from the World Bank that was used to develop ICT infrastructure. There was a perception that investment in ICT infrastructure would overcome challenges of the high cost of ICT services and improve efficiency in the economic sectors. The RCIPMW had three main objectives: productivity, connectivity and public sector investment (see Table 6.6).

Table 6.6: Summary of the themes for the goals of RCIPMW

Programme goals	Description	Examples of statements
Productivity	Promoting capacity and reducing cost of doing business	<i>"For Malawi to achieve higher and sustainable growth performance, it will need to unleash the productive capacity of the economy. One key way of achieving this will be to expand basic infrastructure in telecommunications across the country"</i> (RCIPMW-2009)
		<i>"To reduce Internet prices through competition and cost reduction"</i> (INT-22)
Connectivity	Supporting affordable broadband and improving internet connectivity	<i>"The connectivity development objective is expected to be an engine of shared growth achieved by improving quality, availability and affordable broadband"</i> (RCIPMW-2009)
		<i>"[...] the main objective is to reduce the price of Internet services within government, the public sector and ultimately influence the lowering of prices of internet in our country"</i> (INT-10)
Private sector investment	Provide incentives for the private sector investment	<i>"The government is lowering the upstream costs for the providers of retail communication services and thereby reducing barriers to entry. This will provide an incentive for investment and competition in the market which will provide sustained improvements in the provision of ICT services"</i> (RCIPMW-2009)
		<i>"The second challenge is affordability, ICT charges [...] are perceived to be high. The RCIPMW project is expected to lower internet wholesale prices and therefore bringing down retail price."</i> (INT-26)

As summarised in Table 6.6, productivity was related to promoting the capacity of using ICT in the sector and reduction of cost of doing business using ICTs. Connectivity was supporting high-speed Internet access through broadband that was connected to the national backbone and the undersea cables. Private sector investment was supporting ICT investors and private sector organisations to participate in ICT infrastructure projects that would reduce the cost of Internet and promote competition

in the ICT sector. The programme was also supporting the legislative reforms for ICT related laws.

The RCIPMW used the PPP approach which was conceptualised as:

“legally enforced contract in which a contacting authority partners with a private sector partner to build, expend, improve, or develop infrastructure or service in which a contacting authority and private sector partner contribute to one or more of know-how, finance or other input required for the successful deployment of a service or product” (RCPMW-2012).

The partners from the government side in the programme included MICE, E-Government Department, Ministry of Finance, Ministry of Justice, OPC and MACRA. Private sector organisations included telecommunications operators, private law firms, MPC and ESCOM. The investor was the World Bank. MACRA was assigned the role of implementer since it was responsible for universal access, market entry and regulating the ICT sector. MICE was responsible for programme oversight and high-level supervision. The Public Private Partnership Commission of Malawi (PPPCM) was assigned the role of project coordination agency and among its roles was to support collaboration of partner organisations e.g. MACRA, MICE and private sector organisations.

The programme engaged a number of partners for a number of reasons related to management of risks, supporting participation and human capacity. The first reason was sharing of the risks in ICT infrastructure investment. The risks included delays in execution of activities, negotiations between countries (Tanzania and Malawi over the connectivity were done through the World Bank during feasibility of the project) and lack of capacity where the private sector was engaged to support programme activities. The roles played by the participating parties were crucial in mitigation of risks. The second reason was sharing of resources (such as finance, information and political support) among the participating partners. For example, the respondent from the sponsoring organisation highlighted the role of government related to political support for the programme:

“[...] we know that government will move in that direction to come up with a policy. The environment should be right and right now the government is doing a lot of consultations for the people to raise their issues. Then government has to decide its effort in that direction, so definitely we will see a lot” (INT-22)

The third reason was sharing of expertise where it was recognised that government could not have all the human capacity and expertise to implement the RCIPMW. Government departments and private sector organisations to address the human capacity and areas of the programme that required experts. In addition, the PPPCM as a project-coordinating organisation recruited experts, as highlighted in the project

proposal document: *“This component will consist of support to finance project management issues (a) a project manager (b) a technical expert (c) a procurement specialist (d) a finance manager [...]”* (RCIPMW-2009)

The official from the organisation also elaborated on the role of the organisation in moderating the activities of the project. There was recognition that different interests in the project could affect the activities of the project:

“PPPCM was given the role of the agent or moderator because others [participating organisations] were implementers [...] there should be an agency moderating the interface between government and private sector. That is important because private sector may have different interests which may be contrary to those of government and government may have different interests from that of the private sector” (INT-26)

The RCIPMW focused on three key areas: enabling environment, connectivity and project management. The enabling environment was aimed at reforms for legal frameworks and ICT policies to support the application and use of ICTs in the sectors. Connectivity was related to investments in ICT infrastructure including fibre connectivity to the undersea cable, national broadband network, telecentres in rural communities, broadband connection to public institutions and virtual landing point. Project management covered activities aimed at creating institutional setting for the program that supported participation, accountability and human capacity in the participating institutions. A steering committee was formed as part of project management with key roles that included decision making, consultation of stakeholders (for instance government, external consumers and private sector organisation) on policy activities, risk management through planning, budgeting, internal controls and audits and supporting monitoring and evaluation activities. The World Bank as a project sponsor was responsible for conducting mission supervision and negotiating project arrangements with other countries that were affected by the project:

“The World Bank is in a privileged position to convene and support negotiations between telecom players in Malawi and its neighbours Mozambique and/or Tanzania which will be essential for implementation of the project such as this. This position is further, strengthened by the World Bank’s involvement in the ICT sectors throughout the region, particularly with the RCIP” (RCIPMW-2009)

This statement demonstrates the use of resources for knowledge and contacts that the project sponsor used to exercise power in the project. The resources were shared with the other participating organisations in the project activities to meet the objectives of the project.

Figure 6.2 summarises the arrangements of the RCIPMW programme. The blue arrows depict the programme management roles of the Steering Committee and the black

arrows depict the participation of the members of NICTWG in the programme activities.

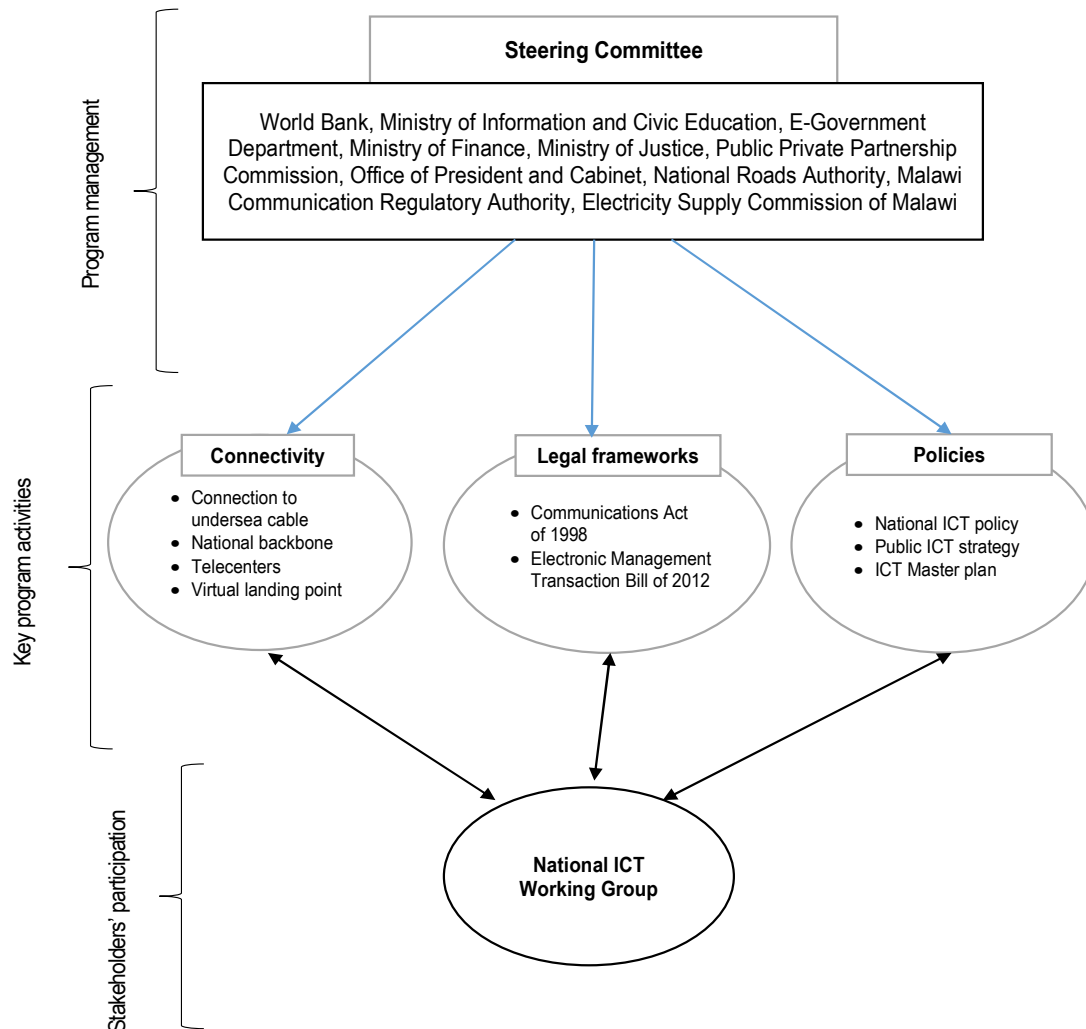


Figure 6.2: Summary of RCIPMW arrangements and activities

As summarised in Figure 6.2, the NICTWG was engaged in the key activities for the RCIPMW. The NICTWG recruited some of the stakeholders listed in Table 6.3 that included government departments, private sector organisations, consumer protection organisations and international development agencies. The NICTWG collaborated with the steering committee. Key activities for the engagement of the NICTWG were consultative meeting in the activities for RCIPMW, revision of the Communications Act of 1998 and formulation of the Electronic Transactions Management Bill of 2012 and reviewing the national ICT policy final draft.

The steering committee held stakeholders' consultative meetings to brief other stakeholders and policy beneficiaries on aims of the project and obtain feedback on the activities of the programme. Further, the steering committee recruited legal consultants who worked with the government departments to review the Communication Act of 1998. The aim of reviewing the legislation was to address the changes in technology such as broadband and management of spectrum that changed from analogue to digital. The consultants also supported the formulation of the Electronic Transactions Management Bill of 2012 that was aimed formulating a legal framework that would support sector operations related to data protection, use of digital signatures and electronic transactions. The E-Government Department was responsible for the coordinating the formulating Public ICT strategy for the government ministries and departments and ICT Master plan for the long-term implementation of ICT-related policies.

Power relations were demonstrated in the decision making during the NICTWG meetings and in the activities of the Steering Committee. The stakeholders were engaged in the debates towards collective decisions. The stakeholders expressed their opinions but when there were issues that they could reach a consensus the Principal Secretary was responsible for the final decision:

"Making those decisions is important because they [Principle Secretaries] are held accountable to the Cabinet and Parliament as well as the electorate for those decisions"
(INT-41).

Hence, the norms and rules from government structures were being reinforced in the NICTWG despite drawing members from outside government. The situation gave the Principal Secretaries a privileged position to make decisions that conformed to the regimes of truth with structures of government. However, in some cases the decisions had to conform to the interests of the programme sponsor that set conditions for the financial support which government had to follow despite having different interests in the programme. Thus, the terms of the programme sponsor or loan conditions had to be accepted and reinforced in the programme despite the government having the legal mandate to decide on behalf of the other stakeholders.

The members of the Steering Committee used resistance tactics in the programme activities as a means of exercising their power in form of apathy, aggressive and active resistance. Apathy resistance was related to the behaviour of the committee members based on their interests in the programme. The officials had different interests in the policy activities and other officials wanted to dominate their interests at the disadvantage of other stakeholders. The situation led to the other stakeholders to challenge their authority and resulted in a clash of personalities. Aggressive resistance was related to some of the implementation agencies officials deliberately not attending

the policy implementation activities such as meetings of the NICTWG. In some cases, the implementation agencies were not following the directives from the main coordinating policy implementation agency. Active resistance was demonstrated in the tensions during the meetings for the steering committee. The members of the steering committee were senior officials in their respective organisations. However, the norms and practices which reinforced their authority were challenged in the Steering Committee and consequently they expressed dissatisfaction with the actions and behaviour of other stakeholders. This resulted in tension. Table 6.7 summarises the tactics of resistance used among Steering Committee members.

Table 6.7: Summary of tactics for exercising resistance among stakeholders

Tactics	Themes	Illustrative statements
Apathy	Personality clashes	<i>"Another problem with the project is planning and operational aspects. Sometimes we have personality clash "(INT-26)</i>
	Differences in interests	<i>"We have different opinions; we have the Chairman [Minister of MICE] whatever he says is final say, we have also the Minister of Finance. Without that we cannot work "(INT-26)</i>
Aggressive	Conformance	<i>"There is a conflict between DISTMS and the regulator and that the conflict means that if the minister of MICE wants to promote a policy that the regulator does not like, the regulator will block it since the regulator is the implementer of the policy "(INT-25)</i>
	Escape	<i>"If you notice during the meeting [for NICTWG], whether it is developing the policy or reviewing the Communications Act, if the regulator [MACRA] is there , the ministry [E-Government Department] is not there because they cannot stand in one room "(INT-25)</i>
Active	Tension	<i>"Although they are sitting at the same level during the meetings, the levels collapse because all are top officials [...] Principle Secretaries, minister of Justice and the Director General [of MACRA] sits there and me as a project manager. As time goes there is tension. Sometimes the Principal secretaries do not come to the meetings because they do not take instructions" (INT-26)</i>

There were issues of exercising power over others among the members of the Steering Committee. Some members of the committee felt that the authority they held in the respective organisations could be exercised over members during the Steering Committee activities. Consequently, there were conflicts among the members of the committee. It was important to address the power relations in the committee because conflicts could affect the outcomes of the RCIPMW. The official from PPPCM who was tasked with project management reflected on the problems of conflicts among the Steering Committee members and how the problems could be mitigated:

"So you normally develop standards, procedure and processes which allow government and private sector to interact and collaborate without stepping on somebody's toes. When that

happens the outcome is not beneficial to anyone, it affects the economy. The economic efficiency of the private sector is an issue, the financing of the private sector and the benefits of the role of the sponsoring ministry are affected” (INT-26)

Drawing from the concept of technologies of the self, this statement can relate to self-practice of the officials in attempting to support resolving a problematic situation where individuals develop a set of skills and attitudes that can help to deal with their conduct and how they relate to others. In this case, the standards and procedures that were developed supported or constrained certain social rules of conduct of the stakeholders engaged in the RCIPMW.

6.5.2 Digital Migration Project in Malawi

The Digital Migration Project was another example that addressed the policy theme for ICT infrastructure development. The digital migration was a transition from analogue infrastructure to digital infrastructure to obtain more spectrum for telecommunications services. The intentions to migrate from analogue to digital infrastructure were highlighted in a number of national development policies for the Government of Malawi. For instance, the Poverty Reduction Strategy of 2003 noted: *“In order to provide televised information to the population, Television Malawi will migrate from analogue to digital [...] to ensure maximum reach in the country [...]”* (PRSP2002). However, initial execution of activities for digital migration began in 2006 after the participation in the Region Radio and Communications Conference and ratification of the Geneva 2006 (GE06) agreement. The ITU proposed that countries should migrate to digital infrastructure by 17 June 2015. The countries in the SADC region, of which Malawi is a member, set a dateline of 31 December 2013. Ratification of the GE06 resolution and agreement among SADC member countries on digital migration led the government of Malawi to prioritise digital migration.

Some of the potential benefits for implementing the Digital Migration Project were better management of spectrum, quality of services and economic gains. The government perceived that digital migration could free some frequency space that could be used by up to 20 channels. Some stakeholders also perceived that the telecommunications operators were monopolising the existing channels and that the digital migration could free the channels to be used for other services such as community broadcasting, wireless broadband and television white spaces. Another potential benefits for the Digital Migration Project were improved quality of services for sound and picture for radio and television and value added services. The examples of the new services included high definition content, personal video recording services, electronic programme guides, video on demand, Videophone on television, Internet on television and datacasting. It was also perceived that the government could generate more revenue from the resale of the freed-up spectrum and the addition business value

models that may emerge from digital content production. Table 6.8 summarises the perceived potential benefits of the Digital Migration Project.

Table 6.8: Summary of potential benefits of Digital Migration Project

Themes	Description	Examples of statements
Management of spectrum	Free space in a channel to up 20 channels	<i>"This will help to manage spectrum for broadcasting houses, the police, the army and hospitals; and the delivery of content"</i> (INT-17)
		<i>"Spectrum is a scarce resource that needs to be effectively managed. With digital broadcasting a single frequency can carry a number of channel/programmes which allow for the freed frequencies or digital dividend to be used for other services"</i> (DBP-2013)
Quality of services	Digital content has better quality than analogue content	<i>"Collision of frequencies will be minimised. For example due to outdated equipment being used there is frequency collision between Mozambique, Malawi and Zambia. The digital migration will address part of this problem"</i> (INT-17)
Economic gains	Revenue generated from resale of spectrum and supporting value added services	<i>"We are also migrating from analogue to digital. The moment we do that we will create a space [frequency], the spectrum we are sharing now some are stingy to share even if we are regulating them, but now since we are analogue and when we move into the digital [platform] we found that we can also economically benefit because we will we will have a numbers of players"</i> (INT-10)
		<i>"Digital broadcasting will lower the costs to the broadcasters as it enables the creation of alternative business models such as content producers and signal distribution"</i> (DBP-2013)

MICE was coordinating the Digital Migration Project. The activities for the project included the formulation of a steering committee and sub-committees to address the different aspects of the project. For example, broadcasting standards, specifications, spectrum plans and migration policy as part of meeting the requirements for the GE06 Plan. The steering committee and sub-committees drew members from the ICT sector. The stakeholders for the Digital Migration Project included government departments, public broadcaster, private broadcasters, private sector organisations, the telecommunications regulator and international development agencies. Some of the recruited stakeholders were members of the NICTWG and officials from the E-Government Department, MACRA and Huawei sponsored by the government of China. The activities were designated to the different sub-committees summarised as follows:

- **Content committee:** supported consideration of content that would be required in the digital environment.

- **Policy committee:** responsible for developing policies that would support the digital migration processes in relation to legislations and regulations, e.g. Digital Broadcasting Policy (approved in 2013)
- **Public committee:** supported raising awareness and sharing information on digital migration activities, e.g. National access to Information policy (approved in 2014)
- **Economic committee:** responsible for assessing the economic implications for the Digital Migration Project for the consumers, telecommunications providers, regulators and government.

The stakeholders in the digital migration process from the supply side had different views in relation to the way the project was being implemented. Other respondents felt that they were fully engaged and that the project was addressing their expectations:

“We were engaged from day one in the Digital Migration Project and MICE engaged our technicians because Malawi Broadcasting Corporation has the advantage of having technicians and producers of our content. Most of our technicians have been engaged and up to now they are collaborating with MICE and the project team on digital migration and that everything is moving [...] (INT-32)

“Radio Alpha [pseudonym] is part of the content-subcommittee and has been meeting whenever possible. At my individual level, I have been following global and regional trends to appreciate the steps our friends have taken. We also look forward to sharing information with the general public” (INT-36)

Some stakeholders felt that the government was not putting effort into the process to meet the national, regional and international dateline:

“I would say we are almost going to 2015 but the project started long time ago in 2005. I do not know why we always want to be followers but it is something that we can lead. So in short, I can say we are literally doing nothing for the radio and we are waiting for someone to come and tell us what to do.” (INT-35)

As pointed out in the comment, it was perceived that the process was left to the dictates of external organisations. It was felt that the process of digital migration was conducted to satisfy the requirements for international and regional organisations:

“The only reason this will happen is because the ITU is pushing for it. ITU has set a deadline, there is SADC deadline and national deadline. Digital Migration Policy will happen but it is not because of the policy [national ICT policy]. It is because of the ITU requirements” (INT-25)

The national dateline for Digital Migration Project was set and was aligned with the regional and international deadline. In a way, the process could be perceived as the government accepted the prescriptions of external organisations and obligations to international agreements that could be limiting if local requirements in the project were not articulated to ensure that the dates were realistic and feasible to the local context

conditions. One example of the local issue was the digital migration readiness. Some media houses felt that there was limited support from government in the procurement of new equipment required in the digital environment:

"[...] media houses need help to purchase equipment which would replace the analogue. The current set up and expectation puts media houses at a huge cost if they are to individually migrate to digital platforms." (INT-36)

In addition, the issues of demand-side were not adequately addressed in terms of set-top boxes (equipment that can support analogue television to receive terrestrial television signal). The proposed price of US\$40 for a set-top box was too expensive taking into account to the Malawian household's income status, especially for the rural communities:

"We think that the digital migration was done in a hurry with limited understanding of local realities. [...] the set-top boxes are expensive for most of the rural dwellers and the number of the set-top boxes is small. There is going to be scramble for the 1,000 set-top boxes. The focus has been much on television rather than radio and a lot need to be done for radio" (INT-37)

To address the challenges highlighted in the statement, the government established the Malawi Digital Broadcast Network Limited which, among other roles, was responsible for distribution of the subsidised set-top boxes, supporting skills development, raising awareness digital migration issues, providing technical support services to consumers and supporting the distribution of digital signals to broadcasters.

Power relations were demonstrated in exercise of power for those with political authority in government over officials responsible for the Digital Migration Project and the roles of government agencies in managing the project. Stakeholders with political influence in government exercised power over others where officials that were championing the Digital Migration Project were transferred to other departments as a means for retaining control over the activities of the project. One participant highlighted the challenges of transferring the officials:

"I know the digital migration on television started well but at a certain time it just died off. We could have been at a better stage than where we are now. [...] but change of government, those other guys [new administration] were not interested. Then somebody picked it up in a certain ministry. I do not want to mention her name. In MICE, she grasped the idea and supported the Digital Migration Project and we saw things moving. She was transferred to another ministry and then come another minister. It was then back to ground zero. Then she came back to MICE and started again [Digital Migration Project]. It is because there are a lot of politics" (INT-35)

In this except, the government in power were refereeing to the Cabinet and the official responsible for the managing the Digital Migration Project was the Principal Secretary.

It was common that when the government changed, most officials in management positions were transferred from their position to ensure that those in management positions served the interests of the incumbent government.

Power relations were demonstrated in management of the Digital Migration Project. There were transfer of roles for controlling the activities of the project in the implementation agencies. In 2007, MACRA was responsible for managing and coordinating of the Digital Migration Project because it had financial resources to participate in the international forums and conferences for the ITU. However, in 2009 the management role for the Digital Migration Project was transferred to the E-Government Department. However, there was limited progress in the programme activities because of limited resources in the E-Government Department. Later, MACRA assumed the role for managing the Digital Migration Project and re-initiated the whole process. Such activities were perceived as conflicts within the implementation agencies and that politics were affecting the process:

“My appeal in the broadcasting and ICT industry is to put things simple because they are straight forward things but in some instances people put politics into the industry and complicate them unnecessarily” (INT-35)

Again, there were was transfer of the roles of implementation agencies in the Digital Migration Project following a study tour to Rwanda in 2012. Rwanda was considered as a success model for implementing ICT policy and Malawi learnt from them about institutional arrangements, leadership and capacity building. The role for coordinating the Digital Migration Project was transferred to MICE as part of the lessons learnt in Rwanda. The changes were voluntary and not with conditions like other changes that were related to prescriptions of the stakeholders’ organisations that provide resources to the government as part of the conditions for their support. However, the changes in the roles of the implementation agencies were not working as the case of Rwanda because of lack of stability and poor working relations among the implementation agencies because of power relations issues.

6.5.3 Outcomes of power relations in the policy programmes

In policy programmes, the stakeholders collaborated in the policy activities through the PPP and technical committee for the ICT policy. In the case of the RCIPMW, the arrangements portrayed the hierarchical structure where the Steering Committee provided direction and decisions on the policy programme’s activities. At a lower level was the NICTWG that drew members from the government departments, private sector organisations, donors and non-government organisations.

Power relations inherent in the collaborations of stakeholders were demonstrated in decision making for allocating resources and prioritising of policy activities. The Steering Committee was privileged in making critical decisions at high-level. However,

within the committee, the stakeholders with the capacity to mobilise resources influenced the policy activities, for example, other donors that were members of the NICTWG. Power relations among the stakeholders were productive because the government was compelled to act and prioritise on the programme activities. Hence, the national ICT policy was approved, ICT-related laws were formulated and reviewed as part of supporting the policy programmes.

Power relations among stakeholders in the collaborations shaped the way policy programmes were being implemented, for instance the conduct of the programme manager for RCIPMW in an attempt to resolve tensions and different interests among the participating parties. The situation can be explained using the concept of technologies of the self where individuals submit to certain ends to behave in a certain way within a particular regime of truth. The respondent takes the obligation to ensure that the tensions among stakeholders are resolved in exercising their power because the issues could have detrimental results. Another example of technologies of the self is demonstrated in comments of a stakeholder for the Digital Migration Project. The participants also internalise their conduct when responding towards issue that affected media houses during the Digital Migration Project:

“The opinions on issues about government require one to be cautious because we are talking about government. The government takes that anything we say is bad. It thinks that whatever you say has bad intentions but what is said are things government should change [...] What we want as broadcasters is our image to be right and when people see us we want to be proud of our profession” (INT-35)

Thus, stakeholders submitted to the attitudes towards the government that were perceived to be acceptable and thereby reinforcing the domination of government to dictate the course of actions the implementation of policy programmes.

6.6. Power relations in policy processes

Policy process consisted of routine activities carried in the implementation agencies to meet the policy objectives. The policy process activities are subject to power relations because of differences in the interpretation of meaning of policy activities, access and capacity to mobilise resources and the differences in interest among the policy stakeholders. Hence, power relations can limit or enable the policy processes.

6.6.1 Coordination of national ICT policy implementation

Stakeholders collaborate with other stakeholders that have resources to influence and maintain control of policy implementation activities. The collaborations as interactions, communication and shared meaning among the stakeholders extend from institutional settings to coordination of activities to achieve policy goals. However, power relations affect the process of coordination where stakeholders work together and negotiate on

policy activities. The stakeholders with resources may dominate the process to advance their interests while marginalising the interests of the other stakeholders.

As highlighted in Figure 6.2, various stakeholders performed their roles at different levels in the policy implementation. Coordination was related to the roles of the stakeholders that were oriented towards formal structures and hierarchies of government and vertical interactions of departments in the operational routines. The hierarchies represented the authority for the stakeholders and the departments that they represented. The vertical interactions were collaborations among departments that were operating at the same level in government structure. The aims of coordination were to reduce redundancies in efforts, wastage of resources and incoherence of activities for the ICT policy implementation.

Coordination of ICT policy implementation was subjected to power relations among the stakeholders that formed part of the institutional setting for the policy implementation. The E-Government Department was mandated to coordinate the national ICT policy. However, changes in the institutional setting affected the stability of the E-Government Department to effectively coordinate the policy. The following statement sums up the changes in the roles of the E-Government Department:

“Between 2003 and 2008 the department was moved to four different institutions. In 2003 DISTMS was placed under OPC, in 2004 it moved to Ministry of Information and Tourism then in 2008 it moved to the new restructured Ministry of Information and Civic Education. In August, 2011 the department was renamed E-Government taking government recognition of ICT in facilitating socio-economic development programmes and was placed back in the Office of the President and Cabinet” (EGSP-2012)

The transfer of the E-Government Department to the various line ministries entailed the department had to restructure its operations and the roles of staff to fit the new arrangements. The changes in the department affected the process of coordination of the policy. The reasons for the transfer of the roles of government departments included internal politics, policy learning, government turnover and capacities challenges of implementation agencies.

The internal politics were exercise of power where the implementation agencies influenced the will of officials in the departments to achieve their personal interests. MACRA was responsible for ICT sector regulation but assumed the policy coordination role from the E-Government Department. The assumed role of MACRA in policy coordination was in conflict with its legal mandate that specified that public policies were coordinated by a government department. The E-Government Department could not coordinate the national ICT policy although its main function was to oversee the policy development and implementation. The situation created conflicts between

DSTMS (which later become a division under the E-Government Department) and MACRA:

“DISTMS was a government department two years ago, it has been demoted to a government division. It does not have the money to do the job, the regulator is much more powerful than the policy watchdog and do their things the way they like without the ministry really having any influence, [...] that is one of the biggest problems, not only is a problem of leadership in the ICT sector, there is a problem of conflict between the department that oversees the regulator and the regulator” (INT-25)

Policy learning also contributed towards the transfer in roles of the policy implementation agencies. Officials from Malawi visited Rwanda to learn on ICT policy implementation. One of the lessons learnt was institutional arrangements that were implemented. The changes in roles of policy implementation agencies affected the way policy processes were conducted and the power relations were exhibited in the conflicts between the policy implementation agencies. Table 6.9 summarises the reasons for transfer of roles in the policy implementation agencies.

Table 6.9: Summary of reasons for transfer of roles in the implementation agencies

Themes	Description	Examples of statements
Internal politics	Exercise of power where policy actors influence the will of others or manipulate other stakeholders to achieve their personal interests	<i>“I think at one point some operations were at MACRA which dragged the process but I am not sure how it ended. Basically E-Government Department is responsible for the national ICT policy.”(INT-8)</i>
Policy learning	Implementation of institutional arrangements as a result of lessons learnt from a study tour	<i>“Six officials from MICE, OPC, MACRA and E-Government Department went to Rwanda to learn how the national ICT policy is being implemented. Some of the changes as a result of the visit are the establishment of E-Government Department as a national ICT policy implementation agency and MICE as a ministry responsible for monitoring and evaluation of the national ICT policy” (INT-17)</i>
Electoral cycles	Changes in government through presidential and parliamentary elections resulting in changes in roles of policy actors in policy implementation agencies	<i>“[...] change of government is one of the factors but I think what is important is whether the change of government or not, there should be a continuity of some kind in terms of leaving the infrastructure that can move us forward as a nation. Whether there is change of government or not there has to be continuity” (INT-38)</i>
Resources	Lack of resources and capacity to support policy implementation activities	<i>“[...] DISTMS has very little funding from government. It was a government department and now it a division but does not have a lot of funding to run its activities and operation. It was under the umbrella with the ICT policy” (INT-25)</i>

One of the issues that arose from the change in the coordination of the policy was the changes to the policy itself. MACRA changed the initial national ICT policy that was developed in 2003 when it was coordinating the policy development and the policy was

split into: “Malawi is currently developing two policies in the ICT sector namely ICT for development (ICT4D) policy and the Universal policy” (ITUR-2007). Initially, universal access was just a theme in the policy document but was proposed into a separate policy. One respondent recalled working on the two policies:

“So internal politics came in. The process was actually taken over by MACRA and after presenting the policy to the stakeholders of course suggestion from MACRA to have two policies one for ICT and another for Universal Access to ICT. So we had two policies because MACRA was championing Universal Access to ICTs” (INT-20)

MACRA exercised of power over the E-Government Department and other stakeholders when it assumed the policy process in endorsing the proposal to split the policy into two. However, the exercise of power was not absolute. The Cabinet rejected the two policies; the Cabinet felt that the policies were addressing related ICT issues and recommended a single policy. The implications were that the process of developing the policy had to be repeated to come up with a coherent policy that addresses the issue for ICT for development and universal access. The policy coordination role was transferred back to the E-Government Department. The situation created tension between the two policy implementations agencies as one respondent pointed out:

“When we were developing Electronic Transactions Management legislation it was headed by the E-Government Department. You will see that the MACRA was not there, if that legislation is passed in Parliament who will implement it? It is a double problem. There is lack of leadership at high enough level and there is a conflict. It will take a good minister of MICE to resolve it. It is not that they do not know. They know that MACRA finances the minister and the minister ignores the E-Government Department” (INT-25)

Thus, power relations were demonstrated where the MACRA preferred to cooperate with MICE on national ICT policy issues rather than with the E-Government Department. MACRA funded the activities of the minister of MICE while the E-Government Department was under-resourced to carry out policy activities and could not influence the minister to support the policy implementation activities:

“There is a conflict between E-Government Department and the regulator and that the conflict means that if MICE wants to promote a policy that the regulator does not like, the regulator will block it, right, since the regulator is the implementer of the policy, the regulator and the policy framework are in conflict in Malawi. That is the major problem why the policy has not been passed.” (INT-25)

Although the E-Government Department had the legal mandate to coordinate the policy implementation activities, limited financial and human resources left it in a situation where it could not exercise power over other well-endowed implementation agencies. Thus, the different forms of power enabled the implementation agencies to exercise and that there was no agency which had absolute power.

Another reason for the transfer of the roles of the policy implementation agencies was the effect of the presidential and parliamentary electoral cycle. The changes in administration as a result of elections led to changes in the key roles of government officials. This affected the policy implementation processes because each time there was a change of administration the government officials were transferred to other departments.

Power relations were also demonstrated in the decision making for the policy coordination. The decision-making process followed the hierarchical structure of government. Policy decision for policy implementation was in a way supposed to be collective. The respondents noted that they were free to discuss the policy issues and present their positions on policy issues: *"They were open, people would give or suggest ideas and the ministry and DSTMIS kept the ideas, they did not get back to us."* (INT-7). However, other respondents highlighted that there were different interests among the stakeholders that led to the discussion of different points of views on issues: *"Naturally there were some very heated debates but after several discussions we always had an agreement. No, it was just general consensus, [...] it was not voting but consensus."* (INT-8).

However, when there were disagreements that could not be resolved through consensus and collective agreement, the Principal Secretary from the E-Government Department made the decisions and employed the procedures of government: *"In those cases it was mainly through discussion and we would involve the Principal Secretary to come in and look at the issue and government policies and procedures were applied to address the issue"* (INT-20). Thus, decision making reinforced the dominant views of government based on the structures of government and the ways of thinking about policy issues where the policy interests of the stakeholders outside government were marginalised. The government control over policy decisions were also enforced through PMEU where policy decisions made in the E-Government Department were checked at the higher level at OPC:

"The understanding is that the E-Government Department and DISTMS to be technical coordinator of the national ICT policy but the final decision lies with the Policy Desk Office at Office of the President and Cabinet [...] even direction on policy. Whatever the department [E-Government] does goes through the Policy desk office [Policy Monitoring and Evaluation Unit] and gives direction on the policy" (INT-20)

Another issue was the clarity of the roles between MICE and OPC. The E-Government Department was constituted as a department under OPC but reporting to MICE. This arrangement created redundancies and challenges of control over policy activities. For example, the E-Government Department was already reporting to the PMEU for the approval of policy implementation activities. The Minister of MICE represented the E-Government Department and the national ICT policy at Cabinet level and chaired the

Cabinet Committee on Media and Communications. The roles of PMEU and MICE appeared to be conflicting. One respondent noted that it required time to understand the roles of the various departments in relation to the policy activities:

“MACRA which is the regulator under MICE. [...] ideally the E-Government Department [...] its mandate is to coordinate, take a lead in all aspects of ICT development. The mandate of E-Government Department is to lead and to coordinate ICT development in the country both in public service and private sector. Ideally that is what is supposed to happen while MICE can deal with other issues, [...] I would say that those clarifications are happening but we have not yet come to a proper setting on the roles to be performed by each organisation.” (INT-21)

In normal circumstances, PMEU was responsible for policy monitoring and evaluation for all government policies. However, MICE assumed the role of policy monitoring and evaluation and line ministry where E-Government Department had to report the policy activities. Similarly, MACRA’s main function was regulating the telecommunications sector and the E-Government Department responsible for coordinating ICT policy implementation. However, MACRA was also engaged in policy implementation activities for ICT infrastructure projects. While there was transfer of the roles for the various implementation agencies, the coordination of the policy was problematic. There was no clear structure to support the policy activities despite having the legal frameworks (for example, the Communications Act of 1998). For the clarity of roles and that there was a need for a centralised coordination of the policy as a respondent noted: *“What we want is the reporting structures to be coordinated from one central point and then all development programmes that we are having would bear that coordinating point” (INT-24).* Thus, policy coordination required authority to ensure that policy activities were in line with policy goals, to reduce duplication of efforts and wastage of resources.

6.6.2 Outcomes of power relations in the processes

Power relations in the processes were analysed in the coordination of policy implementation activities. It was revealed that the E-Government Department, MACRA, MICE and PMEU and the Cabinet were involved in the coordination of national ICT policy. The institutions were assigned different roles in the implementation of the national ICT policy. However, there were changes in roles of the institutions over time because of government turnover through electoral cycles, policy learning and limited capacity within some institutions and internal politics within government agencies.

The outcomes of power relations in policy processes related to coordination of the national ICT poly implementation were the marginalisation of some agencies in the key activities. The E-Government Department was marginalised in policy implementation activities despite having the legal mandate to coordinate the policy activities. The

department had limited capacity and resources because it was not adequately funded. Consequently, other agencies with resources undermined the mandate of the E-Government Department and could not influence other policy implementation agencies such as MACRA and MICE in policy implementation. The tensions between E-Government and MACRA resulted in poor relation and cooperation in the policy implementation activities. In some cases, the E-Government Department was left out in activities related to the ICT policy that were being championed by MACRA.

Another outcome of power relations related to policy coordination were conflicts in roles between MICE and OPC. The two departments were assigned the same roles for monitoring and evaluating the national ICT policy. MICE was the line ministry for the E-Government Department and OPC was also responsible for the E-Government Department and it was not clear how the specific roles the two institutions were performed in relation to monitoring and evaluation of the national ICT policy. Thus, power relations could have affected the meaning of the roles of the institutions that led to conflicts.

6.7. Power relations in politics

Politics in policy implementation were related to the decisions for the policy activities for the stakeholders with political authority. Power relations affected the way stakeholders made decisions in allocation of resources, controlling activities and prioritising policy implementation activities. Stakeholders made decisions as individuals as well as a group. In both cases, power relations affected how the decisions were made for the policy implementation activities.

6.7.1 Decision making for policy implementation

The Cabinet was one of the institutions responsible for policy decisions. Its roles in relation to the national ICT policy were to approve ICT related laws, endorsing the national ICT policy as a priority in the development agenda, allocate resources to the ICT policy implementation processes and programmes through the national budget. The Cabinet was also responsible for ensuring that the policy implementation agencies were operational to fulfill their duties; ensuring that operational plans and human capacity were available in the implementation agencies; raising awareness of the ICT policy issues to the Members of Parliament, and respond to questions in the National Assembly.

The ICT policy decisions were made at different levels of government. For example, at the executive and operational levels. The decision-making process for the ICT policy followed government hierarchies:

“The policy approval will be granted by the Cabinet, it is the executive that is the President and her Cabinet. They will decide on the policy. But in terms of the operational issues,

decisions to be made on operational issues, there are various players including MICE, MACRA, MPC and the E-Government Department. [...] but ultimately the Cabinet, the executive is the one that is responsible for the overall decisions” (INT-21)

The decisions on the policy at lower levels were made in the policy implementation agencies. At the executive level the ICT policy decision were made by the Committee of Principal Secretaries and the Cabinet. However, the Cabinet had the responsibility for the final approval of the policy. The decision to approve the policy took long. The delays in the endorsement of the policy at the Cabinet level meant that no resources (finance and human capacity) could be allocated to the implementation agencies in the national budget. Hence, some of the policy implementation processes and programmes could not be executed.

The delays in policy approval, in part, were due to the failure of prioritising the national ICT policy activities over other issues such as health and food security programmes. The Cabinet prioritised issues that had immediate effect to the electorate, especially those in rural areas. This was crucial to maintain the popularity of government especially during the national elections (2004, 2009 and 2014). The national ICT policy was not prioritised during the run-up to the national general elections. The government focused on activities that could maintain the incumbent government in power. One respondent expressed concern over the effect of elections on the policy implementation activities:

“I do not think you can do much to change the policy now, I do not think so. The way the government machinery works, if there was a really good minister of Ministry of Information and Civic Education, he would probably influence things but the way I know things operate, it will take a real miracle for the policy to be approved between now and May 2014. I do not think it is going to happen” (INT-25)

Thus, the Cabinet exercised its power over other policy stakeholders in the decisions on policy activities that could be executed at a particular time. Despite reminders from the various stakeholders during the NICTWG, it appeared that the decisions on the Cabinet could not be changed. The members of the Cabinet claimed that they had the legal mandate as elected representative to decide on behalf of the electorate. Thus, the Cabinet used legal resources and the authority as the highest decision-making body with the structures of government to exercise power over other stakeholders. However, the Cabinet prioritised on the activities related to the national ICT policies that would lead to access to resources such as loans for infrastructure investment from the international development and financing institutions. The lack of access to resources compelled the government to accept and prioritise the external offers and obligations. For example, ratifications of international treaties that had financial benefits for the government, but were not addressing the real needs of the people. In some cases, the

decisions at the Cabinet were made without consideration of the needs of the policy beneficiaries:

“The problem is that government does all these things without consulting people, the executive just go out and sign international treaties without consulting parliament that they are committed to that agreement then parliament say no because it does not interest Malawians.” (INT-3)

“Another challenge may be that we rely on donations and that those who negotiate the donations are those in high positions, so they do not have space to ask us on the ground what we are looking for, they just decide that this can do better” (INT-19)

The policy programmes emerging from such agreements were resisted at local level. The stakeholders that resisted some of the policy programmes included implementation agencies, non-government organisations, private sector organisations and politicians in Parliament. The stakeholders felt that some programmes were not in line with the needs of the country and that they contravened the values of the people in the country. The perceptions of the policy stakeholders were that the Cabinet was the obstacle on the progress for the implementation of the ICT policy. Further, the local stakeholders felt that they had limited power to persuade the Cabinet to approve the policy and support the policy implementation activities:

“We participated in the workshops [for policy] but you see the policy is stuck at a level where the minister can reach. It is stuck at the Cabinet level so that those of us who work in the sector have done a lot of things to make sure the policy takes off but it is not, right now it is beyond our reach” (INT-25).

Another respondent noted the delays in the policy approval that: “[...] we have contributed to the development of the draft and waiting for the ministry to do necessary approvals and get through the normal government channels” (INT-24). Thus, the politicians had become more powerful in deciding on the policy priorities of government and dominated the decision-making process. The hierarchical structures of government supported the positions of the politicians to exercise their power over other stakeholders in the decisions for the ICT policy.

Some stakeholders continued to carry out activities in the ICT sector despite the inability to influence decisions at the higher level of government. The stakeholders invested in ICT infrastructure that was addressing part of the national ICT policy objectives. For example, ESCOM implemented the fibre network connecting the major cities of the country. Malawi Switch Center, a financial services entity under the central bank implemented a fibre network connecting two major cities in the country. The two organisations were granted the telecom operator licence by MACRA. Universities in Malawi including Mzuzu University, College of Medicine, The Polytechnic and Chancellor College also implemented connectivity sharing infrastructure that required

telecommunications regulations. These activities addressed policy objectives related to themes for ICT infrastructure investment, ICT in industries and human capacity development. However, there was need for government to control such activities through regulations and standards to effectively manage spectrum, bandwidth allocations, maintaining the security of internet gateways and billing of international internet traffic. Without control of the ICT sector activities, the government was losing revenue. Hence, the Cabinet in a way was compelled to endorse some of the ICT policy to support and guide the policy implementation agencies to perform their roles.

Power relations in policy decision making were demonstrated in the ability of the Cabinet to impose its will over other policy stakeholders in deciding on the priorities to be pursued in the development programmes. The exercise of power was partly influenced from government participation in external discourses that were reinforced through access to resources such as loans and development support from the international development and financing agencies. The Cabinet ignored the concerns of the local stakeholders and prioritised the interests of the stakeholders that could offer resources for the policy programmes and processes.

While the participation of stakeholders was encouraged to support the policy implementation of the policy, other stakeholder perceived that the final decisions on policy mainly rested with those in authority. One respondent noted that:

"[...] the problem is the decision makers, they do not value ICT and there is no strategic plan to enhance ICTs. There are no ICT professionals in the decision making committees and that is why decisions are made without input from ICT professionals. They make the decisions and invite the ICT professional just to comment on what they have already done"
(INT-7)

Similarly, another official pointed out that it was not the whole government that was responsible for delays in approval of the ICT policy but those in the position of authority which included the Principal Secretaries and the Cabinet:

"[...] efforts have been done even at lower levels, this is what we want then it gets to the next level. That where the bottleneck is, it does get presented, since there is that procedure you formulate the policy and the Principal Secretaries Committee and then it will go to the Cabinet, where it gets approved, these two steps are the bottleneck. At the Principal Secretaries level or at the Cabinet level, that is why I am saying it is not government as such [...] they are really a stumbling block [...]" (INT-18)

The organisations outside government exercised their power through mobilising their resources and executed programmes that addressed some of the policy objectives influenced the Cabinet to endorse the national ICT policy.

6.7.2 Policy oversight of national ICT policy

Media and Communications Committee (MCC) of Parliament was engaged activities related to oversight in the implementation of national ICT policy. The main role of the committee was policy oversight. This was interpreted as the processes of ensuring that ICT policy programmes funded by the Treasury were managed efficiently, effectively, consistent with the legal requirements and implemented in a transparent manner. Table 6.10 summarises the roles of the MCC for policy oversight.

Table 6.10: Summary of roles for the MCC of Parliament for policy oversight

Role	Description	Examples of statements
Reporting	Reporting ICT policy issues to the national assembly	<i>"Making timely reports of findings and recommendations to the House including but not limited to findings and recommendations on relevant proposed legislation"</i> (SOR-2003)
Formulation of Bills	Engaging stakeholders from executive in the formulation of ICT-related Bill and presenting them for debate in the national assembly	<i>"Studying and reviewing all relevant legislation and report to the House"</i> (SOR-2003) <i>"The Cabinet deliberate over the bill and adopt it. Once it is adopted it is presented by the MCC in parliament for debate and passed into a law"</i> (INT-3)
Monitoring programmes	The committee summons officials from the implementation agencies to obtain feedback on policy programmes	<i>"Summoning relevant responsible Ministers and government officials and other public officials and officers of statutory corporations. These include MICE, MACRA, MPC, MBC and Television Malawi"</i> (SOR-2003)
Investigating ICT sector- related issues	The committee conduct investigations of public interest or on request from the National Assembly on ICT issues	<i>"Investigating, enquiring into, and reporting on all matters relating to the mandate, administration, and estimates of their respective assigned Ministries, Statutory Corporations and public bodies funded by the Treasury"</i> (SOR-2003) <i>"But then it is not just MICE, there are also others. For example, the media committee will deal with MBC, MACRA, MPC, it will also deal with media issues and communications issues including ICT issues and also sometimes deal with the private media institutions and engages them to provide solutions and provide answers to the issues which are of interest to the committee but basically in an oversight manner"</i> (INT-31)

As summarised in Table 6.10, the activities of the MCC related to the ICT policy implementation were to report to the national assembly on ICT policy issues, formulation and presentation of ICT-related bills in the National Assembly for debate before they are passed into laws, monitoring policy programmes by summoning officials from implementation agencies to obtain feedback on policy implementation

activities, examining expenditure funded by the Treasury, monitoring progress on policy programmes and investigation of policy and legislative issues related to ICTs.

The issues of power emerged in relation to the activities of MCC where limited of resources constrained the functions of the committee. Part of the reasons was that there were tensions between MCC and the Ministry of Finance that was responsible for allocation of the funds to the various parliamentary committees in the National Assembly. The tensions were the result of political preferences for the officials in the Ministry of Finance where they were not supporting the new administration in government. The committee at that time faced challenges in carrying out the oversight activities due to lack of financial resources:

“In the past, not in this financial year, not in the parliamentary term, [...] we had seen some difficulties because money which comes to parliament is controlled by the executive and there was somebody who was reluctant to complete the process [in the Treasury Department]. For example, for the executive who is controlling the money to release the to parliament used to be reminded all the time, but we have seen change in this parliamentary term, especially from 2009 when we saw the government had the majority of the members and they did not have much problems to release the funds to the committees including the Media and Communications Committee” (INT-31)

The situation reveals power relations where the Ministry of Finance exercised their power over the MCC. The ministry withheld financial resources as a means of obstructing the activities of the committee. Such action was intended to limit the capacity of the committee in performing its roles. The situation improved when there was a change of government. Thus, the Ministry of Finance supported the ruling administration or those in authority ensured that the ministry performed its roles without political biases.

Power relations were also noted in the activities for oversight of national ICT policy where there were emerging disputes in the policy implementation agencies. The MCC was engaged to investigate and report to the National Assembly on the implementation of the Consolidated Information and Communication Technology Regulatory Management System (CIRMS). MACRA was experiencing challenges in regulating the ICT sector and some of the problems are highlighted in the following extract:

“MACRA had been unable to effectively discharge its mandate of monitoring the quality of service delivery of the ICT industry. Currently, the telecom industry is characterised by high rates of dropped-calls, network congestion, constant service interruptions, inaccessibility of network services, unexplained high tariffs and limited or poor coverage in some rural areas” (MCCR-2012)

In 2009, MACRA procured CIRMS at a cost of US\$17 million for supporting in ICT sector regulation in areas of billing of mobile network operators, management of

spectrum and supporting the security of the internet gateway. However, implementation of the system attracted different perceptions amongst its stakeholders. MACRA, the government, mobile operators and concerned citizens had different views about the system. MACRA perceived that CIRMS was beneficial to effectively regulate the ICT sector and address issues of accurate billing on network traffic data, correct call detail records and securing internet gateways: “[...] the objectives of CIRMS as follows: quality of service monitoring, revenue assurance, fraud control and spectrum management as well as quality of service” (MCCR-2012). The government also perceived that CIRMS was beneficial and would support generation of revenue from the telecommunication operators:

“Government will be assured of increased foreign exchange generation for the country [...] CIRMS will result in more revenue being collected and will lead to the further development of ICT in Malawi” (MCCR-2012)

The mobile telecom operators perceived that the system as a waste of resources since mobile network operators were already investing in the ICT sector as part of the licence conditions: “[...] whatever MACRA was advocating with regard to the CIRMS machine, it would be a duplication of effort as the issues were already being addressed by the operators” (MCCR-2012). The general public feared that CIRMS may violate their right to privacy where the regulator will be able to listen to their phone conversations:

“Basically what they are concentrating on is like our friends did in China, is censorship [...]. Censorship prohibit technology progress which is a bit unfortunate.” (INT-44)

“Now with the machine that was approved to be used by MACRA [...], so is there a right to privacy? There is no right to privacy” (INT-13)

Similar perceptions were noted from other stakeholders including journalists and opposition Members of Parliament. CIRMS was perceived to be a “spy machine” that could violate people’s privacy where MACRA would listen to the conversations of the mobile phone users.

The different perceptions about the system led to conflicts where concerned citizens obtained a court order restraining MACRA from implementing the system in 2011. This meant that MACRA could not operate the system despite having the system installed. MACRA successfully appealed against the ruling and was granted permission to operate the system in 2012. MCC investigated the implementation of CIRMS and conducted consultative meetings involving MACRA, mobile telecommunication operators and the media houses. MCC visited MACRA and telecom operators to appreciate the how the CIRMS would operate and understand the concerns from all the stakeholders. The recommendation from the investigation was that: *“installation of the machine would be beneficial to Malawians”* (MCCR-2012). The findings were reported in the National Assembly and the Members of Parliament debated the issues related to the

implementation of CIRMS in 2013. The National Assembly approved the implementation of the systems. However, the mobile network operators obtained a court injunction to restrain MACRA from operating the system in 2014.

Drawing on the discourse of ICT infrastructure, the MACRA in away was attempting to exercise power over the mobile operators in the implementation of CIRMS. The claim about the system being beneficial in regulating the ICT sector and in turn generating revenue for the country became part of regimes of truth for the stakeholders that were supporting the implementation of the system. The stakeholders included MACRA, government and members of parliament from the ruling party. However, the concerned citizens and mobile network operator mobilised legal resources to exercise their power in the litigation process where MACRA was not able to implement the regulatory system. Thus, power circulated among the stakeholders that supported the implementation of the system and those that opposed the system.

While the implementation of CIRMS may be seen as repressive and reinforcing dominant regimes of truth where mobile network operators would be subjugated to the regulations for the telecommunications sector, power relations were also productive. The actions of concerned citizens demonstrated that power can be productive where potential threat to privacy was raised. The MCC took action to resolve the conflicts. As part of oversight roles, the committee recommended reforms in the Communications Act of 1998 to ensure that implementation of CIRMS was within the legal frameworks:

“The Committee requests for a speedy review of the Communications Act of 1998 in order to incorporate current trends in the telecommunications sector and to include issues of internet, cybercrime and some roles of MACRA which need to be enhanced” (MCCR-2012).

6.7.3 Outcomes of power relations in politics

Politics in policy implementation were demonstrated in control over decision making for the policy activities. The stakeholders that had political authority in decision making for the policy include the Cabinet and MCC. Examples of policy activities that demonstrated control over decision making were the approval for the national ICT policy by the Cabinet and oversight of policy in the investigation of issues in the ICT sector by MCC.

The outcomes of power relations were in the delays on approval of the national ICT policy where the initial policy was drafted in 2003 and the final version was approved in 2013. Other stakeholders for the policy had supported the formulation of the policy but there was a limit for their influence in getting the policy to be adopted by the government. The stakeholders influenced the policy at lower levels of government e.g. through the NICTWG and Technical Committees that were working on the policy. The Cabinet prioritised on other issues that affected the popularity of government among

the electorate and did not approve the policy on time. Other stakeholders perceived that the government lacked commitment and that there was no direction regarding the development of ICT in the country: *“There are several drafts but no policy, [...] one of the things is that there is no real clear government direction right now because there is no policy. There is no clear government direction”* (INT-25). However, the stakeholders in the private sector continued to invest in ICT infrastructure which led to changes in the sector and required regulations. Hence, the Cabinet was compelled to approve the national ICT policy.

Another outcome for power relations was inability of the MCC to perform oversight of ICT policy implementation. The Ministry of Finance exercised power over MCC by withholding the funding that was used to support the activities of the committee. The situation led to the committee to depend on external funding from the donors. Another outcome was the exercise of power for the different actors in the ICT sector that led to the CIRMS not be operational because of litigation. Here, the power relations outcomes can be seen in two perspectives. The stakeholders that supported the implementation of the system, exercise of power among those that opposed the CIRMS was limiting and did not support the implementation of the system. While the stakeholders that opposed the implementation of the system, their exercise of power was enabling because it supported to highlight the concerns for privacy that were being ignored by the implementers of CIRMS. Thus, power was relational and stakeholders exercised their power drawing on different resources including legal resources.

6.8. Summary of the results

This section summarises the key findings from the study. It highlights the results of processes for the recruitment of stakeholders that were engaged in the policy implementation activities. Further, it summarises the effects of power relation in the policy programmes, processes and politics.

6.8.1 Recruitment of stakeholders in policy implementation

The findings on recruitment of stakeholders show that there were diverse stakeholders that were recruited for the execution of the national ICT policy implementation activities. The stakeholders were identified and selected using a broad range of techniques that were categorised into formal and normalised approaches. The recruited stakeholders include officials from government departments, telecom operators, international development agencies, politicians, local ICT associations, consumer protection associations and academics. The stakeholders performed different roles for the national ICT policy implementation including decision making, supporting policy activities, providing resources, regulating and implementing policy activities. Some stakeholders were excluded in policy implementation despite the diversity in the approaches of recruiting stakeholders and the composition of the recruited

stakeholders. The excluded stakeholders included representatives of rural communities, local farmer's associations, informational organisations that use ICTs and people with special needs such as disabled, the blind and the elderly.

The outcomes of power relations were the inclusion of demanding stakeholders and normalised approaches in the recruitment of stakeholders. The demanding stakeholders influenced government to be included in the policy implementation activities. Another outcome of power relations was the inclusion of stakeholders in the policy implementation through normalised approaches (appointment of stakeholders and compliance to policy programmes requirements).

6.8.2 Power relations in policy programmes

The findings on policy programmes concentrated on understanding power relations in collaborations of stakeholders in the policy implementation activities. The collaboration of stakeholders involved international development agencies, government departments and private sector organisations that worked together in partnerships and technical committees. The stakeholders shared different resources including information, knowledge, finance and skills. Despite the participation of stakeholders that was portrayed as beneficial to all stakeholders, there were differences in the capabilities of the stakeholders to mobilise and access resources that were used to exercise power. The stakeholders with resources dominated the policy implementation activities in imposing their will over other stakeholders to drive the direction of the policy programmes. However, the stakeholders with limited resources also exercised their power to influence policy activities. In some cases, the stakeholders used resistance as a way of exercising power to influence policy activities. The stakeholders used techniques of apathy, aggressive and active resistance.

The outcomes of power relations in the policy programmes were that the activities were driven by stakeholders that had the capacity to mobilise resources in influencing or compelling the government to act on policy activities. Further, access to resources was an important issue where stakeholders with resources were mainly outside government which led to the policy implementation activities to be oriented towards meeting the external needs, technocentric towards supply side of ICTs and with limited focus on the local needs, especially for the policy beneficiaries.

6.8.3 Power relations in policy processes

The findings on policy processes revealed power relations in the coordination of national ICT policy activities between the E-Government Department, OPC, MICE and MACRA. The roles of these government agencies in coordinating the implementation of the policy were changed over time. The roles of coordinating and controlling the policy activities were transferred to the different government agencies. The E-Government

Department, according to the Communications Act of 1998, was the main policy coordination and implementation agency for the ICT policy. However, the department had limited resources to effectively coordinate the policy implementation activities. Other agencies that were endowed with resources exercised power over the E-Government Department. MACRA were able to mobilise resources and exercise power in assuming the roles for the policy coordination. The transfer in coordination of the national ICT policy led to the duplication efforts in policy development and instability for the E-Government Department.

The outcomes of power relations among the stakeholders in the coordination of policy implementation activities were limited progress of policy implementation. Each time the policy was transferred to another implementation agency the policy activities were to be repeated, resulting in waste of resources and time. The power relations between MACRA and E-Government Department led to conflicts where there was limited support and cooperation among the agencies in policy implementation activities. The E-Government Department was marginalised in some of the sector activities related to the ICT policy that were championed by MACRA.

6.8.4 Power relations in policy politics

The findings for power relations in policy politics were highlighted in the decision making of the stakeholders with political authority. The findings showed that the Cabinet had control over the decisions for the approval of the ICT policy which was significant in the policy implementation. The policy approval related to resources such as budget, human capacity and political commitment to the policy implementation activities. However, the Cabinet exercised power over other stakeholders in delaying the process of policy approval. Part of the reasons for the delays in approving the ICT policy was lack capacity to mobilise local resources. The Cabinet prioritised policy programmes that would maintain its popularity and support from the electorate. In addition, the Cabinet prioritised on donor driven programmes that would maintain access to resources and contacts with the international development and financing agencies. The situation led to the government focusing more on external issues related to the ICT policy while neglecting the local needs for the policy beneficiaries. Thus, politicians became more powerful in deciding the priorities for the policy implementation and they positioned themselves to the dominant external discourses for development and their interests became regimes of truth that local stakeholders supported despite the ideas not addressing the real needs of the local stakeholders and policy beneficiaries.

While there were delays in approval of the national ICT policy, the other policy stakeholders including international development agencies and private sector organisations continued to invest in ICT infrastructure. In a way, the private ICT

infrastructure investment activities influenced government to consider approval of the national ICT policy to ensure that some of the policy implementation agencies could be able to perform their roles in the ICT sector. For instance, MACRA required regulating the ICT sectors and part of the regulatory activities formed part of the policy theme for legal and regulatory frameworks.

The outcomes of power relations in politics were that the Cabinet was not popular among some of the policy stakeholders that were engaged in the policy implementation. The stakeholders perceived that the government had no direction on the national ICT policy. However, the government was popular with some of the policy stakeholders in terms of the changes and developments that were taking place in the ICT sector. Another outcome of exercise of power for the stakeholders in the ICT sector compelled the government to consider approval of the policy. Thus, power to decide on the policy approval was not absolute as stakeholders indirectly influenced the decisions of the government to approve the policy.

6.9. Chapter summary

This chapter presented the findings for data analysis and highlighted how power relations among stakeholders affected the execution of the national ICT policy. The results showed that power relations affected the process of recruiting stakeholders that participated in the policy activities, and the way the stakeholders performed the different roles in the policy execution activities including policy programmes and processes. Power relation also affected the way politicians exercised their power in making decisions for the policy activities. Further, the findings showed that the exercise of power among the stakeholders emerged from the ability of the stakeholders to mobilise resources and influence the policy implementation. However, the exercise of power was not absolute for the stakeholders with resources but rather circulated among the stakeholders that participated in the policy implementation activities.

Chapter 7

Discussion of findings

7. Introduction

This chapter discusses the research findings from the study. The discussion focuses on the thematic outcomes from the research findings to illustrate points that are missing in the extant literature. Thus, the discussion will relate to some of the points highlighted in the reviewed literature. The chapter is divided into three sections. Section 7.1 discusses the thematic outcomes from the research findings concentrating on the effects of power relations on the recruitment of stakeholders and the key policy implementation activities: policy programmes, processes and politics. Theoretical propositions are suggested based on the thematic outcomes of the research findings. Section 7.2 revisits the key research question and sub questions. The key research question will be restated to ease going back and forth between the chapters. Section 7.3 is the summary of the chapter.

7.1. Thematic discussion of the findings

Emerging themes from the findings highlight key issues related to power relations. The summary of findings in Section 6.1 showed that the national ICT policy was framed around discourses of modernisation, technology and economics. The policy solutions to problems of poverty and economic performance concentrated mainly on the supply side of technology while missing details on the needs of beneficiaries. The findings on the recruitment of stakeholders showed that formal and normalised approaches were used in the recruitment of stakeholders. There was diversity in the groups of the recruited stakeholders. However, some stakeholders were excluded and the recruited stakeholders were more of the elite. Part of the reasons for exclusion of some stakeholders was technocentric approach to the policy. The key focus for the policy implementation was on technology as highlighted in the programmes for ICT infrastructure. Section 6.3 presented findings on power relations among stakeholders in policy programmes using RCIPMW and the Digital Migration Project. The emerging themes from programmes were use of resources and resistance tactics that stakeholders employed due to differences of interests in the programmes activities. The findings regarding policy processes in Section 6.4 highlighted power relations among stakeholders in the coordination of policy implementation activities. The emerging themes were the stability of implementation agencies and centralised coordinating point for policy implementation activities. Section 6.5 noted power relations among stakeholders in the politics for policy implementation. The power relations were highlighted in the decisions for policy approval that affected popularity of government among some of the stakeholders and in limited capacity of oversight of policy

implementation. The emerging themes from the analysis of politics were policy decisions and oversight of the policy implementation. The emerging themes are discussed in detail in the subsequent subsections.

7.1.1 Power relations in recruitment of stakeholders

The key thematic outcomes from the findings on recruitment of stakeholders were that recruitment was government-led and was technocentrically based on the stakeholders that were engaged in the policy implementation. The government in a way dominated the recruitment process where line ministries or departments identified and selected potential stakeholders that were verified by the PMEU. The role of the PMEU in the recruitment process brought potential biases in the selection of stakeholders that would conform to the regimes of truths for the development agenda of the incumbent government. Further, the selection was restricted to the stakeholders that had resources (finance, contacts, information and knowledge about ICT and policies) and were formal organisations. Hence, the recruited stakeholders were mainly elite and included academics, officials from government departments, telecom operators, politicians, law enforcement agencies, consumer protection agencies, donors, investors and local ICT associations.

Malawi was a beneficiary of AISI that was supported by UNECA. The country was supported in developing the national ICT policy using a blueprint. The NICI Framework was used in the initial formulation of the policy and prescribed the stakeholders to be engaged in the policy implementation. The prescribed groups of stakeholders that were recruited using framework were mainly from the supply side of ICTs. The stakeholders represented the macro-level of society. The stakeholders were those that participated in the discourses for technology, development and economics. Further, the adaption of the NICI framework in the initial formulation of policy goals marginalised the local ideas and contextual realities as one respondent noted:

“In the first place they [E-Government Department and external experts] should consult us before coming up with the draft policy in their own way, “the Western way”. They should have tried to ask us first as Malawians the ones that are ICT experts. We could have done a better job because if you look at the policy it has things which we do not have. May be with time we will have some of the things outlined in the policy but I think those things can not apply to the current situation in the country” (INT-05)

This statement partly explains the technology-centric view as highlighted in Section 2.1.4 to the recruitment of the stakeholders. Most of the recruited stakeholders were from the supply side of ICT and some with resources and capacity to mobilise resources to influence their interests and values. The interests of the policy stakeholders from the demand side of the stakeholders were marginalised as there were few representatives from the micro-level of society. Some of the stakeholders that were excluded in the

policy implementation include representatives of people with special needs, informal sector organisations, of rural communities, local Chiefs and local farmer's associations. The policy intentions were to address the urban and rural divide and support integration of ICT in the economic sectors (including agriculture which is the main economic activity for the country). There was need for a right balance in representation of stakeholders from both supply and demand side of ICT for the policy to ensure inclusion of the interests of all stakeholders. Thus, the recruiters could have assessed the assumptions embedded in the NICI framework and how the framework could be adapted to reflect the context the country.

The reviewed literature on stakeholder recruitment explained the process of recruitment of the stakeholders having a structured sequence highlighted in Section 2.6.2. The findings showed, in part, similar steps. However, the extant literature does not adequately address the issues of power relations in the recruitment process. The findings attempted to demonstrate that power relations in the recruitment process can be visible or hidden. The role of PMEU demonstrated the exercise of power over other government departments and external organisations in the recruitment of stakeholders. The department used power/knowledge in selecting stakeholders that were considered relevant to the policy while marginalising other stakeholders that did not participate in the dominant discourses related to ICT and development. However, the exercise of power among the recruiters and other policy stakeholders was relational and some of the excluded stakeholders demanded their inclusion in the policy implementation activities. Further, the insights on normalised process of recruitment extend the knowledge on the recruitment of stakeholders in the context of national ICT policy. The reviewed literature highlighted the steps that were consistent with formal approach in the identification and selection of stakeholders and normalised approaches were missing. Therefore, from the findings it can be suggested that recruitment of stakeholders can include approaches that are embedded in the government and international development agencies processes; and become taken for granted. The normalised approaches in the recruitment of stakeholders exhibit power relations that can be in form of pressure and compliance.

The discussion on recruitment of stakeholders led to the suggestion that potential contribution towards the policy activities can support inclusion or exclusion of stakeholders that have the capacity to mobilise resources and influence the policy implementation activities. However, exercise of power in the recruitment of stakeholders is relational where both the recruiting and recruited or excluded stakeholders can exercise power to influence the recruitment process. The following proposition is suggested:

Proposition 1: *Power relations in the recruitment of stakeholders influence who gets recruited or excluded in policy implementation activities.*

7.1.2 Power relations in policy programmes implementation

The findings show that policy programmes involved the collaboration of policy stakeholders in the policy activities to share resources including finance, knowledge, human capital, legal resources and information. The examples of policy programmes that were analysed employed participation approaches. For instance, the PPP approach for the RCIPMW and technical committee for the Digital Migration Project. Power relations were exhibited in the situations when stakeholders mobilised resources to the programme activities. Government as the custodian of the national ICT policy had limited resources (human capacity, finance, contacts and knowledge) to execute some of the policy programmes. Part of the solution was to collaborate with other policy stakeholders with resources. An example of such collaboration was the RCIPMW. The programme drew members from donors, government and private sector who contributed different resources. The RCIPMW activities addressed part of the policy goals for ICT infrastructure development, legal and regulatory frameworks and universal access to ICTs. The PPP approach to the programme was portrayed as beneficial to all stakeholders; however, there were power relations that affected the programme activities because partners had differences in interests in the programme:

"[...] we have the chairman [Minister of MICE], what he says is final. We also have the Minister of Finance without him we cannot work and everyone has got his or her own interests and different views on issues. For example, the legislation time frames, some say they want in June, those from Ministry of Justice do not want legislation passed by June because it will be off their record for the year. It means that it has inconvenienced the other officials so they are likely to say that it is not possible." (INT-26)

The extant literature on power relations and resources presented in Section 3.1.4 highlighted that stakeholders in relationships can draw on different resources to exercise power over or with others. In *power over*, the situation may be beneficial to one party while in *power with* may be the advantage to both parties. The study showed that although they collaborated, the stakeholders had different interests that influenced the priorities in the activities for the policy implementation. While the government of Malawi initiated the national ICT policy process, it had limited resources to fully finance and implement the policy. The situation led to the government to collaborate with other stakeholders including donors and private sector organisations. The contribution of the study towards this debate is that the government established relations with other stakeholders to access resources but exercised power in prioritising policy implementation activities. The government had pressing issues that were affecting the economy as a whole and prioritised in activities for health, education and

food security. However, the government had limited capacity to mobilise its own resources and in a way was influenced by the stakeholders with resources. The inclusion of the vested interests in the policy programmes from the donors or investors meant allowing certain values to be adopted as part of the policy implementation. However, not all the interests of the stakeholders were accepted in the collaborations; stakeholders exercised power that exhibited through apathy, compliance and aggressive resistance. While the stakeholders with financial resources, for instance donors and private sector organisations influenced the policy implementation activities, their exercise of power was not absolute. Power based on resources did not guarantee total control over policy activities. Other stakeholders also influenced the policy activities using different forms of resources e.g. legal frameworks and political mandate. Thus, power was relational and moved among the stakeholders. From this discussion, the following propositions are suggested:

***Proposition 2:** Power relations affect the capacity of stakeholders to mobilise and access resources that are used in influencing policy implementation activities*

7.1.3 Power relations in policy processes implementation

An example of policy processes was the coordination of the national ICT policy implementation activities. Coordination involved stakeholders in interactions, communication, sharing resources and norms and values that institutions performed in the policy activities. The process was also related to the roles that institutions performed in the policy implementation and the institutions in this process were the Cabinet, PMEU, MICE, MACRA and E-Government Department. These institutions were assigned different roles related to the policy implementation activities summarised as follows:

- **MICE:** A line ministry responsible for the ICT sectors activities
- **MACRA:** The regulator for the telecommunications and policy implementer
- **PMEU:** An agency responsible for monitoring, assessing the impact of policies and harmonisation of public policies
- **E-Government Department:** an agency responsible for coordinating the national ICT policy implementation.

Power relations were exhibited in the activities related to coordination of policy implementation where there were changes in the roles of the institutions. The transfer of roles between agencies influenced poor cooperation and conflicts among the stakeholders. For instance, the transfer of coordination of the ICT policy from the E-Government Department to MACRA in 2006. The transfer of the policy coordination led to changes in power positions for the stakeholders in the implementation agencies. The E-Government Department was affected in terms of the stability of the department and

continuity of policy implementation activities since the department was moved to a number of institutions over time. Each time the department was transferred to another department meant that stakeholders had to assume new identities and power positions to perform their new roles to support the new arrangements. Another example for power relations was the conflicts in the roles for PMEUE that was assigned to MICE but reporting to OPC as a controlling ministry for all government agencies. Similar roles were the key functions of the PMEUE. Thus, power relations were also related to meaning assigned to the policy implementation activities and stakeholders required to understand their roles in the new arrangements and lack of understanding of the roles contributed to the conflicts among the stakeholders.

The literature reviewed in Section 2.6.3 addressed issues of roles of stakeholders related to geographical location, knowledge and hierarchies. The findings are consistent with the issues on hierarchies where coordination of policy followed the government structures. The PMEUE retained control over the policy as a main controlling ministry for public policies. The study also demonstrated the exercise of power when the policy stakeholders took different positions when performing the different roles in the policy implementation activities. The roles of stakeholders in coordinating policy implementation could have been controlled from a central position to minimise conflicts among the policy stakeholders. The central position of the coordinating point required clarification of the roles that had legal mandate to ensure that stakeholders agree to the formal arrangements, support harmonisation of interests and actions in the policy implementation activities. These factors may affect the way stakeholders exercise power when coordinating policy implementation. From this debate the following proposition is suggested:

Proposition 3: Power relations influence the roles that stakeholders perform in coordinating policy implementation activities

7.1.4 Power relations in politics implementation

The findings showed that power was exercised among the stakeholders where those with political authority and political mandate exercised power over other stakeholders in decision making for the policy implementation. The Cabinet had control of the approval of the national ICT policy and the decision-making process followed the hierarchies of government structures. The Cabinet was the final decision maker for the policy. The approval of the national ICT policy was delayed and consequently some of the policy activities could not be executed because of lack of financial resources, human capacity and political will.

The reviewed literature in Section 2.7 highlighted that policy decisions can be made in a single or multiple settings and that problems related to decisions can be simple or

complex (Howlett, 2007). The finding of the study is consistent with the Type IV decision-making style where the problems for the national ICT policy were complex and involved many actors with different interests. This meant that the stakeholders had different views and preferences on the priorities of the policy implementation. Like other low-income economies, the government of Malawi did not prioritise the national ICT policy over other social challenges facing the country. However, power relations affected the way the decisions were made where those with political authority controlled the decision process and delayed the policy approval. The situation could be regarded as controlling where the interests of few stakeholders (for example, politicians in power) were being served, marginalising the interests of other policy stakeholders. In this case, the institutional practices supported the exercise of power where final policy decisions were made at the Cabinet level and lower-level institutions had limited control or inability to hold the Cabinet accountable. Power relations were limiting the progress in the activities of policy implementation.

The contribution of the study on the debate for power relations and decision making is that the exercise of power by the Cabinet in policy implementation decisions was not fixed. Drawing on the argument that power relations are ubiquitous (Foucault, 1980), other stakeholders without political authority mobilised resources (finance, contacts and human capacity) to engage in practices that indirectly influenced the Cabinet to consider approval of the national ICT policy. This was achieved through ICT infrastructure investment projects.

Another interesting finding on power relations was in the oversight of national ICT policy. The relations between the MCC and the Ministry of Finance showed that power relations were not productive. Despite having the legal mandate, the MCC could not perform some of the oversight roles due to inadequate resources. Hence, not all policy implementation issues related to oversight were addressed, such as summoning officials from implementations agencies to obtain feedback on policy implementation programmes. Such feedback was important to establish the status of policy programmes. For instance, noting successful programmes or programmes that required additional support to deliver the expected outcomes.

Power relations were also noted in results for the investigation for the CIRMS. The MCC investigated the implementation of CIRMS by MACRA as part its oversight roles. The results showed that power relations affected the implementation of CIRMS where MACRA was not able to implement CIRMS although it had already invested a large amount in acquiring the system. Some stakeholders of CIRMS exercised their power in restraining MACRA to implement the system. The power/knowledge concepts can explain the exercise of power among stakeholders as a contingency or opportunity for raising issues that were taken for granted in the decisions for CIRMS by MACRA e.g.

privacy concerns from the mobile phone users when the system was implemented. Against this backdrop a proposition is suggested related to policy decisions in the policy implementation where power/knowledge can limit or support stakeholders influence the decision-making styles:

Proposition 4: Power relations influence use of knowledge that determines decision making style for policy implementation

7.2. Revisiting the research question

Chapter 1 presented the background to the study was presented and highlighted that low-income status countries have enacted national ICT policies to support addressing their development ends. However, the countries were facing challenges in executing policy declarations into desired outcomes. Some of the challenges were the lack of financial resources, human capacity in implementation agencies, lack of legal frameworks, domination of politicians in decision making that do not consider the input from those affected by the policies (Kendall et al., 2006; Twaakyondo, 2011). One way of addressing the challenges was the participation of stakeholders in policy activities (Chacko, 2005; Labelle, 2005). The study argued that participation is also challenging because the stakeholders have different interests and values that shape their practices in policy implementation activities. While there were other issues that could affect participation, the study argued that understanding of power relations among the stakeholders was important. Power relations influence the way stakeholders communicate, collaborate, interact and make decisions for policy implementation. On the premise of this argument the following primary research question was posed:

- *How do power relations among stakeholders in a policy subsystem affect the implementation of national ICT policy?*

The primary question was answered through three sub questions. The first sub question relates to the recruitment of stakeholders to establish the stakeholders that were included and excluded in the policy implementation activities. The second sub question was on how power relations influenced the strategies and decisions of the stakeholders in the policy implementation. The third research sub-question was related to the outcomes of power relations in recruitment, strategies and decision for the policy implementation. The following paragraphs summarises the answer to the questions.

The study analysed power relations in the recruitment of stakeholders to establish an understanding of the process of identifying and selecting stakeholders that were engaged in the policy implementation. The analysis highlighted the key activities in the recruitment process and the stakeholders that were included and excluded in the policy implementation. The findings showed that the government employed a technical-centric approach to recruitment and selected stakeholders mainly from the supply side

of ICT that participated in the development discourses. Some stakeholders that were excluded in the recruited process exercised their power in influencing their inclusion in policy implementation action activities. The literature that was reviewed indicated the recruitment of stakeholders focusing on identifying, selecting, assigning roles to stakeholders and evaluating their influence and interests (Archterkamp & Vos, 2007; Ballejos & Montagna, 2008; Bryson, 2004). While the previous studies had highlighted activities for recruitment of stakeholders, understanding of power relations was not clear. The study extended the debates on recruitment of stakeholders and highlighted insights on the power relations among government and the recruited stakeholders. One of the themes that emerged from the recruitment process was the normalised approach to recruitment where stakeholders were recruited through compliance to programmes and appointments. This finding can be valuable to policy custodians to recognise that some means of recruiting stakeholders can be embedded in government processes.

Some of the recruited stakeholders performed multiple roles in the policy implementation activities as providers, experts, implementers, supporters, decision makers and the affected. The contribution towards this finding is that the different roles that stakeholders performed influenced the positions which they occupied and exercised power over others. The stakeholders had to negotiate and maintain their identities to effectively perform the multiple roles. The understanding of subject positions can be useful to the policy stakeholders so that they can balance their interests in policy and the interests of the other stakeholders in policy implementation.

The study analysed key policy activities of policy implementation including policy programmes, processes and politics. Power relations were noted in the policy programmes for RCIPMW and Digital Migration Project. The results showed that stakeholders collaborated in the policy programmes to share resources e.g. financial, knowledge and human capacity. Power relations were highlighted in situations where some stakeholders were able to mobilise resources and imposed their will on others as part of the collaboration process. However, other stakeholders also exercise their power using the tactics of apathy, aggressive and active. The finding was consistent with the idea that the exercise of power also closely related to resistance (Foucault, 1980).

Power relations were also highlighted in the coordination of ICT policy implementation as an example of policy process. Coordination of policy implementation was significant to ensure that there was no duplication of efforts in the policy implementation agencies. The stakeholders required common understanding of their roles in the policy implementation activities. However, the results highlighted that there were frequent transfer of roles in the policy implementation agencies that affected the coordination of the policy. Power relations were exhibited in the conflicts among the policy implementation agencies where the position of stakeholders (within their roles and

responsibilities that were considered to be legitimate and within moral obligation) were affected each time the central policy coordination point were transferred in the implementation agencies. The contribution of the study is on the detailed insights on the effects of power relations in coordination of policy implementation.

The analysis of politics as one of the key policy implementation activities concentrated on how stakeholders exercised their power in decision making and oversight of policy implementation activities. The study analysed the policy implementation activities related to the roles of the Cabinet and MCC of Parliament. Power relations were noted in the role of the Cabinet that controlled the policy decisions for approval of the policy, allocation of budget and human capacity, providing leadership in the policy implementation activities. The findings highlight the limit of stakeholders at lower levels of government structures in influencing policy decisions at the Cabinet level. The contributions of the findings are insights on the oversight roles of politicians in the policy implementation which have not received attention in the reviewed literature (Duncan, 2015; Ordonez, 2015).

The analysis the outcomes of power relations in policy implementation activities showed that the exercise of power among stakeholder was both enabling and limiting. In policy programmes, power relations were highlighted in the interactions among the members of the Steering Committee for the RCIPMW where some stakeholders imposed their will on other stakeholders. The situation led to those responsible for managing programmes to reflect on their roles and come up with way of managing power relations among the stakeholders. The outcomes of power relations in the policy processes were conflict among the policy implementation agencies that led to the E-Government Department being marginalised in some of the policy activities. For example, Telecentre Projects and Television White Spaces. Further, the transfer of roles in coordination of the policy affected the stability of the policy implementation agencies and delayed the policy implementation process. The outcomes of power relations in policy politics showed domination of politicians in policy decisions but other stakeholders also influences the ICT policy activities. In part, the results on domination of politicians in policy decision were consistent with the reviewed literature on decision making for a multi-actor setting. Howlett (2007) noted the complexity of decision involving multiple actors. The study extend the debate to highlight insights on the effects of power relations and that power can circulate among stakeholders to influence the outcomes of the policy decisions in a multi-actors setting (Foucault, 1980).

7.3. Chapter summary

This chapter has presented the discussion of the results. The key focus was on the thematic outcomes comes from the findings and how they extend the debate on the

analysed literature. The chapter also revisited the key research question and attempted to answer the sub-questions.

Chapter 8

Conclusion

8. Introduction

The primary aim of the study was to analyse power relations among stakeholders in the implementation of national ICT policy. The study analysed the case of Malawi which represented a low-income economy. This chapter summarises the key findings, highlights the contributions of the study and outlines potential areas for further work arising from the study. Section 8.1 summarises the key findings of the study. Section 8.2 presents the contributions of the study. Section 8.3 highlights the researcher's reflection on the study. Section 8.4 outlines the limitations of the study and how the researcher attempted to address them. Section 8.5 summarises the suggestions for research arising from the study. This is followed by recommendations for practice. Section 8.7 presents the final word.

8.1 Summary of key findings from the study

The study sought to analyse the power relations among policy stakeholders in the implementation of national ICT policy. The previous chapter demonstrated that the research question has been adequately addressed. The discussion on the emerging themes from the results showed how power relations among the stakeholders affected the implementation of national ICT policy. The results of the study are summarised in the subsequent subsections.

8.1.1 Recruitment of stakeholders for policy implementation

The government was responsible for the recruitment of policy stakeholders for the policy implementation. The E-Government Department identified and selected stakeholders. PMEU exercised power over the E-Government Department in verifying and controlling the stakeholders to be engaged in the policy implementation activities. The recruited stakeholders include officials from government departments, international development agencies, private sector organisations, consumer protection agencies, academics, local ICT associations and law enforcements agencies. The recruited stakeholders were mainly elite and were selected from formal organisations. Stakeholders who were excluded from the policy implementation activities included representatives of local communities, representatives of farmers, the youth, women, the elderly and people with special needs. However, some of the excluded stakeholders exercised their power to influence their inclusion in the policy implementation activities. The recruited stakeholders performed different roles in the policy implementation including providers, supporters, experts, decision makers, regulators and affected.

8.1.2 National ICT policy implementation

The national ICT policy implementation activities were categorised into programmes, processes and politics. The RCIPMW and Digital Migration Project were used in the study as examples of programmes where power relations were evident. The two programmes used participative approaches that drew stakeholders from the ICT sector and formed the Public Private Partnership and technical committee. Power relations among the stakeholders affected the programmes; some stakeholders accessed and mobilised resources to influence the will of other stakeholders in the programme activities. Hence, stakeholders with resources dominated in the policy programmes. At the same time, other stakeholders used apathy, aggressive and active resistance in the programme activities.

The analysis of politics in the policy implementation concentrated on the coordination of the policy implementation activities. Here, the various roles, interactions and collaboration in sharing resources and rules in the policy activities were analysed. The findings showed that there was frequent transfer of the roles of the policy implementation agencies. The transfer of roles affected the stability of some of the implementation agencies. Further, implementation agencies were assigned similar roles which created tensions among the agencies. Some agencies were marginalised as a result of the tensions between the organisations. Power relations affected cooperation in policy implementation activities among the policy implementation agencies.

Politics were noted in the making of decisions regarding approval of the policy and the oversight of national ICT policy. The Cabinet exercised power over other stakeholders in the approval of the policy. The delays in the approval of the policy affected the progress in the policy implementation. Other stakeholders also exercised power through the practices in the ICT sector that compelled the government to approve the policy. Another example that illustrated power relations in politics was the oversight of the national ICT policy. The Ministry of Finance officials exercised power over the MCC in the financing of the committee. The committee was not able to carry out some of its activities and relied on external funding. The committee also investigated issues in the ICT sector, including the implementation of CIRMS. This demonstrated power relations among politicians, the regulator, telecom operators and concerned citizens. The exercise of power among stakeholders was not restricted to a single group but move in a network-like setting that supported and inhibited some of the policy implementation activities.

8.2 Contribution of the study

The study analysed power relations in among stakeholders in the implementation of ICT policy using the context of Malawi. National ICT policy has been part of development agendas for low-income status economies. However, the execution of the

policies has been problematic and required explanation and understanding of issues for policymakers to take action. The thesis used Critical Social Theory (Foucault, 1980) as a theoretical underpinning and the concepts from power/knowledge were applied in the study. The concepts of discourses, problematisation, regimes of truth and technologies of the self were appropriated to explain power relations in the context of policy implementation. The study attempted to highlight power relations amongst stakeholders and questioned some of the assumptions about the participation of stakeholders in policy implementation activities. The study generated insights from the stakeholders related to participation and issues that can initiate further debates on participation to those engaged in policy implementation. The study suggested four propositions (summarised in Section 7.1) that can explain power relations among stakeholders in ICT policy implementation in similar setting especially the context of developing countries (Lee & Baskerville, 2003). First, explaining power relations in the recruitment of policy stakeholders to show stakeholders who are privileged and marginalised. Second, power relations are noted in the access of resources the stakeholders mobilise to dominate or resist actions of others in the policy implementation activities. Third, the influence of power relations in the roles that stakeholders perform when coordinating policy activities. Fourth, the effects of power relations on the outcomes of recruiting policy stakeholders, strategies and decisions for the policy implementation activities.

8.3 Reflection on the research process

Reflection on the research process is important and has been accepted as a standard methodical practice in qualitative research approach (Myers & Klein, 2011; Sarker, Xiao & Beaulieu, 2013). Reflection is related to reflexivity which is *“to look back over what has been done so as to extract a net of meaning which is the capital stock of intelligent dealing of further experiences”* (Dewey, 1938, cited by Pillow, 2003:177). Reflexivity in the study was related to self-conscious awareness of the research process; production of knowledge that supports understanding and gaining of knowledge on a research problem; on-going self-awareness in the research process to produce accurate results, and becoming aware of challenges or problematics of the research (Pillow, 2003). It was also led to consideration of the researcher’s views on theoretical constructs; research data; researchers’ biases; and the structural and historical context of a phenomenon (Carroll & Swatman, 2000).

A number of authors have outlined principles for reflexivity in Information Systems that addresses come of the points for reflexivity (for example, Cecez-Kecmanovic, 2010; Klecun & Comford, 2005; Klein & Myers, 1999; Myers & Klein, 2011). The study used the guiding principles for qualitative research (Sarker, Xiao & Beaulieu, 2013) as a reference point of reflection for the research process in this study. Eight principles for

qualitative research address some of the components of reflexivity noted in other studies (Cecez-Kecmanovic, 2010; Klecun & Comford, 2005; Myers & Klein, 2011). These include variety, internal coherence, relevance, theoretical engagement, transparency, charity, self-criticism and dignity. These are summarised in the subsequent subsections.

Principle of variety

The researcher was aware of the different methods available to conduct the study on national ICT policy implementation. The choice of qualitative method was based on the nature of the study. The aim of the study was to gather in-depth details of the historical context, interpretations, discursive practices and hidden assumptions of policy implementation (Myers & Klein, 2011). The qualitative method informed the way the research questions were framed, the data collection protocol and the process for data analysis.

Principle of internal coherence

The study attempted to achieve internal coherence in linking the components of research such as theories, methods of data collection and data analysis. The study employed CST and a single case and multiple data sources were used. Policy documents and data from interviews were collected and analysed using Foucauldian Discourse Analysis for consistency (Sarker, Xiao & Beaulieu, 2013).

Principle of relevance

Relevance was related to the topic of study, being significant to the discipline and practice (professionals with an interest in Information and Communication Technology). The researcher was cautious of relevance to the study and ensured that the topic was interesting, drawing from the persistence of the research problem in literature which was verified by experts in the field (the researcher obtained feedback on the topic from ICT policy experts at the Young Scholars Workshop in Kenya and Regional Communication Infrastructure Project of Malawi Stakeholders Consultative Conference in Malawi held in 2011). This led the researcher to ensure that the study was grounded in reality and that the results were not trivial.

Principle of theoretical engagement

Theoretical engagement ensured that data for the study had order, sense and meaning (Sarker, Xiao & Beaulieu, 2013). CST (Foucault, 1980) was used in guiding the study and propositions are suggested based on the emerging themes from the findings to explain power relations in the ICT policy implementation. Table 8.1 summarises key questions for theorising which were applied in the study to understand national ICT policy implementation.

Table 8.1: Answering key questions of theorising (Whetten, 1989)

Key question	Answer to the question
What is new?	The study provide insights on power relations among stakeholders in national ICT policy implementation
So what?	The study addresses the need for in-depth for understanding of power relations to support change in addressing limiting conditions for successful policy implementation outcomes
Why so?	The assumptions that participation in value free in addressing top-down approach to policy implementation where power issues (in communication, interactions, decision making) are taken for granted and perpetuate domination and marginalisation
Well done	Explanations of power relations among stakeholders in the context of national ICT policy
Done well	The study considered academic standards to provide knowledge claims on power relations in policy implementation
Why now?	There are claims that African countries have enacted national ICT policies but are experiencing challenges that are inhibiting successful outcomes. Power relations is one of the factors and understanding of power relations among stakeholders may support change in addressing the problems so that African countries can support development activities using ICTs
Who cares?	African policy makers, researchers and international development agencies consider ICT in supporting socio-economic development initiatives. National ICT policy support the application, regulation and use of ICT in the socio-economic development initiatives

Principle of transparency

Transparency was necessary to ensure that the researcher was not biased in the process of conducting the study (Sarker, Xiao & Beaulieu, 2013). The researcher ensured that the research activities were clearly defined and documented as outlined in the research methodology chapter; details on where, how and when data were collected and analysed, then highlighted to demonstrate how the conclusions from the findings were drawn.

Principle of clarity

Clarity is appreciating the work of respondents and taking a neutral position when interpreting the research data. This was applied when conducting data analysis. The policy documents presented the consensus of various stakeholders engaged in the policy formulation of national ICT policy. The interviews represented accounts of activities for the national ICT policy implementation. The researcher ensured that there was no bias in analysing the data and took a value position in the process, based on FDA (Arribas-Ayllon & Walkerdine, 2008) and hermeneutic cycle (Wodak, 2011). The principle of clarity extends to self-criticality.

Principle of self-criticality

'Self-criticality' is the researcher's attitude towards data, sources of data, analytical approach to the research process and interpretation of data (Sarker, Xiao & Beaulieu, 2013). The aim was to ensure that personal experiences, assumptions and biases did not influence the results of the study. The researcher ensured that there was no systematic distortion of narratives from the data, so some of the interview transcripts were sent to the respondents for verification and member checking was applied to the results of data analysis. The data were analysed in an iterative way while considering concepts from CST, emancipatory interests and highlighting the taken-for-granted assumptions and beliefs in the national ICT policy implementation (Cecez-Kecmanovic, 2011; Walsham, 2005). The researcher was cautious of his own beliefs, assumptions and understanding of the context of the study because he is from Malawi and familiar with how the public and private sectors operate.

Principle of dignity

Dignity relates to the fact that some researchers do not recognise qualitative research as substantive and rigorous as positivistic research is (Sarker, Xiao & Beaulieu, 2013). The researcher was cautious of the two dominant research paradigms and that qualitative research is now a well-established paradigm in IS discipline (Walsham, 1995). The research was conducted ensuring that, in addressing the issues of objectivity and generalisations, it was not defensive and apologetic about being a qualitative study. Creative ideas were considered in presenting the views of the respondents on policy implementation and exposing the deep-rooted contradictions in the national ICT implementation activities. The researcher ensured that the results were presented in an ethical manner to represent what was happening in the implementation of the policy, while maintaining confidentiality of the respondents (Walsham, 2006).

8.4 Challenges and limitations of the study

The study had a number of challenges and limitations which were reflected upon as contingencies during the execution of the study. The researcher was aware of the challenges of voluntary participation, especially in public institutions where respondents are often unwilling to participate in academic studies or disclose information (Kendall, Kendall & Kah, 2007). Data collection was conducted in two phases, the first phase between July and August 2013 and the second phase between December 2013 and January 2014. The researcher experienced challenges in the second phase. The public service in Malawi was granted a three-week holiday in December 2013 at short notice. As a result, all the appointments scheduled with government officials during that period had to be rescheduled.

During the second phase for data collection, some respondents from government ministries and departments were unwilling to discuss national ICT policy. At that time there were investigations relating to misuse of public funds where an Information System was used in creating and approving unauthorised payments. The respondents self-censored themselves and provided limited information on ICT policy issues. The researcher explained and provided adequate information on the purpose of the study to mitigate the challenges of participation. The respondents were given adequate time to decide on their participation in the study. The researcher reassured them of confidentiality and anonymity.

There were also a number of limitations which affected the study and the researcher perceived them as opportunities that, given time, would be dealt with differently. These extended from practical to methodical limitations. The interviews for the study did not include some of the mobile network operators in Malawi (Telecom Networks Malawi Limited and Airtel). The two organisations were important in the provision of ICT services to the other economic sectors and communities. The researcher requested permission from the Human Resources Departments and later Chief Executives of the organisations, but permission to interview officials from the two organisations was declined. To mitigate this, the researcher used secondary data from the Association of Telecom Operators to understand the views of mobile network operators on national ICT policy issues. Similarly, a request for participation of politicians in the study did not yield fruitful results. Most of the politicians declined to participate in the study and others were busy campaigning for the presidential and parliamentary elections. A member of the MCC was interviewed and the researcher was given minutes of meetings and reports which were analysed in the study.

Further, the respondents in the national ICT policy indicated memory lapses in recalling events since the national ICT policy process had taken a long time (the national ICT policy formulation began in 2001). To mitigate this challenge, the researcher highlighted the key issues to be discussed during the interviews when arranging the appointments with the interviewees. In some cases, the researcher provided a copy of the interview guide to the respondents before the meetings. The respondents had time to recall some of the key issues for the national ICT policy.

8.5 Suggestions for further research

National ICT policy implementation is a social activity involving different stakeholders who have different interests and values. The study has demonstrated that power relations among the policy stakeholders may affect the expected outcomes. Drawing from the findings in this study, a number of options are available for further research.

First, there is need to examine the transferability of the concepts for explaining power relations among the stakeholders in the implementation of the national ICT policy to

another context of a developing country. A further study is suggested to validate the propositions for power relations in the implementation of the national ICT policy that have emerged from the data summarised Section 7.1. Second, there is a need to assess the role of politicians engaged in national ICT policy implementation in the African context. The study has demonstrated that those in political leadership are crucial to decisions for allocation of resources (finance and human capacity), and exercise their power over other policy stakeholders. Further research may focus on the political will of the executive and on the legislative oversight roles that can be reviewing and monitoring national ICT programmes in policy implementation agencies.

8.6 Recommendations for national ICT policy practice

Participation of stakeholders in national ICT policy implementation is suggested as part of solutions in addressing the challenges of policies failure. While there is merit in participation, the study argued that power relations among stakeholders can also affect the policy implementation. It is important to recognise that there are differences in interests when stakeholders participate in policy activities and develop means to mitigate the challenges power relations may cause. Three recommendations are suggested from the research findings:

First, access to resources and capacity to mobilise resources are key in policy implementation and can limit the way power is exercised among stakeholders. Implications for practice are that despite African countries having pressing needs that require attention and resources (for instance, finance and human capacity), there is need for the governments to come up with innovative means for generating its own local resources that can support investment in ICT infrastructure. Currently, most governments rely on external funding from donors and investors. It appears that lack of resources put African countries in a disadvantage position to follow dictates of external parties that have little interest for development and the plight of the policy beneficiaries. Some of the means of generating local resources could include introduction of levies and revive the universal access fund where licenced operators and other ICT investors should be encouraged and supported in the whole process for ICT infrastructure investments.

Second, national ICT policy oversight is crucial for supporting transparency and accountability in policy implementation. The findings highlighted some power relations issues: (i) the Cabinet had control over the decision for approval of the national ICT policy and that stakeholders at lower levels of government structures could not hold the Cabinet accountable; (ii) some officials in Ministry of Finance exercised power over MCC in the allocation of resources from Treasury. The MCC could not perform some of its oversight roles because of limited resources. The following measures can be taken to support the oversight of the national ICT policy. The MCC can be empowered to

conduct oversight for national ICT policy to extend its roles towards engaging the Cabinet (through the Cabinet Committee on Media and Communications) and Committee of Principle Secretaries. The arrangement can support accountability at high level of government on ICT policy issues where the committee would have access to the Cabinet and be able to query and follow up on issues related to the national ICT policy implementation. Second, enhancing the collaboration of the MCC with external parties such as NGOs, CSOs and research institutes that work with local communities and that have specialised skills or expertise to conduct research and support evidence-based decision making in the activities of the committees. The collaborations can address challenges of limited resources and support the investigations of ICT-related issues that are beyond the capabilities of the MCC e.g. technical issues on spectrum management, cyber laws and data protection.

8.7 Final word

Execution of national ICT policies in African countries has followed a top-down approach which has been one of the barriers to successful policy implementation outcomes. While participation of stakeholders is perceived to be a best practice that can address the top-down approach in policy implementation, the study has showed that power relations among stakeholders affect the implementation of the national ICT policy. The power relations affected the way stakeholders were recruited, made decisions, prioritised policy activities and allocated resources in the policy implementation activities. The study provides valuable insight into factors that are often taken as given when stakeholders participate in the policy implementation process. This study has brought an understanding of participation of stakeholders in policy implementation and highlighted the need for right balance of representation of stakeholders and that power relations form part of participation. Thus, the key lesson learnt from the study is that power relations among stakeholders in policy implementation should be recognised and managed to support policies in achieving successful outcomes.

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Appendices

Appendix 1: List of respondents

Organisation	Nature of organisation	Designation
Government departments		
1. National Science & Technology Council	Organisation responsible for supporting research and development on science and technology; and advisory body to government	Director of ICT
2. Office of the President and Cabinet	Line ministry for government operations and reports directly to the Cabinet and the President	Assistant to the Chief Secretary Other: Member of NICTWG
3. National Library Services	Organisation offering public library services and responsible for managing the national digital repository	ICT Specialist Other: Member of ICT Association of Malawi
4. National Library Services	Organisation offering public library services and responsible for managing the national digital repository	Deputy National Librarian
5. E-Government Department	Department responsible for coordinating and implementation of policy activities	Deputy Director
6. E-Government Department	Department responsible for coordinating and implementation of policy activities	Principal Systems Analyst Other: Member of NICTWG
7. Ministry of Economic Planning	Department responsible for economic planning	Director of Economic Planning
8. Ministry of Information and Civic Education	Department responsible for information and civic education; line ministry for monitoring national ICT policy	1) Deputy Secretary 2) Under Secretary
9. Ministry of Lands and Housing	Department responsible for registration of land and housing services	Assistant ICT Director Other: Member of NICTWG
10. Ministry of Agriculture	Government department responsible for agriculture and food security	ICT Director Other: Member of NICTWG
11. Department of Information Systems and Technology Management Services	Division responsible for management of ICT services in public organisations	Deputy Director Other: Member of NICTWG

Organisation	Nature of organisation	Designation
12. Ministry of Information	Department responsible for information and civic education	Project Manager for Digital migration
13. Copyright Society of Malawi	Department responsible for registration copyrights and patents	Chief Copyrights Officer
14. Copyright Society of Malawi	Department responsible for registration copyrights and patents	Licensing Manager Other: Member of NICTWG
15. Office of the President and Cabinet	Line ministry for government operations and reports directly to Cabinet and the President	Former Principal Secretary & Secretary to the Cabinet
16. Ministry of Human Resources	Department responsible for human resources development in public service	Former Principal Secretary
17. Ministry of Trade and Industry	Department responsible for trade and industry development	Principal Secretary
Consumers		
18. The Competition and Fair Trading Commission	Regulatory body for fair trading and competition	Director of Mergers and Acquisition
Regulators		
19. Malawi Communications Regulatory Authority	Regulatory organisation for ICT sector regulator (Telecommunications, broadcasting and postal services)	ICT Development Manager Deputy Director
Legal institutions		
20. Malawi Law Commission	Organisation responsible for formulation, evaluation and reforms of laws which coordinate with Ministry of Justice	Chief Law-Reform Officer, Other: Member of NICTWG & Consultant of Electronic Transactions Management Bill
Private sector		
21. Multi-choice	Private content service provider and offer television programmes and mobile banking services	Branch Manager
22. Public Private Partnership Commission of Malawi	Organisation responsible for private public partnerships and investment	RCIPMW Project Manager

Organisation	Nature of organisation	Designation
23. Malawi Postal Cooperation	Public postal services provider	Postmaster
ICT sector		
24. Malawi Switch Center Limited	Private organisation providing connectivity and financial services	ICT Manager
25. Local Development Fund	Organisation responsible for administration of local development programmes	ICT Manager Other: Executive member of ICT Association of Malawi
26. ITS Enterprises	Private sector organisation offering ICT services	Managing Director, Other: President of ICT Association of Malawi
27. National AIDS Commission	Organisation for coordinating HIV/AIDS programmes.	ICT Officer Other: Member of ICT Association of Malawi
Academia		
28. UbuntuNet Alliance for Research and Education Networking	Non-government organisation that support connectivity and related services in education and research institutions	Executive Director
29. Kamuzu College of Nursing	Academic institution and a constituent college of University of Malawi which offers Nursing programmes	ICT Manager Other: Member of ICT Association of Malawi
30. National Information Technology College	Department for training and development under E-Government Department	Deputy Principal
31. University of Malawi – The Polytechnic	Academic institution and a constituent college of University of Malawi that offer Management and Engineering programmes	The Director Other: President of Malawi ISP Association
Law enforcement agencies		
32. Malawi Police	Law enforcement agency	Director of ICT
33. Malawi Police	Law enforcement agency	Chief Prosecuting Officer

Organisation	Nature of organisation	Designation
Telecom operators		
34. Malawi Telecom Limited	Telecommunications mobile operator	Customer Services Engineer
Investors		
35. The World Bank	International development and financing agency	Senior Private Sector Development Specialist
Politicians		
36. Communication and Media Committee	Parliamentary committee for Media and Communications responsible for ICT policy oversight	Secretary for the Communication and Media Committee
Rural communities		
37. Farm Radio	Non-government organisation promoting radio programmes for ICT in agriculture and rural development	Executive Director
The media		
38. Malawi Broadcasting Cooperation	Public broadcaster for television and radio stations	Regional Head of Services
39. Zodiac Broadcasting Cooperation	Private broadcasting station (television and radio)	Director of Engineering and Technical Services
40. African Bible College Radio Station	Faith-based private broadcasting station (television and radio)	Station Manager
41. Transworld Radio	Faith-based private broadcasting station (radio)	Station Manager
42. Galaxy Radio Station	Private broadcasting station (radio)	Director of Technical Services
43. Media Institute of Southern Africa Malawi Chapter	Organisation responsible for supporting access to information and freedom of the press (print, radio and television)	Executive Director
Donors		
44. United Nation Economic Commission for Africa	International development agency supporting economic development in Africa	Economist

Appendix 2: List of document used in the study

	Title of document	# of Pages	Focus	Organisation	Reference
Key documents	National ICT policy draft (2003)	20	ICT sector development	E-Government Department	NICTP-2003
	National ICT for development policy (ICT4D) (2006)	65	ICT sector development	E-Government Department	NICTP-2006
	National ICT policy final draft (2009)	27	ICT sector development	E-Government Department	NICTP-2009
	National ICT policy (2013)	23	ICT sector development	MICE	NICTP-2013
	National ICT policy implementation plan (2013)	74	ICT sector development	MICE	NICTPP-2013
Supporting documents	Vision 2020 (1998)	78	National development	National Library Services	VS-1998
	Communication Sector Policy (1998)	31	ICT sector development	MICE	CSP-1998
	Communications Act (1998)	56	ICT sector regulation	MICE	CA-1998
	Digital Broadcasting Policy (2013)	22	ICT sector development	MICE	DBP-2013
	Rural Telecommunication Policy (2002)	14	ICT sector development	MICE	RTP-2002
	Malawi Poverty reduction Strategy (2002)	215	National development	Ministry of Economic Planning	MPRS-2002
	Malawi Growth and Development Strategy I (2006)	248	National development	Ministry of Economic Planning	MGDS1-2006
	Malawi economic recovery plan (2012)	22	National development	Ministry of Economic Planning	MERP-2012

	Title of document	# of Pages	Focus	Organisation	Reference
	Malawi growth and development II strategy (2012)	258	National development	Ministry of Economic Planning	MGDS2-2012
	National ICT master plan 2014-2030 (2013)	137	ICT sector development	E-Government Department	NICTMP-2013
	Joint meet report (DISTMS, MACRA, MBC, MICE, PPPCMW, MPC) (2011)	38	ICT sector development	E-Government Department	JMR-2011
	Electronic transactions management Bill (2012)	37	Regulation of ICT	E-Government Department	ETMB-2012
Reference documents	Policies and plans on information society: status and impact - Economic Commission for Africa (2003)	55	ICT sector development	Economic Commission for Africa	ECA-2003
	Towards an information society in Africa: The case of national policies - Economic Commission for Africa (2007)	25	ICT sector development	Economic Commission for Africa	ECA-2007
	The constitution of the Republic. Government of Malawi (1998)	65	Government and protection of rights	Ministry of Justice	COM-1998
	Malawi National Assembly standing orders (2003)	82	Operations guide	Malawi national Assembly	SO-2003
	Report on study tour to Rwanda development (2013)	28	ICT sector development	E-Government Department	STR-2013
	Department of E-Government Strategic Plan (2012)	44	ICT sector development	Malawi national Assembly	EGSP-2012

	Title of document	# of Pages	Focus	Organisation	Reference
	An Integrated Socio-Economic and ICT Policy and Plan Development Framework for Malawi (2002)	144	ICT sector development	MICE	BLP-2002
	Project Preparation Consultancy for the Malawi Communication Infrastructure Project (MCIP) (2009)	47	ICT sector development	PPPCMW	RCIPMW-2009
	Farm radio Malawi Report (2011)	90	ICT sector development	Farm Radio	FRM-2011
	Malawi Government Civil Service ICT policy (2012)	69	ICT sector development	E-Government Department	CSICTP-2012
	Malawi Government ICT standards (2013)	110	ICT sector development	E-Government Department	NICTMP-2013
	Minutes of meeting (MACRA/MISPA) (2012)	7	ICT sector development	Malawi ISP Association	MMISP-2012
	Report on evaluation of the performance of telecenters in Malawi (2012)	49	ICT sector development	MACRA	MTLCP-2012
	Regional Communication Infrastructure Project Report – The World Bank (2009)	18	ICT sector development	The World Bank	WB-2009
	Regional Communication Infrastructure Project Report – PPPMW (2012)	18	ICT sector development	PPPCMW	RCIPMW-2012
	Media and communications committee report (2012)	31	ICT sector development	Malawi national Assembly	MCCR-2012

	Title of document	# of Pages	Focus	Organisation	Reference
	Malawi National Assembly Strategic Plan (2010)	28	Operation plan	Malawi national Assembly	NASP-2010
	Integrated strategic and implementation planning in the government of Malawi (2007)	80	Policy development guide	OPC	ISPGM-2007
	Telecommunications sector status in Malawi (2007)	37	ICT sector report	MACRA	ITUR-2007
	Report on review of communications Act and E-Legislation (2012)	97	Regulation of ICT	E-Government Department	ELRR-2012
	Malawi public service charter (2012)	20	Operation guide	OPC	MPSC-2012

Appendix 3: Interview guide

REF No.	INTERVIEW GUIDE-1
SEMI-STRUCTURED INTERVIEWS QUESTIONS	
THEME 1	INTRODUCTION
<ol style="list-style-type: none"> 1. Please tell me, how did you get involved in the national ICT process and for how long? 2. How did you, in your position, get involved in the national ICT policy process and for how long? 3. Which organisations do you consider to be of particularly importance in the implementation of national ICT and why? 4. Please describe for me any activities or programmes that so far emerged from the national ICT policy? 5. How would you describe the status of the national ICT policy implementation? 6. In your assessment and analysis, what have been the major challenges, if any, in the implementation of the national ICT policy? 	
THEME 2	STAKEHOLDERS AND PARTICIPATION IN NATIONAL ICT POLICY IMPLEMENTATION
<ol style="list-style-type: none"> 7. Will you please describe the nature of organisations that are stakeholders in the National ICT Policy and their respective interests that they represent? 8. How are these stakeholders organisations identified and selected to participate in the National ICT Policy? 9. Please explain the nature of working relations among the stakeholders in the National ICT Policy implementation process? 10. How do stakeholders participate in setting the goals of the National ICT Policy implementation? 11. How are the decisions on objectives and goals for implementation of the National ICT Policy made? 12. If there are different views or opinions arise on goals and objectives for National ICT Policy implementation, how are such differences resolved? 13. How do stakeholders that hold different views pursue their strategies and actions to shape the implementation of National ICT Policy? 14. Please describe the availability or lack of resources (skills, expertise, information, legal instruments and finances) in the process of implementing the National ICT Policy? 15. How does the availability or lack of resources affect strategies (course of actions) in the implementation of National ICT Policy? 16. Please explain the efforts that are made to control actions of participants or stakeholders in the implementation of National ICT Policy? 17. Please explain if there any opposing views on actions of stakeholders or participants in the implementation of the National ICT Policy? 18. How does the presence or absence of administrative and political arrangements i.e. laws and regulations affect the implementation of National ICT Policy? 	

THEME 3	POWER RELATIONS IN NATIONAL ICT POLICY IMPLEMENTATION
	<p>19. How do you use your knowledge from your field or profession to influence the implementation of National ICT Policy?</p> <p>20. Please tell me how you, yourself in your official position, use your knowledge from the field experience and professionalism to influence the implementation of the National ICT Policy?</p> <p>21. What knowledge do you obtain from those with different views or opinions on the implementation of National ICT Policy?</p> <p>22. How is knowledge shared among the stakeholders in the implementation of National ICT Policy?</p> <p>23. In your opinion, how does the process on implementing the National ICT Policy ensure that views and opinions of those stakeholders that are not represented are incorporated?</p> <p>24. Overall, how do you maintain a sense of self-worth in your engagement in the implementation of the ICT policy?</p>
THEME 4	OUTCOMES OF THE IMPLEMENTATION OF NATIONAL ICT POLICY
	<p>25. Will you please explain the results of the process of implementing National ICT Policy and how the results affect social economic development?</p> <p>26. How do the results of the process of National ICT Policy implementation influence the strategies of stakeholders?</p> <p>27. How do openness of political, administrative and collaboration affect the outcomes of the National ICT Policy implementation?</p> <p>28. How do public opinions affect the decisions on ICT policy implementation and outcomes?</p>
THEME 5	CLOSING
	<p>29. Who else, would you recommend to be interviewed regarding National ICT Policy?</p> <p>30. May be you have questions you would like to ask about the subject, do you have any?</p>

Appendix 4: Interview protocol

OPEN ENDED INTERVIEWS PROCEDURE	
A	PREPARATIONS
<ol style="list-style-type: none"> 1. Study the interview guide and consent form 2. Confirm date, time and venue for the interview 3. Check recording equipment and note-making materials 4. Travel and arrive early at the venue of the interview (provide time for delays) 	
B	CONDUCTING THE OPEN-ENDED INTERVIEWS
<ol style="list-style-type: none"> 1. Greet the participants and introduce yourself in a friendly manner (Who you are, what you are doing, issues of anonymity, boundaries of confidentiality and what will happen to the collected data) 2. Describe the interview process briefly (the nature of questions, the sequence of questions and the expected responses - detailed) 3. Obtain the informed consent from the participant (Signing of the interview consent form) 4. Switch on the recording equipment, if permission to use the recorder is granted 5. Verify consent on recorder. 6. Ask the questions according to the interview guide and ask follow up questions 7. At the end of the questions, give the participant the opportunity to ask questions 8. Summarise key points and verify with the participant 9. Ask for suggestions for further appointments or participants to the study 10. Thank the participant for their time and switch off the recorder 	
C	AFTER THE INTERVIEW
<ol style="list-style-type: none"> 1. Check if the interview is recorded; if not recorded, expand the notes. 2. Assemble all materials 3. Expand the notes within 24 hours 4. Send a note for vote of thanks to the participants 	

Appendix 5: Authorisation letters to conduct the study



NATIONAL COMMISSION FOR SCIENCE & TECHNOLOGY

Lingadzi House
Robert Mugabe Crescent
P/Bag B303
City Centre
Lilongwe

Tel: +265 1 771 550
+265 1 774 189
+265 1 774 869
Fax: +265 1772 431
Email: directorgeneral@ncst.mw
Website: <http://www.ncst.mw>

All communication should be directed to the Director General

Please Reply to: Ref No. : RTT/2/20

30 July 2013

TO: Frank Makoza, PhD Candidate, University of Cape Town, Department of Information Systems

CC: Professor Wallace Chigona

Dear Mr. Makoza

RE: RESEARCH CLEARANCE

I refer to your submission in which you are requesting the National Commission for Science and Technology to grant you permission to carry out a study titled "Power relations among stakeholders in the implementation of national policy in a developing country context"; the study being part of your PhD project.

Our office has reviewed the merit and ethical components of the research protocol which you had submitted and have **no objection** in granting you permission to conduct the study. Nonetheless, the National Commission for Science and Technology will be interested in updates of the research exercise whenever necessary.

For further information do not hesitate to contact our office.

Yours Faithfully

Signed

Andrew Mpesi

RESEARCH OFFICER (HEALTH, SOCIAL SCIENCES AND HUMANITIES)

For: DIRECTOR GENERAL

A nation with scientifically and technologically led sustainable growth and development

*Directors (PPP)
handle this.
Do communicate
the researcher.*

01 Aug 2013
PRESIDENT AND
CABINET
LILONGWE

REF. NO.

01/8/13
Signed

29TH JULY 2013

FROM: THE CHIEF SECRETARY TO THE GOVERNMENT, OFFICE OF THE PRESIDENT AND CABINET, PRIVATE BAG 301, LILONGWE 3.

TO: THE SECRETARY FOR E-GOVERNMENT, PRIVATE BAG 338, LILONGWE 3.

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH: IMPLEMENTATION OF NATIONAL ICT POLICY IN A DEVELOPING COUNTRY CONTEXT

I refer to your letter of 9th July, 2013 Reference Number OPC/GOVT/LA/414 on the above subject matter.

I am pleased to inform you that approval has been granted for Frank Makoza to conduct a research on the above subject as requested. It would be appreciated if a copy of his findings could be made available to this office once completed.

Signed

C.J.G. Mwale

For: THE CHIEF SECRETARY TO THE GOVERNMENT

Appendix 6.1: Introductory letter



Department of Information Systems

Leslie Commerce Building
Engineering Mall – Upper Campus
OR Private Bag – Rondebosch 7701
Cape Town
South Africa

Telephone: +27 21 650-2261

Fax: +27 21 650-2280

24th June, 2013.

TO WHOM IT MAY CONCERN:

Request for participation in a study on national ICT policy implementation

I am a PhD student in Information Systems at University of Cape Town, South Africa. I would appreciate your participation in my research on implementation of national ICT policy in a developing country context. The aim of the study is to investigate the relationships among stakeholders in the implementation of national ICT policy and how the policy influence socio economic development. I am using case of Malawi to conduct the study.

I would like to interview members of your organisation on national ICT policy since your organisation is a potential participant in the national ICT policy implementation. Participation in the study is voluntary and the collected data will be used for academic research purposes only. I undertake to keep all data and interviews confidential and anonymous.

The University of Cape Town Research Ethics Committee has approved the study to ensure that all research standards for academic research have been followed. If you need further details on the study do not hesitate to contact my supervisor. The contact details are as follows:

.....
Professor Wallace Chigona
Telephone: +27 (0)21 650 4345
Email: Wallace.Chigona@uct.ac.za

Thank you for your cooperation,
Yours sincerely,

F. Makoza.

Frank Makoza
Telephone: +27 0726508399
Email: fmakoza@gmail.com

Appendix 6.2: Consent form



Department of Information Systems

Leslie Commerce Building, Engineering Mall, Upper Campus,
Private Bag X3 - Rondebosch – 7701, Cape Town, South Africa.
Tel: +27 (0) 21 650 2261 Fax: +27 (0) 21650 2280

Internet: <http://www.commerce.uct.ac.za/informationssystem>

INTERVIEW CONSENT FORM

Research title: Power relations among stakeholders in the implementation of national ICT policy: Case of Malawi

Researcher: Frank Makoza, Department of Information Systems, University of Cape Town.

Research purpose:

Investigating stakeholder's relationships in the implementation of national ICT policy. The study focuses on the context of Malawi and the implementation process of national ICT policy.

I would like to record the interview, if you are willing, and use notes to supplement our materials during the interview. You may stop or withdraw from any time you want. All the information that will be collected will be kept confidential and used for academic research only.

1. I confirm that I understand the aim of the research.
2. I understand that participation in the research is voluntary and I am free to withdraw from the research anytime?
3. I agree to participate in the research

Please sign in the spaces provided below:

Name

Signature

Date