THE INTERPLAY OF SECTOR REGULATORS AND COMPETITION AUTHORITIES IN REGULATING COMPETITION IN TELECOMMUNICATIONS: THE SOUTH AFRICAN CASE

by

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I, Miyelani Khosa, declare that *The interplay of sector regulators and competition authorities in regulating competition in telecommunications: the South African case* is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

The interplay of sector regulators and competition authorities in regulating competition in telecommunications: the South African case

Summary: the privatisation and liberalisation of telecommunications throughout the world has resulted in the growing involvement of competition authorities in telecommunications regulation, alongside telecommunications sector-specific regulators. The existence of both sector specific rules and competition rules has brought about a critical institutional challenge. The increased role of competition authorities in the telecommunications sector raises the issue of inconsistent jurisdiction in the sector. Conflicts are therefore inevitable in the absence of clear delineation of jurisdiction. The South African model for regulation in the telecommunications sector entails a sharing of jurisdiction between the sector-specific regulator, the Independent Communications Authority of South Africa (ICASA), and the competition-wide regulator, the Competition Commission. The study thus determines the interplay between the Competition Commission and ICASA as well as the competitiveness of South African telecommunications.

Key terms: telecommunications, economic regulation, competition, sector-specific regulator, competition-wide regulator, Independent Communications Authority of South Africa (ICASA), Competition Commission, concurrent jurisdiction, regulatory capture, liberalisation, privatisation, natural monopoly.

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CHAPTER ONE: INTRODUCTION AND RESEARCH SUBJECT

1.1. OVERVIEW OF COMPETITION REGULATION IN TELECOMMUNICATIONS

Telecommunications began as a free enterprise market at the end of the 19th century in the United States and in Europe. The patenting of technology meant that one company could dominate the sector for the duration of the patent, which usually lasted 20 years. In the 20th century, the monopolies were strengthened by the need to interconnect growing national and international networks; governments were, however, eager to control the excessive power of monopolies and provide the population with affordable telephone services. Most major telecommunications operators in the United States were public companies regulated by the government (Shankar, Delcroix, Cowles & Hahn 2002:4-5). Over the past decades, the telecommunications sector has been transforming from a monopoly structure to a competitive one the world over. This transformation does not occur in a vacuum but happens in a broad context of reforming network industries (Hellwig 2008:2).

In the early and mid-20th century, utility services were provided through the formation of state-owned monopolies, mainly because it was considered to be an efficient way to centrally plan and manage these sectors and to ensure that the goods and services were delivered to the public. In this regard, the monopoly provider was government-regulated and government-owned (Hellwig 2008:2; Jamison, Berg, Gasmi & Távara 2004:25-26; Shankar et al. 2002:1; Trade and Industry Policy Strategies (TIPS) 2008:3). In the 1980s, the monopoly provision of utility services came under increasing pressure because of, among other things, globalisation and regulatory-induced inefficiencies which resulted in the view that there should be greater reliance on market forces, rather than state interventions (Chakravarthy [sa]:2-3; Hellwig 2008:2; Trade and Industry Policy Strategies (TIPS) 2008:3).

It became clear that state-owned monopolies were generally inefficient providers of utility services and ineffective in making these services broadly available to the public. Jamison et al. (2004:25-26) maintain that the micro-management of politically motivated government officials resulted in state-owned operators having excessive numbers of employees providing service largely to politically powerful groups, cross-subsidising services, and charging non-commercially viable prices. This, according to Hellwig (2008:3), led to the view that "the state's focus should be on setting the policy framework while the actual operation of the particular activity should be left to the private sector and market forces". In this regard, the view that regulated privately-owned service providers might be more effective than state-owned operators prevailed. considering that private operators might be less subjected to political opportunism and would therefore operate more efficiently than state-owned enterprises, particularly if subjected to competitive pressures. As a result, a trend developed where countries began to introduce competition wherever possible and to develop utility regulatory agencies that would enforce concession or licensing agreements and regulate prices (Jamison et al. 2004:27).

It should be noted that the general trend towards decrease in government involvement in market mechanisms and towards competition varies across sectors and countries. In telecommunications, although countries have varied in degree, market reform has largely taken the form of liberalisation and privatisation. It is also worth noting that the liberalisation of telecommunications markets started at different times in different countries. As an example, liberalisation in America began in the late 1960s with decisions by the sector regulator, the Federal Communications Commission (FCC), to introduce competition in customer equipment. Furthermore, the divestiture of AT&T in 1984 and the Telecommunications Act of 1996 declared all telecommunications markets to be open to competition. Liberalisation in the United Kingdom started with the privatisation of British Telecom in 1984. The European Union and many other countries around the world followed suit by embarking on a gradual liberalisation process throughout the 1990s, which usually involved privatisation of the incumbent national operator, the establishment of national regulatory agencies, and the licensing of

alternative operators. As a result, the late 1990s saw more than 100 countries binding themselves to liberalising their telecommunications sectors through the World Trade Organisation (WTO) agreement on Basic Telecommunications Services. Towards the end of the century, about half the countries in the world had committed themselves to telecommunications liberalisation programmes and had established national regulatory agencies (Melody 2003:4-5).

Key events that helped shape the breakup of the monopoly structures in a number of countries include (Shankar et al. 2002:4-5):

- ➤ The 1984 divestiture of AT&T in the United States and the creation of a duopoly in the United Kingdom set the stage for competition in the long-distance markets in numerous countries
- Technological advancements in wireless cellular technologies in the early 1990s.
- ➤ The economic downturn of the early 1990s that pushed governments in Europe, Latin America and Asia/Pacific to search for new resources by privatising their telecommunications sectors
- ➤ The US Telecommunications Act of 1996 that began the process of opening local markets to competitors in the United States
- > The freedom of offering value-added information services over networks in the 1980s, which broadened the market for the public Internet in the 1990s
- ➤ The World Trade Organisation's telecommunications agreements that committed 73 countries worldwide to open their networks to competitors
- > Wireless spectrum auctions of the late 1990s, which acted as taxes, and which exploited the financial strength of the operators and the equipment vendors

Most countries are thus embracing the importance of establishing a regulatory authority to foster competition in the information and communication technologies (ICT) sector in a fair and transparent manner. The challenge then becomes to ensure that adequate measures are in place to achieve policy objectives (OECD 2000:29). The development of competition in the telecommunications sector has resulted in the growing involvement of competition authorities in telecommunications regulation, and this has brought about

a critical institutional challenge (OECD 2000:29). The institutional frameworks for fostering competition in the telecommunications sector differ from country to country, depending upon the unique circumstances of particular countries in terms of the degree of competitiveness in the market, the existing legal system, as well as the political environment.

In terms of commonality, the telecommunications regulatory models are as follows (International Competition Network [sa]:84; International Telecommunication Union (ITU) 2008):

- The most common scenario is where countries have both a telecommunications regulator and one or more entities with jurisdiction over economy-wide competition matters (e.g. South Africa, United States and Australia)
- ➤ A model adopted in certain developing countries where there is only a sectorspecific regulator with competition mandates and no competition authority (e.g. Hong Kong and Namibia)
- ➤ The least common model is the one where a sector-specific commissioner is part of the general economy-wide competition authority (adopted by New Zealand) and the one where there is neither a sector-specific regulator nor a competition authority

According to Intven (2000:4), both sector-specific regulation and economy-wide competition regulation have their unique features. Sector-specific regulation involves both prospective and retrospective activities. In its prospective activities, sector-specific regulators render decisions that set the tone and conditions for companies participating in telecommunications service markets such as the approval of prices or the terms and conditions for interconnection between operators. Telecommunication regulators also have the authority to respond to complaints or remedy behaviour which contravenes telecommunication policy or laws. Competition authorities' activities, on the other hand, are concentrated on a retrospective basis, with the view of correcting problems which arise from actions by firms that harm competition.

Competition authorities are mainly concerned with preventing market participants from interfering with the operation of competitive markets, with the aim of achieving competition and improving economic efficiency. Telecommunication regulators often deviate from or manipulate competitive market principles to achieve other public goals (Intven 2000:4). The characteristics of both a sector-specific regulator and those of a competition-wide regulator are discussed in detail in Chapter Three.

The increased role of competition authorities in the telecommunications sector raises the issue of inconsistent jurisdiction in the sector, which may create problems for market participants in making business decisions (OECD 2000:29). It is for this reason that this study seeks to determine the interplay of competition authorities and sector-specific regulators in regulating competition in South African telecommunications.

1.2. COMPETITION REGULATION IN TELECOMMUNICATIONS: OVERVIEW OF THE SOUTH AFRICAN CASE

The South African model for regulation in the telecommunications sector entails a sharing of jurisdiction between the sector-specific regulator, the Independent Communications Authority of South Africa (ICASA), and the competition-wide regulator, the Competition Commission. This dual-regulatory model is governed by the Electronic Communications Act (No. 36 of 2005) as well as the Competition Act (No. 89 of 1998, as amended). The concurrent jurisdiction is premised on the understanding that combining the Competition Commission's intensive knowledge in competition matters and ICASA's superior industry-specific knowledge can only mean better regulation for the telecommunications sector (Esselaar, Gillwald & Stork 2006:21). The concurrent jurisdiction is managed through an agreement between the sector regulator and the Commission. This agreement means that ICASA can approach the Competition Commission, and vice versa, when a need arises, so as to solve any problem related to the telecommunications and ICT sector.

For quite some time, it has been widely argued that the concurrent jurisdiction between ICASA and the Competition Commission has led to ineffective regulation in the telecommunications sector. According to Manoim (2006), the overlapping jurisdiction leads to what is termed "forum shopping", where complainants can ignore the rulings of one regulator if they are of the opinion that their complaint was inadequately handled, and approach the other. Furthermore, the lack of clarity on which regulator has ultimate jurisdiction over competition in the telecommunications sector may result in the regulators simply avoiding assuming responsibility for tasks.

The continuing confusion caused by the overlapping jurisdiction between ICASA and the Competition Commission can be best exemplified by the case laid to the Competition Commission in 2004 by South African Value Added Network Services Association (Sava), in which Telkom was accused of abusing its dominance by refusing to supply backbone access facilities to value-added network service (VANS) licensees unless they met Telkom conditions. Telkom has responded by taking the case to the High Court, arguing that ICASA, and not the Competition Commission, has the ultimate jurisdiction to rule over competition matters (Andersen 2008a). In 2008, the High Court ruled in favour of Telkom, citing procedural flaws on the part of the Competition Commission.

The Competition Commission finds the concurrent jurisdiction seriously problematic and is determined to institute a scheme that would provide clarification and delineation of responsibilities for both the Commission and the sector-specific regulator. Andersen (2008b) maintains that the upcoming Competition Amendment Bill is expected to address the confusion caused by the concurrent jurisdiction. The Competition Amendment Bill provides that although the management of the concurrent jurisdictions with sector regulators – as provided by section 3 of the Competition Act – has generally worked well, uncertainty continues to exist in some cases, particularly following the establishment of the Electronic Communications Act, section 67(9), which provides that the Competition Act is subject to the Electronic Communications Act (Competition Amendment Bill 2008:10).

During the Department of Communication's budget speech in Parliament, on 3 June 2008, the Deputy Minister of Communications, Roy Padayachie, said that the Electronic Communications Act would be amended in line with the proposed Competition Amendment Bill. This means that the Commission would then be vested with the final authority to adjudicate on competition matters in the telecommunications sector and would also carry the responsibility to initiate market inquiry into the sector (Andersen 2008a). The essence of this is that the prevailing concurrent jurisdiction between ICASA and the Commission is once again being reconsidered through the Competition Amendment Bill, released on 27 May 2008.

The combination of sector regulators and competition authorities in telecommunications regulation is not unique to South Africa. The growing level of competition authorities in telecommunications has sparked debate worldwide as to whether either of the two models is superior in fostering competition in the sector. According to the ITU (2002:22), there is little empirical evidence to indicate a clear choice. This study seeks to determine the interplay of sector-specific regulators and competition authorities in regulating competition in the telecommunications sector, so as to determine a link between the adopted regulatory framework and the competitiveness of the South African telecommunications sector. As is, the study argues that the South African telecommunications sector's full capacity for competition is hindered by the insufficient management of the prevailing concurrent jurisdiction. This is, however, a symptom of a bigger problem, which is described by Lewis ([sa]:2003) as "the absence of a coherent national ICT policy framework, an ICT sector governed largely by fragmented legislation and a multiplicity of sometimes overlapping institutions..."

1.3. RESEARCH METHODOLOGY

The study of the interplay of sector-specific regulators and competition authorities in regulating competition in the telecommunications sector is an analytical, qualitative study that is based on the case study method. According to Wimmer and Dominick

(1997:103), a case study model entails "an empirical inquiry that uses multiple sources of evidence to investigate a contemporary phenomenon within its real life context, in which the boundaries between the phenomenon and its context are not clearly evident".

The study draws data from documents, journal articles, newspaper articles, books, research reports, and in-depth interviews with relevant industry stakeholders – purposive sampling was used to select interviewees.

1.3.1. Aims and Objectives of the Study

This study seeks to determine the interplay of sector-specific regulators and competition authorities in regulating competition in the telecommunications sector, making particular reference to the South African case. In this regard, the relationship between ICASA and the Competition Commission in fostering competition in the telecommunications sector is at centre stage of the study. In essence, the study will analyse the mandates, competencies as well as authorities of the two regulators, together with related institutions such as the Department of Communications.

The study will highlight the strengths and weaknesses of South Africa's adopted model of combining sector-specific regulation (ICASA) and competition-wide regulation (Competition Commission) in fostering competition in the telecommunication sector. The state of competition in the South African telecommunications sector is also assessed, with the aim of determining whether there is a causal relationship between the state of competition in the country and the adopted competition regulatory framework in the sector. The study also seeks to establish key learning points and interventions, at an institutional level, that could be employed for enhancing the competitiveness of South Africa's telecommunications sector.

1.3.2. Research Questions

At the heart of the research study, as stated above, is determining the interplay of sector regulators and competition authorities in regulating competition in the telecommunications sector, while giving particular reference to the South African case. In doing so, the study strives to answer the following sub-research questions:

- ➤ What is the rationale of economic regulation in the telecommunications sector?
- ➤ What are the general roles of sector regulators and competition authorities in telecommunications?
- ➤ How is the relationship between sector regulators and the competition authorities generally managed?
- ➤ What authority and competency do the competition regulators have in fostering competition in the South African telecommunications sector?
- > What is the interplay between the Competition Commission and ICASA?
- ➤ Is the South African regulatory framework effectively fostering a competitive telecommunications environment that works in the interest of the public?

1.3.3. Data Sources

The study will draw data from documents, journal articles, newspaper articles, books, research reports, and in-depth interviews with relevant industry stakeholders drawn from government, civil society and the private sector – purposive sampling was used to select interviewees.

1.3.4. Structure of the Study

The study comprises six chapters that are structured in a way that answers the research questions posed in 1.3.2. below. In that regard, Chapter Three deals with the question that seeks to determine the rationale of economic regulation in the telecommunications

sector, while Chapter Four deals with two questions: a) what are the general roles of sector regulators and competition authorities in telecommunications? And b) how is the relationship between sector regulators and competition authorities generally managed? Chapter Five deals with the rest of the research questions:

- ➤ What is the interplay between the Competition Commission and ICASA?
- ➤ Do the competition regulators have adequate competency and authority to foster competition in the South African telecommunications sector?
- ➤ Is the South African regulatory framework effectively fostering a competitive telecommunications environment that works in the interest of the public?

Further to this, the content of the six chapters of the study can be summarised as follows:

Chapter One introduces the study by providing an overview of the competition regulatory environment at an international level. The chapter also briefly outlines the South African competition regulatory framework in the telecommunications sector. The chapter ends with an outline of the aims and objectives of the study, research methodology as well as the structure of the study.

Chapter Two details the methodology used in conducting the study.

Chapter Three provides the theoretical framework of the study, which entails the theory of economic regulation as well as the rationale of economic regulation in the telecommunications sector. The chapter also provides critical definitions that lay the foundations of the study: privatisation, liberalisation, market failure, natural monopoly and regulatory capture.

Chapter Four outlines the interplay of competition authorities and telecommunications regulators, with particular reference to their unique characteristics, complementarities, overlaps and conflict, as well as conflict resolution mechanisms. The chapter also briefly

outlines five national regulatory frameworks for competition in the telecommunications industry, in recognition of the fact that telecommunications unfolds at an international level.

Chapter Five delves into the regulation of competition in the South African telecommunications sector. The chapter discusses the institutional arrangements for fostering competition in the telecommunications sector (particularly with regards to the inherent overlapping and often vague roles of the Competition Commission and ICASA). The role of government (Department of Communications) in the telecommunications sector is discussed. The resultant state of competition in the telecommunications sector is also assessed. The chapter concludes with a discussion on the role of the institutional regulatory framework in determining the competitiveness of the South African telecommunications sector.

Chapter Six presents the findings, conclusion, as well as recommendations of the study. In this chapter, an outline of limitations of the study is also provided.

CHAPTER TWO: RESEARCH METHODOLOGY

2.1. INTRODUCTION

This chapter details the methodology followed throughout the study. The chapter first provides a brief outline of the objectives and aims of the study. It then goes further to detail the research design of the study, which is then followed by a discussion of the methods used to collect data. The chapter concludes with a discussion of research ethics.

2.2. OBJECTIVES OF THE STUDY

The study seeks to determine the interplay of sector-specific regulators as well as competition authorities in regulating competition in the telecommunications sector, making particular reference to the South African case. The South African case entails a sharing of jurisdiction between the Independent Communications Authority of South Africa (ICASA), the sector-specific regulator, and the Competition Commission, the competition-wide regulator. The study therefore analyses the interface of the two regulators in regulation of competition in the telecommunications sector. The role of the Department of Communications in the telecommunications sector is also determined.

In determining the interplay of ICASA and the Competition Commission in regulating competition in the telecommunications sector, the study strives to answer the following sub-research questions:

> What is the rationale of economic regulation in the telecommunications sector?

- ➤ What are the general roles of sector regulators and competition authorities in telecommunications?
- ➤ How is the relationship between sector regulators and the competition authorities generally managed?
- ➤ What authority and competency do the competition regulators have in fostering competition in the South African telecommunications sector?
- > What is the interplay between the Competition Commission and ICASA?
- ➤ Is the South African regulatory framework effectively fostering a competitive telecommunications environment that works in the interest of the public?

The study also seeks to establish key learning points and interventions, at an institutional level, that could be employed in enhancing the competitiveness of the South Africa's telecommunications sector.

2.3. RESEARCH DESIGN

The study is an analytical qualitative study that is based on the case study method. Qualitative research is analytic and interpretative and seeks to examine phenomena in a holistic manner and makes no attempts to control events or unconnected variables. Types of qualitative research include field observation, focus groups, in-depth interviews, case studies and social surveys (Du Plooy 2001:33). Leedy and Ormrod (2005:133) emphasise the point that all qualitative research approaches have two things in common, that is, they concentrate on phenomena that happen in natural settings and study these phenomena in their complexity.

According to Wimmer and Dominick (1997:103), a case study model entails "an empirical inquiry that uses multiple sources of evidence to investigate a contemporary phenomenon within its real life context, in which the boundaries between the phenomenon and its context are not clearly evident". Recognising the coexistence of

both a sector-specific regulator and a competition-wide regulator in regulating competition in telecommunications in many countries, this study uses the South African situation as a case study (the relationship between ICASA and the Competition Commission). The following are advantages of the case study method, according to Wimmer and Dominick (1997:125):

- > A wealth of information about the research topic can be obtained
- The case study method can suggest why something has occurred
- ➤ The researcher has the responsibility to deal with a wide spectrum of evidence in the form of documents, historical artefacts, systematic interviews, as well as direct observations. The more data that can be used, the more likely it is that the study will be valid

2.4. DATA COLLECTION

Data was collected using two types of qualitative research methods: literature review and in-depth interviews with key stakeholders. With regards to interviews, a non-probability purposive sampling was used. In particular, maximum variation purposive sampling was used. Maximum variation purposive sampling simply entails seeking and identifying respondents who represent the widest possible range of characteristics of interest for the study (Merriam 1998:63). The underlying reason for using purposive sampling was the fact that the researcher thought it best to select a sample from which the most can be learned. According to Neuman (2000:220), qualitative researchers opt for non-probability sampling because the respondents are not chosen because they are found to be representative of a large group but because they are found to be most relevant to the research topic at hand.

2.4.1. Literature Review

The study drew data from documents such as journal articles, newspaper articles, books, research reports, Acts of Parliament, annual reports and policy documents. A full list of all the sources used is detailed in the "Sources Consulted" section of the study. The table below illustrates the variety of the documentary data used by the researcher.

Figure 1: Documentary Data

Source	Year	Туре
ICASA Act	2000, as amended	Act
Competition Act	1998, as amended	Act
ECA	2005	Act
ICASA Annual Report	2007/8	Report
Competition Commission Annual Report	2007/8	Report
Telkom Annual Report	2007/8	Report
Deputy Minister of Communications	2008	Speech
Mail & Guardian	2006	Newspaper
Department of Communications	2008	Website
ITU	2008	Website
OECD	2004	Research Report
Telecommunications Policy	1997-2007	Journal
Financial Mail	2008	Magazine

2.4.2. In-depth Interviews

Four in-depth interviews were conducted with interviewees selected from relevant industry stakeholders drawn from government, civil society and the private sector. The interviews were selected either because they represent the institutions in question (ICASA and the Competition Commission, as well as the Department of Communications, to a lesser extent) or they have working knowledge of the researched institutions. The interviews took place between the months of January and April 2008, following a review of literature that largely took place between September 2008 and January 2009. The following is a list of the people interviewed:

- Lisa Thornton: Telecommunications Law Specialist, Lisa Thornton Inc.
- ➤ Damian Finlayson: Enforcement Specialist and Avish Kalicharan: Head of Telecommunications, Competition Commission
- Norman Munzhelele: Acting Deputy Director General, Department of Communications
- Dr Christoph Stork, Senior Researcher, The Edge Institute/ Research ICT Africa (RIA)

The reason for conducting the interviews was to source information that will not be adequately addressed by the literature review. Therefore, the interview questions were tailor-made for specific individual respondents, as all the respondents were selected to address different aspects of the research. However, there were a few questions, such as the following, that were uniform to all interviewees:

- ➤ Do you consider the current South African regulatory framework for competition as fostering an effective and efficient competitive telecommunications environment?
- ➤ In your view, what are the main challenges facing the telecommunications sector in South Africa with regards to competition?
- > Do you think that, in respect of their concurrent jurisdiction, the relationship between ICASA and the Competition Commission is well managed?

- > Do the respective competition regulators, in your view, have adequate authority to foster competition in the South African telecommunications sector?
- > Do the respective competition regulators have adequate competency to foster competition in the South African telecommunications sector?
- > Do you think that there is a correlation between the country's regulatory framework for competition and the competitiveness of the telecommunications sector?
- ➤ What impact will the Competition Amendment Bill of 2008 have in the telecommunications sector once it is enacted into law?
- What needs to be done, in your view, to achieve an ideal South African framework for fostering competition in the telecommunications sector?

After getting consent from the interviewees, the interviewer gave enough time to the interviewee to reflect on the issue at hand, by providing an outline of issues to be discussed beforehand. During the course of the interviews, all interviewees were informed that the interview would be recorded so as to ensure that the process of transcribing happens at another time, thereby enabling the interviewer to give full attention to the interviewee. Although some of the respondents were uncomfortable with the recording of the interviews, the interviewer put the interviewees at ease by assuring them that the recorded information will solely be used for the research study. The significance of recording is that it establishes beyond doubt what was said in the interview as well as associated expressions.

Further to the above, the researcher tried by all means possible to follow the guidelines of in-depth interviews as provided by Deacon, Pickering, Golding and Murdock (1999:294-297):

- ➤ Being friendly and reassuring, and also spending time having a casual conversation before the interview. Here the researcher gave a background about herself as well as about the research itself
- Showing an active interest through eye contact, the use of body language, nodding, and so on

- > Striving to be a good listener by not interrupting the flow of speech as well as guiding the interviewee back to the issue being discussed in cases where they strayed
- > Refraining from imposing one's views by avoiding creation of a situation where the respondent speaks in order to please the researcher
- Asking the interviewee to favourably consider a follow-up session, should the need arise

In conducting the interviews, a variety of techniques were used depending on what was convenient for both the interviewer and interviewees, in terms of geographic location. As a result, three interviewing techniques were used: face-to-face interviews at the offices of the interviewees, a telephone interview, and one interview conducted via Skype because the respondent was on a business trip in the United States of America. The interviews ranged between 30 and 40 minutes each. After each interview, the researcher closed by thanking the respondents and alerting them that the process forward would entail the researcher transcribing the recorded interviews, which would then be emailed to the respondents to verify whether they were quoted correctly, and thereafter to give permission for the information to be used or arrange for it to be altered.

2.5. RELIABILITY AND VALIDITY

Issues of reliability and validity are important to qualitative data methods, although they are commonly associated with quantitative research methods. Reliability and validity in qualitative research assists the reader in deciding how much confidence to afford the outcomes of the study and whether or not to believe the researcher's conclusions. In qualitative research, the focus is thus on trustworthiness of the research project. There are four factors that can be used to enhance the credibility of qualitative research (Wimmer & Dominick 1997:89):

- Multiple methods of data collection: the use of various methods to collect data for a research project gives the impression that the topic was examined from various perspectives and thus builds confidence in the findings
- Audit trail: involves making available a permanent record of original data used for analysis. The audit trail provides others with a platform to examine thought processes involved in the research as well as to access the accuracy of research conclusions
- Member checks: involves allowing your research subjects an opportunity to read your notes and conclusions in order to ascertain whether or not you have accurately captured their input
- > Research team: team members should strive to be honest and on target when describing and interpreting data. Sometimes an outside person is asked to

> observe the process and raise questions of possible bias or misinterpretation where appropriate

To comply with the requirements of reliability and validity, the study used two types of data collection: documentary and in-depth interviews. As for the member-checks provision, being a dissertation of limited scope, the study was conducted under the guidelines of a supervisor (Professor PH Potgieter) who provided all the necessary checks and balances. With regards to in-depth interviews, the transcripts of the interviews will not be made available, at the request of some interviewees who expressed reservations about this.

2.6. RESEARCH ETHICS

The researcher considered research ethics when designing the study in order to ensure that sound ethical practice is built into the study design. Neuman (2000:129) advises that although ethics ultimately rest on individual researchers because mechanisms such as a code of ethics can only provide guidelines, the researcher has a moral and professional duty to be ethical. The ethical issues are the concerns, dilemmas and conflicts that arise over the proper way to conduct research. Ethical issues usually revolve around finding a balance between two often conflicting values: a) the search for scientific knowledge, with the advantage of improving the understanding of social life, arriving at improved and informed decisions, or helping research participants; and b) the rights of those being studied or others in society such as dignity, privacy, self esteem and other democratic freedoms.

When conducting in-depth interviews, the researcher followed the basic principles of ethical issues to be considered when conducting research, as provided by Neuman (2000:142):

- Refrain from exploring research subjects for personal gain
- The researchers should get consent to conduct research

- Guarantees of privacy, confidentiality and anonymity must be honoured
- The researcher should refrain from coercing or humiliating subjects
- A researcher must use appropriate research method suited to the topic at hand
- > The study design should be released together with the result of the research
- > The researcher must strive to ensure that interpretation of research results is consistent with the data
- > The research must use high methodological standards and strive for accuracy

In the case of literature review, the researcher ensured that all sources consulted are acknowledged both in the text and in the list of consulted sources.

2.7. SUMMARY

The chapter detailed the methodology used to conduct the study: an analytical, qualitative study that is based on the case study method. The study draws data from documents, journal articles, newspaper articles, books, research reports, and in-depth interviews with relevant industry stakeholders – purposive sampling was used to select interviewees.

CHAPTER THREE: THEORETICAL FRAMEWORK

3.1. INTRODUCTION

This chapter provides the theoretical foundation of the study as well as seeks to determine the rationale of economic regulation in the telecommunications sector. The study is based on the theory of economic regulation which essentially entails government intervention in the market in order to achieve public policy objectives. An emphasis is on the importance of the role played by regulation in introducing competition in the telecommunications sector. In this regard, the study discusses the rationale of economic regulation in the telecommunications sector. By way of conclusion, key concepts related to the interface between sector-specific regulators and competition regulation, in regulating competition in the telecommunications sector, are defined. These key concepts are: natural monopoly; market failure; privatisation; liberalisation; as well as regulatory capture. The essence of this chapter is to provide the foundation of the issues to be discussed in the chapters to follow.

3.2. THEORETICAL FRAMEWORK

The case study of the interplay of sector regulators and competition authorities in regulating competition in the South African telecommunications industry is premised on the theory of economic regulation. This section will thus discuss the historical developments of the theory of regulation, types of economic regulation and the rationale of economic regulation in telecommunications, and provide definitions that are central to the study.

3.2.1. The Theory of Economic Regulation

Economic regulation is an important aspect of government policy in market economies (Ricketts 2006:34). Posner (1974:1) defines regulatory economics as government intervention in the market. This intervention can take the form of taxes and subsidies of all kinds as well as explicit legislative and administrative controls over rates, entry and other aspects of economic activity. It is sometimes argued that economic regulation refers to government control of activities of producers in order to enhance the wellbeing of the customers they serve (Sterett 2001:12951).

Regulatory economics is an area of economics that is enhanced by practice, which means that its theoretical developments are also likely to arise out of practice. In this regard, the theory of economic regulation developed from the 19th century and has since evolved over time to become what it is today. George Stigler played an important role in the development of this theory (Crew & Parker 2006:14). According to Viscusi, Harrington and Vernon (2005:381), Stigler's work was a major breakthrough in the theory of regulation because the value of his work was in the way he approached the question, "Why is there regulation?", and not so much in the predictions it generated.

Stigler's theory of economic regulation (1971) maintains that the basic resource of the state is the power to coerce. Regulation is acquired by the industry and is primarily designed and operated for its benefit. As a result, a regulatory system comes to be operated in the interest of the regulated companies rather than the general public whose interest it is meant to protect. This is due to the fact that coercive powers are costly, leaving large companies at an advantage, considering the fact that they have the ability and capacity to mobilise (Stigler 1971:4-10). Victims of the pervasive use of the state's support of special groups will be helpless to protect themselves (Stigler 1971:18). In essence, Stigler's theory of economic regulation holds the view that economic regulation serves the private interests of politically effective groups rather than those of the general public (Parker & Kirkpatrick 2004:1; Posner, 1974:15; Rasmusen & Zupan 1990:167; Ricketts 2006:38). It is worth mentioning that for his work on industrial organisation as well as his work on the effects and causes of regulation, Stigler won the 1982 Nobel Prize for economics (*The Concise Encyclopedia of Economics* 2009).

Stigler's work was heavily criticised by Peltzman (1976) for not taking into account the incentive for other groups to resist as they experience increased marginal costs of regulation (Ricketts 2006:38). Peltzman thus improved upon Stigler's theory by giving equal attention to factors that might motivate regulators to develop regulations that benefit consumers, even though regulated companies have the resources to lobby better than consumers. In this regard, the Stigler/Peltzman model makes the following propositions: a) regulatory legislation, first and foremost, distributes wealth among members of society; b) the behaviour of regulators (legislators) is driven by their desire to remain in office by maximising political support; and c) interest groups compete by offering political support in exchange for favourable legislation. It should be noted that political support might mean money (from business) or votes (from consumers). This means that legislators seek to balance these two types of support at an equilibrium point that maximises their chances of re-election (Viscusi et al. 2005:382).

Today, the theory of economic regulation has evolved to focus on circumstances where we might even expect to find "regulatory failure", in that regulation of markets might reduce rather than increase economic welfare (Kirkpatrick & Parker 2004:1). The literature relating to the economics of regulation also includes the following propositions (Kirkpatrick & Parker 2004:1):

- > The institutional context under which regulation takes place is critical to the process and outcomes of a regulatory regime
- Regulation is associated with information asymmetries
- Investment in a regulated environment is subject to a threat of hold-up leading to under-investment
- Regulatory regimes are prone to capture
- A regulatory system should be both effective and efficient, meaning that the regulator should do what is set out by policy and should do it at the least cost
- Competition is superior to economic regulation and should be preferred

The essence of economic regulation is that it involves government intervention in a market, with the objective of preventing market failure, limiting abuses of market power, as well as improving economic efficiency (Intven 2000:2). Market and state failure are

the basis for arguments in support of regulation (Parker 2002:493). Schultz and Alexandroff (1985:4) identify the following as characteristics of economic regulation: a) economic regulation involves a government role in the restriction or restraining of behaviour such as choices of individuals or firms; b) economic regulation also involves the coercive power of government, in that regulation is most closely associated with government by command and control and not by incentive; and c) the focus is on economic behaviour such as entry into (and exit from) a specific economic activity, prices (fares, tariffs and rates) to be charged, and conditions governing regulated firms and those who purchase from them.

It is important to note that government intervention in a market is viewed differently by different scholars of economic regulation, and as a result, there are different schools of thought associated with the theory of economic regulation. Ricketts (2006:34) identifies two broad traditions, with tensions, in the economics of regulation. These are regulation viewed as "the planning of collectively determined desired ends and regulation as the governance of continuing decentralised market process". The conceptual distinction between the two is said to be at the heart of many of the disputes concerning the role of the state in a market economy. It should also be noted that there is a school of thought that is totally against regulation as a remedy to market failure or inefficiency. Posner is one of the few economists that advocates the total abolition of regulation, arguing that "any efficiency losses from the abuse of monopoly power can be outweighed by the efficiency losses, transactions costs, and other costs arising from regulation" (Posner 1974:3).

However, the reality is that the economics of regulation has become increasingly important in recent years, owing to the decline of direct state ownership of most utilities. The idea that the provision of certain limited but crucial regulatory functions by the state is necessary for economic growth remains an integral part of classical liberal economic and political theory (Ricketts 2006:34). Parker (2002:497) puts it bluntly in saying that "if the old view of government action as entirely benign seems now hopelessly flawed, any

contrary assumption that private action is always preferable to state regulation would seem to be equally panglossian".

3.2.2. The Rationale of Economic Regulation in the Telecommunications Sector

The late 20th century saw the erosion of natural monopoly characteristics in many network industries, of which telecommunications is part. Technological advancement, ranging from the advent of wireless communications to the efficient size of an electricity generating plant, made competition a conceivable model for previously heavily regulated networked industries. Many countries have implemented measures designed to open competition in strategic sectors such as telecommunications, airlines, electricity generation and distribution, and so forth. The good thing about competition is that, where it operates effectively, it encourages innovation and lower prices, more or better services, and induces suppliers to be more efficient by carrying out production at the lowest reasonable prices and offering a better choice of services (Europe Economics 2001:63; Intven 2000:1; ITU 2008). Achterberg (2000:21), maintains that there is broad consensus that competition is most likely to be the most effective method of improving the telecommunications sector.

In a perfectly competitive market, there would be no reason for government intervention to implement competition policy. But such a market does not exist and imperfect competition is an important source of market failure. Taking cognisance of the fact that recently privatised utilities, generally, were formerly state-owned monopolies, regulating for competition in the telecommunications sector therefore requires more intensity than previously seen (ITU 2008; Europe Economics 2001:63).

Even with market liberalisation, network industries possess certain characteristics that require the application of special measures before meaningful competition can take place (Dunbar 2007:2; Moffatt & Dajkovic 2004:47). Telecommunications network services raise unique challenges for the application of competition policy. These challenges arise from the specific manner in which some incumbent network operators

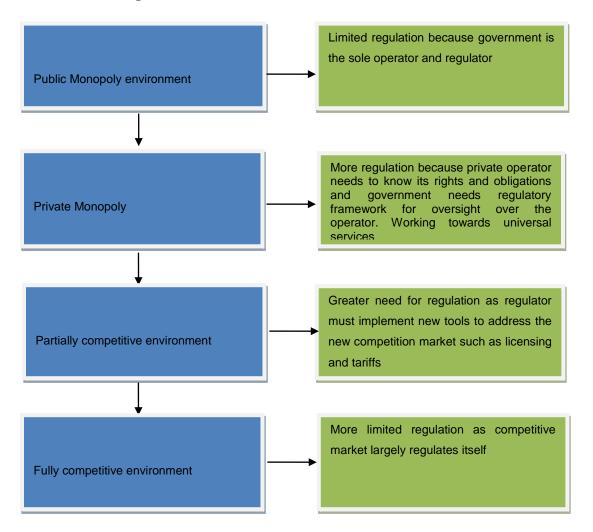
are able to continue to dominate their markets after the introduction of competition (Intven 2000:7). In telecommunications markets, certain characteristics still favour the continued concentration of market power in the hands of incumbent operators. These characteristics include the following (Dunbar 2007:2; ITU 2002:9; Moffatt & Dajkovic 2004:47; Sibinda 2008:213):

- ➤ Control of essential facilities: incumbents often own essential facilities, such as public rights-of-ways, local loops, telephone numbers and frequency spectrum that were built and paid for by governments before competition was introduced Control of these facilities may give the incumbent varied advantages over competitors, particularly in the absence of firm pro-competitive regulation. It should also be noted that there are large sunk costs involved in the construction of essential facilities such as local networks
- Interconnection: strong network effects that reflect the desire by customers to make and receive calls from anyone, causing customers to choose large networks over smaller networks in the absence of interconnection
- Cross-subsidisation: incumbents usually have a wider range of services to crosssubsidise as compared to new entrants to the market
- The long legacy of statutory public monopoly in telecommunications which has afforded the incumbent scale of scope economies, benefits of established networks such as wide subscriber base, deep pockets and market experience, vertical integration as well as brand recognition, and loyalty to the incumbent operator persisting long after the introduction of new players in the market

ITU (2002:9) emphasises the fact that in most cases, these barriers to competition are worsened by the anti-competitive behaviour of incumbent operators that have the tendency to exploit their position in a market in order to prevent or reduce competition in the market. It is important to note that for the incumbent, the incentives change from a political agenda to a profit-driven one after privatisation or liberalisation. As a result, most governments have resolved to intervene directly in the market to guarantee access to essential facilities and networks controlled by the incumbent, in order to

prevent anti-competitive behaviour. This shows that the introduction of competition in the market should not be taken to mean that regulation is no longer necessary. In actual fact, regulation increases with the introduction of competition, particularly so during the early stages of transition to competition (ITU 2008). The figure below, as adopted from ITU (2008), illustrates the importance of regulation in each stage of transition to competition:

Figure 2: Need for Regulation



Source: ITU, 2008

Government intervention in telecommunications markets, just like in any other markets, largely takes the form of regulation. Telecommunications regulation is designed to

mitigate the adverse effects of telecommunications monopolies as well as to pursue public policy objectives (ITU 2002:10). The role of telecommunications regulation includes a wide range of policy objectives, including: the promotion of universal access to basic telecommunications service; the protection of consumer rights; maintaining an effective competitive market; and fostering long-term development of the ICT sector. ITU (2008) explains that regulation is not an end but a means to an end. As such, the desired end of regulation is to promote effective competition and to protect consumers. In a nutshell, the principal focus of regulating competition in the telecommunications industry is to develop and enforce a set of competitive rules that allows the forces of competition to work effectively in maximising economic welfare (Haring & Rohlfs 1997:122).

3.2.3. Definitions

This section defines key concepts that are central and fundamental to the interface between sector-specific regulators and competition regulation in regulating competition in the telecommunications sector. These key concepts are: natural monopoly; market failure; privatisation; liberalisation; and regulatory capture.

3.2.3.1. Natural Monopoly

Unlike a monopoly, a natural monopoly does not only mean that a single supplier supplies a particular kind of goods or service. Instead, the term "natural monopoly" refers to a situation where "a single supplier is technically able to serve a single market at a lower total cost than any feasible combination of two or more suppliers" (Ricketts 2006:41). Lewis (2004:1) concurs in maintaining that a natural monopoly generally occurs in a market in which scale considerations permit for only a single efficient provider. These providers are generally confined to those of basic goods and services such as telecommunications, water, certain transport services as well as electricity transmission.

In essence, natural monopolies are associated with industries that require the input of large indivisible amounts of fixed capital. At the core of these industries are "indivisible" assets such as pipes, wires, cables, satellite, rail and road links, waterways, etcetera (Ricketts 2006:41). It should however be noted, according to Lewis (2004:1), that major technological developments call into question how many of these monopolies remain "natural" in this strict sense.

For Selwyn (1994:21), the game of monopoly, whether natural or technical, highlights one of several techniques for acquiring varying degrees of market power and controlling the entire supply. The problem with one supplier is that it allows for monopoly exploitation, with the resulting efficiency losses from the monopoly (Crew & Kleindorfer 2006:63). Competition laws and/or economic regulation of natural monopolies thus exist to protect consumers from monopoly prices, poor quality services and cartel behaviour. Economic regulation is thus particularly appropriate where there is a natural monopoly, particularly where there are sunk costs such as networks, pipelines as well as similar high fixed-cost infrastructure (Parker 2002:496).

In the telecommunications industry, governments, for a long time, regarded markets as natural monopolies. But this idea was eroded because governments came to the realisation that a) not all segments of the telecommunications industry showed signs of a natural monopoly; b) technological advancements reduced previously prohibitive fixed costs; and c) increases in demand for telecommunications services called for installation of new capacity (ITU 2002:7). As a result, the telecommunications industry throughout the world has either transformed, or is currently transforming, from a monopoly structure to an environment guided by competition principles.

Lewis (2004:1) maintains that in most countries, state-owned enterprises (SOEs) that are in the form of natural monopolies, due to varied reasons such as strain on the fiscus and the poor quality of service they provided, were or are being corporatised by either establishing "corporations owned by the treasury but excluded from fiscal subsidy or

corporations in which both the state and private investors share in ownership or fully privatised". The corporatised entity often remains a licensed monopoly and even when the government commits itself to competition through licensing new entrants, the former SOE invariably enjoys any number of massive advantages over its rivals. For the citizens, this change only means that while they were subjected to substandard service before, they now have to come to terms with the fact that under private monopoly, the rich and conveniently located are the only ones able to access the new technologically superior service (Lewis 2004:1).

3.2.3.2. Market Failure

A market is a system of exchange in which the demands of buyers interact with the supply by sellers. In free markets, this system determines the price. There is a widely accepted view that "when competition exists, resource allocation through unimpeded markets is expected to produce higher economic welfare than resource allocation through state planning" (Parker 2002:495). Although markets are usually glorified as more effective than state planning, it should be noted that markets may fail. The following are circumstances in which markets may fail (Black & Dollery 1992:2-20; Parker 2002:495-497):

- Significant externalities which may arise from a production process such as appreciable pollution (an external cost) resulting in an adverse impact on society
- Public goods associated with the conditions of non-excludability and non-rivalry. Consumers tend to free-ride on non-excludable services by benefiting from their consumption without paying for them
- Incomplete or imperfect information hinders markets from providing services in an efficient manner. Markets work best where consumers and producers are well informed. In the absence of much needed information, wrong decisions can be made

- ➤ Incomplete markets which occur when markets are missing or incomplete, meaning that they cannot meet the demands for public goods or fully account for the external costs and benefits associated with individual actions on their own
- Uncompetitive monopoly markets
- ➤ Inequality in society may call for state intervention through redistribution of wealth strategies which interfere with private property rights or interfere with the outcomes in terms of revenues received from these property rights.

It is important to note that although market failure supports the economic rationale for state regulation of economic markets, alongside market failure, there is state failure, to the point of justifying the case for market liberalisation and privatisation (Parker 2002:497).

In the telecommunications industry, a special form of market failure occurs because the sector, in most countries, developed in a monopoly environment. But as competition gets introduced into telecommunications markets, concerns arise about the continuing exercise of market power by incumbent operators. It is this exercise of market power that constitutes a special form of market failure and poses a challenge for regulators and competition authorities in many countries (Intven 2000:2).

3.2.3.3. Privatisation

Hodge (2006:1) maintains that privatisation began as a political initiative under Margaret Thatcher in the United Kingdom and later became a global movement. Policies in favour of market privatisation and liberalisation have thus been advanced by many economists and the main international aid and trade bodies such as the World Bank, International Monetary Fund (IMF), Organisation for Economic Cooperation and Development (OECD), Asian Development Bank as well as the World Trade Organisation (WTO). (Parker 2002: 943-494; ITU 2002:3).

Privatisation promotes the existence of an economy founded on a market of privately owned companies, as compared to a centrally controlled economic engine based on public ownership. Privatisation is fundamentally characterised by the following activities: enterprise sales; contracting-out of government services; public-private partnerships; and private-sector development strategy (Hodge 2006:3).

Privatisation is a contested concept where the "privatisation war" has been raging on at least three fronts (Hodge 2006:2-3):

- ➤ The philosophical front where the battle is between individualism and collectivism. The collective good as a priority over one's own individual private interest is the lifeblood in the role of government. All public policy decisions are geared towards best serving the interest of the public, rather than solely private interest
- ➤ Service delivery is the second battleground, where the question is raised of whether the public or private sector is best suited to deliver government services. Proponents of privatisation attack government service delivery as inefficient, on the basis of lack of competency associated with government bureaucracies. On the other hand, critics of privatisation observe that the private sector has a tendency of cutting corners to promote profit and unethical corporate behaviour
- ➤ The third fighting front exists through the external struggle of capital interests against civil society and human rights. There are ongoing battles between the powerful and sometimes shadowy influence of capital owners with a voracious desire for higher rates of investment return on the one hand, and the welfare of human beings, their human rights and governing for social cohesion on the other

For governments wanting to adopt a policy of privatisation, far greater care must be taken because as much as privatisation can indeed be a useful policy servant, it can be a poor ideological master. Farazmand (2001:13) provides the following points of caution against privatisation:

Privatisation usually involves massive downsizing and demoralisation of public employees. In this regard, public sector performance may suffer due to loss of

- expertise and erosion of organisational competence, and this in turn provides the basis for more privatisation, leading to independent power of government in policy-making being lost to corporate elites
- ➤ In cases of massive contracting out, government needs to develop adequate contraction management in order to ensure quality of public service and avoid corruption and abuse of public funds
- The state needs to appreciate that privatisation increases the responsibility of the state in that, although services such as roads and bridges are built by private contractors, these are public goods that the state is held accountable for
- Privatisation leads to more corruption in government because the private sector, in the quest of influencing policy-makers, offers various kinds of bribes and incentives for favourable political and administrative actions

Both public and privatisation policies have seen strong winners and losers. It is thus evident that strong communities need both a strong government and a strong private sector, as the dominance of one over the other inevitably leads to poorer communities in terms of liveability. It is clear that strong communities need wealth in order for resources to be available for public policy purposes as well as private purposes. But equally, private markets do not naturally serve the public interest – they require good governance and regulation in order for market games to be played according to fair and effective rules for all (Hodge 2006:3).

According to Chang (2006:12), privatisation is seen by many developing countries as America's imposition of democracy by holding development assistance hostage to political and economic reform, through a "take it or leave it" approach. Parker (2002:432) maintains that privatisation is more likely to succeed in achieving economic efficiency where there is a competitive product and capital market, effective and efficient state regulation, as well as an efficient and non-corrupt government. It should, however, be noted that the success ingredients needed for the success of privatisation are only prevalent in most developed industrialised countries. It is therefore not surprising that there is growing empirical evidence of privatisation failures, particularly in developing

countries. It is these failures that have prompted the World Bank to switch its policy focus from privatisation to creating the conditions of effective state regulation.

3.2.3.4. Liberalisation

Liberalisation refers to fostering conditions for competition through the relaxation of previous government restrictions in areas of social or economic policy, by opening up a sector to entry by private companies (Horwitz & Currie 2007:5). Competition exists when there are two or more suppliers in a market competing with each other to sell goods or services to customers (Intven 2000:1). The rationale for competition is that it encourages lower prices, more or better services, and induces suppliers to be more efficient and offer a better choice of services (Esselaar et al. 2006:3; Intven 2000:1).

In the telecommunications sector, there has been a worldwide trend of liberalisation over the past few decades which can be associated with declining state involvement in this sector and the information and communication technology (ICT) sector, particularly through privatisation of state-owned entities. This unprecedented reorganisation of the sector has seen it moving from a sector that operates nationally to one that operates globally (Bauer 1994:392; Esselaar et al. 2006:3; Hurst 1994:13).

Liberalisation of the telecommunications sector occurs in different forms and two trends can be distinguished. According to Esselaar et al. (2006:3), a country can either choose to completely liberalise the telecommunications sector or opt for what is termed managed liberalisation.

There are various factors that can be attributed to the changes the telecoms industry is currently undergoing (Bauer 1994:392):

- Technological change with regards to convergence
- Multinational enterprises continuously seek specialised and scarce services and skills that are found in one part of the world and lacking in most other parts, hence the globalisation of services

➤ To avoid regulatory restrictions and/or high cost of labour, companies move to other parts of the world where conditions are better

These factors have opened up an environment of global companies operating in an environment of foreign direct investments, joint ventures and alliances. However, it is important to note that the legal and regulatory framework of the telecommunications industry remain under national control. It is this regulatory framework that sets the tone of the liberalisation of markets, hence the extent to which countries have liberalised their markets is different: Most countries maintain monopolies for network provision and basic services, and perhaps envision a gradual transition to a more open framework. Although monopolistic tendencies still exist in most countries, a growing number of countries have moderately or fully privatised the dominant service provider, or are considering doing so (Bauer 1994:393).

Liberalisation in telecommunications has been greatly influenced by World Trade Organisation (WTO) commitments and obligations such as the WTO Reference Paper on regulatory principles. There is evidence that investors are more inclined to commit capital and technology in countries with WTO telecommunications commitments, seeing that they are likely to be rewarded with higher revenues. Liberalised markets in the same region at similar income levels typically have higher penetration rates than those with non-liberalised markets (ITU 2008).

Developing countries and former communist countries find themselves having to create even more favourable conditions for infrastructure service providers, including exclusive franchises and lax price control, to succeed in the attraction of foreign investment capital and technology (Bauer 1994:393). Parker and Kirkpatrick (2004:24) maintain that many developing countries have not succeeded in developing policies and regulatory agencies to prevent market abuse by dominant operators, due to lack of administrative and institutional capacity.

3.2.3.5. Regulatory Capture

Regulatory capture refers to a situation where "the regulator loses (or even never had) the independence to make professional decisions on their merits because of undue influence either from politicians or the regulated monopolies" (Melody 1997:18). Regulatory capture can thus occur when regulatory officials inappropriately identify with the interests of the regulated (Adams, Hayes, Weierter & Boyd 2007:1). Adams et al. (2007:1) emphasise the fact that the "capture" associated with regulation is not physical but may involve a capture of hearts, minds and emotions. This non-physical capture can manifest itself in different ways, including: favourable discretionary decisions; the regulator's reluctance to implement certain regulations; or even the regulator championing an advocacy role for the regulated industry.

Laffont and Tirole (1991:1090) outline various ways that can demonstrate capture of a regulator by industry or government:

- Monetary bribes, although not common
- ➤ Commissioners and regulatory staff may succumb to demands of the regulator because of the hoped-for future employment in the regulated companies
- Personal relationships provide incentives for regulatory officials to treat their industry partners kindly
- > The industry may cater to the industry's concern for tranquillity by refraining from criticising publicly the regulator's management
- > The industry can also operate indirect transfers through a few key elected transfers who have influence over the agency

Such attempts at capturing the supervisory decision-making through collusive activities are likely to be only the "tip of the iceberg". That is, the hidden and bigger part of the iceberg is the organisational response to prevent collusion, in this case, the rules and policies whose *raison d'être* is potential for regulatory capture, and their effect on industry performance (Laffont & Tirole 1991:1091).

According to Melody (1997:18), the term "regulatory capture" summarises the principal failures of past policy and regulation in the telecommunications sector. The implications of regulatory capture is that "if liberalisation and competition policies are introduced in an environment of inherited monopoly and weak regulation, competitive market forces are likely to play a modest role" (Melody 1997:18).

Studies around competition in regulated industries generally show a strong tendency for both politicians and regulators to have a preference for selecting and managing competitors, compared to promoting an open competitive market. As a result, a comfortably closed market for the chosen competitors is created instead of an open one intended by competition policies. These tendencies lead to duopoly/oligopoly behaviour as well as the establishment of very high artificial barriers to entry for new players. For competition to be an effective tool of regulation aimed at achieving both economic and social objectives, the role of the regulator is to monitor the extent and significance of competition in telecommunications markets, as well as to take positive steps to reduce barriers to entry wherever possible (Melody 1997:18-19).

3.3. SUMMARY

The chapter provided the theoretical foundation of the study: the theory of economic regulation which essentially entails government intervention in a market in order to achieve public policy objectives. The fact that there are still characteristics, even with the liberalisation and privatisation of the sector worldwide, that still favour the continued concentration of market power in the hands of incumbent rationalises economic regulation in the telecommunications sector. These characteristics include control of essential facilities, interconnection, cross-subsidisation, and scale of scope economies. The level or intensity of regulation varies from country to country depending on the competitiveness of a market. It should, however, be noted that the introduction of

competition in the telecommunications sector should not be taken to mean that regulation is no longer necessary.

The chapter concludes with definitions of five key concepts – natural monopoly; market failure; privatisation; liberalisation; and regulatory capture – that are central and fundamental to the interface between sector-specific regulators and competition regulation in regulating competition in the telecommunications sector.

CHAPTER FOUR: COMPETITION REGULATION IN TELECOMMUNICATIONS

4.1. INTRODUCTION

This chapter determines the general roles of sector regulators and competition authorities in telecommunications as well as how is the relationship between sector regulators and competition authorities generally managed. In that regard, the chapter provides a general outline of competition regulation in the telecommunications sector, putting particular emphasis on the interface of sector-specific regulators and competition authorities. The essence of this chapter is to unfold the interface of competition authorities and sector-specific regulators in regulating competition telecommunications. In this regard, the characteristics, relationship, overlaps and conflicts, as well as conflict resolution mechanisms of the main players in competition regulation in telecommunications, are discussed.

The chapter also provides an overview of national frameworks of regulating competition in the telecommunications sector in five countries, so as to highlight the existence of various styles of management of the relationship between sector-specific regulators and competition-wide regulators worldwide used by different countries. The general overview of competition regulation in the telecommunications sector discussed in this chapter provides the basis for the case of South Africa to be discussed in Chapter Four.

4.2. INSTITUTIONAL REGULATORY FRAMEWORK FOR TELECOMMUNICATION REGULATION

There are a range of options for governments to choose from in regulating the telecommunications sector. Governments usually base their decisions, when

establishing a regulatory authority, on the following factors: the level of development and liberalisation of the ICT sector, available resources in the country, and the historical context and administrative and legal frameworks available for regulating the sector. According to the ITU (2008), there are four main institutional frameworks for telecommunications regulatory entities:

- Single-sector regulator whose function is solely to administer the telecommunications sector
- ➤ Converged regulator which oversees a broader range of previously separated services such as telecommunications, broadcasting and postal
- ➤ Multi-sector regulatory authority that encompasses different industry sectors that are considered public utilities (e.g. telecommunications, water, electricity and transportation)
- ➤ No industry-specific telecommunications regulator. Although this is not a regulatory authority in the true sense of the word, it is an approach in which general competition policy is the main method of overseeing the telecommunications sector

Along with the chosen broader institutional regulatory framework, the institutional arrangement within which regulation occurs is an important aspect of regulation of utilities because these arrangements affect stakeholders' beliefs and abilities to influence regulation, the incentives and capabilities of the regulatory agencies, and the role of politics in the regulatory process (Jamison et al. 2004:21-22). Institutional arrangements in regulation include four important factors:

- Institutional design: this includes such features as appointment processes for regulators, agency financing, scope of responsibilities and authority of the agency, regulatory processes for protecting stakeholders' rights and providing stakeholders with information, and the management structure of the regulatory agency
- Methods for review and appeal of regulatory decisions: the review and appeal processes for regulatory decisions include decision-making processes, choices

- of regulatory instruments, stakeholder and government roles in regulatory decision-making, mechanisms for appeal of regulatory decisions, and alternative dispute resolution processes
- Mechanisms for encouraging ethical conduct: these include methods such as adopting conflict-of-interest standards and codes of conduct
- Processes for managing relationships with stakeholders: stakeholder relations affect the independence of the agency and include the use of advisory boards, communication strategies, grievance procedures, and relationships with the government, consumers, operators and investors

Countries that have pursued the path of liberalising their markets in recognition of the importance of competition in telecommunications and the regulation thereof, although they are at different stages of this transition, are now facing the same dilemma with regards to the appropriate institutional frameworks to govern the new competitive structure (Dunbar 2007:1). At the heart of this institutional dilemma is the question of whether or not the telecommunications sector should be transferred to the general laws of competition enforced by competition authorities with economy-wide mandates, or if there are characteristics of the sector that continue to rationalise shared jurisdiction between traditional sector-specific regulators and competition authorities. And if there is a case for shared jurisdiction, where are the appropriate boundary lines to be drawn and how should these institutions interact?

Although there are significant differences in the approach to regulation adopted by different countries, there exist a number of general principles that are commonly regarded as desirable in regulatory practice. In this regard, the main characteristics of a sensible and effective regulatory system, with regards to both the instruments that are chosen to achieve the desired result and the ways in which the chosen instruments are used, include the following (TIPS 2008):

➤ The rule of law is the foundation of a regulatory system, as it ensures the legitimacy of regulation

- > Transparency is important for regulatory quality. As such, public consultation and accessibility are two key instruments central to the improvement of transparency
- Regulations should be **neutral** to all market players, without exhibiting favoritism to one or another group. The principle of non-discrimination must be advanced
- ➤ A clear mandate for the regulator in relation to other institutions, in order to ensure a predictable environment for industry players
- ➤ **Predictability and consistency** should guide the rulings and judgments issued by the regulatory authority. In this regard, the rulings and judgments should have a reasonable degree of predictability based on previous rulings of similar cases
- ➤ Independence of the regulator from both government and regulated industry is a prerequisite for any sound regulatory system. The regulator should be independent from government and political actors in the implementation of legislated policy, in order to ensure long-term stability of regulatory policies. This independence is particularly important in countries where there is public ownership of network utilities. For a regulator to achieve full independence, it should be provided with adequate resources, skills and information

> Strong enforcement capabilities

A regulatory body, although independent, needs to have **accountability**. A regulator must be held accountable for its actions and must be subject to adequate efficiency controls

4.3. REGULATORY INSTITUTIONS FOR FOSTERING COMPETITION IN TELECOMMUNICATIONS

There is a growing trend among countries with highly competitive telecommunications markets, according to ITU (2008), to rely on competition law to regulate the sector. This does not in any way mean that the role of sector-specific regulators has been diminished. Both economy-wide competition regulators and sector-specific regulators

have their unique features that are necessary in the regulation of competition in the telecommunications sector. In this regard, the expertise available to both sector-specific regulators and competition authorities are unique and cannot be acquired easily by either. As Kumar (2006:14) puts it, competition law enforcement can overcome insufficiencies in regulations, while a sector regulator can do what a competition authority cannot, seeing that some situations might warrant price fixation in the interest of consumers.

In recognition of these unique features, coupled with unique circumstances of individual countries, countries have created institutional regulatory frameworks that seek to maximise the benefit of competition in the telecommunications sector. Consequently, it is highly advisable to devise a regulatory framework that ensures a close cooperation and consultation between the two authorities (Styliadou [sa]:28). In this section, we discuss in detail the characteristics of economy-wide competition authorities and sector-specific regulators.

4.3.1. Competition Authorities

A large number of countries are beginning to heavily rely on industry-wide rules enforced by competition authorities as a vehicle to prevent anti-competitive behaviour in the telecommunications sector. In this regard, three main types of anti-competitive rules can be identified (ITU 2002:10; Kerf & Geradin 2003:7):

- Rules seeking to prevent anti-competitive agreements between operators. These rules prohibit agreements aimed at fixing prices or dividing up markets
- ➤ Rules that prevents dominant or monopoly operators from abusing their position by restricting competition. Prohibited behaviour includes refuse to deal with certain buyers, imposing predatory prices, as well as imposing discriminatory prices in the provision of similar services

➤ Rules that prohibit mergers and acquisitions that are likely to have a negative impact on competition. These rules are usually controlled by the provision of *ex* ante proposed agreements

Competition authorities are mainly concerned with preventing market participants from interfering with the operation of competitive markets, with the aim of achieving competition and improving economic efficiency. Telecommunications regulators often deviate from or manipulate competitive market principles to achieve other public goals (Intven 2000:4).

Although competition authorities deal with various industries, to deal with the technical issues of a particular industry, such as telecommunications, competition authorities usually seek to attract highly qualified professionals in the legal and economic spheres. Another unique feature of competition authorities is that they are often granted some degree of protection from political interference in their day-to-day activities. Competition authorities are protected from political control in various ways: a) they are usually set up by law as autonomous or independent entities; b) appointment processes may be designed to prevent partisan nominations at the top echelons of the entity; and c) measures may be adopted to prevent arbitrary removals (Kerf & Geradin 2003:8).

In addition to protection from political interference, some measures are also usually put in place in order to ensure that competition authorities are independent from the enterprises which they are mandated to scrutinise. The most common measure requires competition-wide regulators to refrain from intervening where intervention would raise a conflict of interest (Kerf & Geradin 2003:8).

4.3.2. Telecommunications-specific Regulators

Unlike competition authorities which only entail retrospective activities, sector-specific regulation involves both prospective and retrospective activities. In its prospective activities, sector-specific regulators render decisions that set the tone and conditions for

companies participating in telecommunications service markets such as the approval of prices or the terms and conditions for interconnection between operators. Telecommunications regulators also have the authority to respond to complaints or remedy behaviour which contravenes telecommunication policy or laws. Competition authorities' activities, on the other hand, are concentrated on a retrospective basis, with the view of correcting problems which arise from actions by firms that harm competition (Intven 2000:3).

The core business of a telecommunications-specific regulator, as the name suggests, is to implement rules that are specific to the telecommunications sector only (Dunbar 2007:3; Moffatt & Dajkovic 2004:50). Telecommunications regulation also involves rules that primarily seek to promote or preserve competition. These rules seek to accomplish the following (Kerf & Geradin 2003:7-10):

- > Define entry procedures to be followed by new operators
- > Set technical, procedural and pricing conditions pertaining to interconnection agreements
- Determine conditions for number allocation and portability.
- Determine the allocation of frequencies

It is argued by some that telecommunications-specific regulators are better placed to develop expertise paramount to tackling difficult and complicated telecommunications issues, rather than competition-wide regulators (ITU 2008; OECD 2005:2; Sibinda 2008:214; Zambia Competition Commission 2006). It should, however, be noted that a cross-sector regulator may benefit from the experience gained in working with multiple sectors, and could, for example, establish a telecommunications-specific department in order to provide some staff the opportunity to specialise in telecommunications-specific issues (Kerf & Geradin 2003:9).

Just as competition authorities, telecommunications regulators also may have some degree of independence from political authorities as well as from the enterprises they regulate. Telecommunications regulators are said to be more independent, as compared to competition authorities, for various reasons: a) telecommunications regulators benefit from strong legal protections against arbitrary removal; b) telecommunications regulatory board members or commissioners usually have staggered terms in order to prevent a single government from presiding over the renewal of the whole regulatory body; and c) telecommunications regulators are usually required to sever all their links to regulated enterprises, as compared to simply refraining from intervening when a conflict arises (Kerf & Geradin 2003:9).

Telecommunications regulators should be protected against regulatory capture because they face greater risks of capture, in that telecommunications is a public service that unfolds in a politically sensitive environment in many countries (OECD 2008:10). Furthermore, a telecommunications regulator should be protected from regulatory capture because they have a stronger impact than competition authorities on the profitability of the operators it regulates. Another reason is that sector-specific regulators tend to maintain closer contacts with the sector ministry and a very small group of operators, as opposed to competition-wide regulators (Kerf & Geradin 2003:9). It is for the reasons stipulated above that telecommunications-specific regulators are arguably more at risk from industry or government capture.

The table below, adopted from Intven (2000:4), outlines the typical differences between a competition authority and a sector-specific regulator.

Figure 3: Differences between A Competition Authority and a Sector-specific Regulator

Feature	Competition Authority	Sector-Specific Regulation
Timing/Process	> Typically applies remedies retrospectively (i.e. after the	Prospective as well as retrospective
	fact)	> Decisions or other processes
	➤ Specific complaint or	of general application, as well
	investigation driven	as specific issue proceedings
	➤ Formal investigative and other	Mix of formal and less formal
	procedures	procedures
	> Narrow scope for public	> Typically broader scope for

	intervention	public intervention
Policy Focus	 Objective to reduce conduct which impedes competition 	Typically applies multiple policy objectives
	Focus on allocative efficiency/preventing abuse of market power or other misconduct	 Traditional (monopoly) regulation likely to pursue social objectives other than allocative efficiency (universal service for example) Transitional regulation may focus on anti-competitive behaviour as market becomes competitive; (ultimately, forbearing from regulation may be a policy objective as competition becomes sufficient to protect public)
Scope	 Economy-wide, multiple industries Power of intervention and remedies tend to be narrowly defined 	 Usually industry-specific with greater sectoral expertise Powers tend to be more broadly defined (correspond to breadth of policy objectives and procedures)

Source: Intven, 2004

Having discussed the unique features of sector-specific telecommunications regulators as well as those of competition-wide regulators, it should be emphasised that, according to Kerf and Geradin (2003:8), even when competition authorities or telecommunications regulators have been set up, other entities still have important functions to perform with regard to promoting competition or the prevention of market power abuses in the telecommunications sector.

For instance, political authorities might reserve final decision-making on pertinent issues such as the award and renewal of licenses, and the establishment of the price regime. The courts may also have a role to play because in some systems, competition authorities gather evidence and present it to courts which decide upon the merits and

demerits of those cases. In this regard, the courts will be the final decision-making authorities when parties contest the decisions taken by competition authorities or even telecommunications regulators (Öz 2006:7). It is for this reason that the ITU (2008) emphasises the fact that the regulatory frameworks for fostering competition in the telecommunications sector vary according to unique circumstances of particular countries.

4.4. THE INTERPLAY OF COMPETITION AUTHORITIES AND SECTOR-SPECIFIC REGULATORS

The relationship between telecommunications legislation and competition policy differs from country to country. This relationship is influenced by a) the level of economic development in a country; b) the country's institutional framework determined through political and practical considerations such as management of existing human and financial resources; as well as c) the maturity of the telecommunications market. Regardless of the regulatory model adopted, it is important to note that telecommunications policies should be guided by underlying principles of competition in order for markets to develop for the benefit of consumers (ITU 2008; Öz 2006:8). UNCTD (2006:4) concurs in saying that in practice, regulatory reforms throughout the world rarely simply consist of regulations that leave everything up to market forces operating within the general framework of competition law.

According to the ITU (2008), the most common scenario, with regards to the institutional arrangement for fostering competition in the telecommunications sector, is where countries have both a telecommunications regulator and one or more entities with jurisdiction over economy-wide competition matters. In this regard, the relationship between competition-wide institutions as well as sector-specific institutions becomes an issue of growing importance.

4.4.1. Complementarities

According to Kumar (2006:9), sector-specific regulators and competition authorities complement each other in that sector-specific regulators ensure the prevention of the inefficient use of resources and protection of consumers, while competition law aims to prevent market power and thus ensures efficiency as well as consumer welfare.

There are both disadvantages and advantages associated with concurrent or shared jurisdiction of power between a competition-wide regulator and sector-specific regulator. These disadvantages and advantages are what in turn complement the two types of regulators. Competition authorities are experts in competition law while sector regulators have broad knowledge of their respective industries. As a result, interaction between the two may be particularly helpful in defining markets, obtaining industry statistics, and articulating theories of competitive harm. Furthermore, competition authorities generally have more investigative powers as compared to sector-specific regulators, which can only complement those of sector-specific regulators (OECD 2005:7). The essence here is that each of the two regulators makes up for the shortfall of the other.

Sector-specific regulators and competition authorities apply different standards in regulating competition. As mentioned earlier, competition authorities are designed to guard against anti-competitive behaviour, while sector regulators not only redress anti-competitive harm but can alter a competitive situation by putting issues of public interest before competition. The essence of this difference is that telecommunications regulators also address concerns about existing market power that may have accumulated prior to liberalisation. In this way, sector-specific regulators complement competition authorities by going beyond the narrow focus of competition authorities (OECD 2005:7).

4.4.2. Overlaps and Conflicts

Although economy-wide competition law and sector-specific regulations are the only necessary sets of rules that are being simultaneously applied to augment marketplace incentives in many countries, the ambiguity of substantive and institutional differences between these two sets of rules often cause institutional conflicts (Hou 2008:1). According to Kumar (2006:9), complementarities between the two sets of rules suffer on account of conflict in laws (such as legislative ambiguity/overlap or omission) as well as interpretational bias (bureaucratic bias). Wu and Leung (2008:2) contend that it is only natural that complicated institutional conflicts will arise in a situation where different institutions, such as competition authorities and telecommunications regulators, with different competencies share common industry areas.

Conflicts are therefore inevitable in the absence of clear delineation of jurisdiction. These conflicts are also often spurred by turf warriors in the form of market players, enforcers as well as legal arbitrators. Regulatory capture is a prime example of these conflicts (Kumar 2006:9). The increased role of competition authorities in the telecommunications sector raises the issue of inconsistent jurisdiction in the sector, which may create problems for market participants in making business decisions (OECD 2000:29). In this regard, Intven (2000:3) cautions that where a case of a dual-regulatory model exists, it is important to ensure that the sector is not subjected to duplicate and inconsistent interventions.

It should be noted that concurrent or shared jurisdiction imposes costs on the regulatory agencies as well as the regulated parties. In addition, shared jurisdiction can lead to inconsistent outcomes, in that differences in enforcement agencies may emerge and thereby increase the difficulty of achieving consistent competition policies in a jurisdiction (OECD 2005:7). Therefore, it cannot be stressed enough that where there are separate entities enforcing telecommunications and competition rules, balancing the interplay and jurisdiction between these two entities is a key element in allowing the industry to grow.

In the telecommunications sector, a classic case of overlapping application of competition and sector-specific law occurs when specific instances of anti-competitive behaviour addressed by sector-specific legislation, such as a refusal to interconnect, are also used as an example of abuse of a dominant position, which is a crucial component of general competition law (Moffatt & Dajkovic 2004:50).

According to Manoim (2006), overlapping jurisdictions lead to what is termed "forum shopping" where complainants can ignore the rulings of one regulator, if they are of the opinion that their complaint was inadequately handled, and then approach the other. Furthermore, the lack of clarity on which has ultimate jurisdiction over the telecommunications sector may result in the regulators simply avoiding assuming responsibility for tasks.

4.4.3. Conflict Resolution

The relationship between telecommunications laws and competition policies can be depicted through the jurisdictional division of power between competition authorities and regulatory institutions. The ITU (2002:23) stresses the need for clear lines of jurisdiction and increased cooperation where there is a combination of sector-specific regulation and competition-wide regulation. According to Öz (2006:7), there are two possible ways to regulate within a market where both sector-specific regulators and competition-wide regulators exist: a) ensuring clear allocation of roles; and b) creating a framework for cooperation between the two authorities.

According to Öz (2006:18) and Kumar (2006:12), the forms of cooperation applied in different countries can be clustered under three main groups: informal and soft cooperation; delimitation of jurisdiction; and organised cooperation.

> Informal Cooperation

Cooperation may be increased through informal exchange of views such as liaison statements and regular coordination meetings (to discuss issues of mutual interest) in order to prevent duplication or overlap. UNCTD (2006:12) concurs in maintaining that a number of steps can be taken to minimise uncertainty regarding the jurisdiction of sector-specific regulators and competition authorities, and thus avoid confusion for consumers and the business community. Such could be in the form of periodic information exchanges between telecommunications regulators and competition authorities, through regular liaison consultations and exchange of publications and other relevant information. Furthermore, regulators can have early and regular contact in order to reduce duplication of effort and limit the risk of inconsistent outcomes (OECD 2005:7).

According to *Info*Dev (2008), as a remedy to create an open dialogue between competition authorities and sector-specific regulators, telecommunications regulators may resolve to request competition authorities to comment on proposed telecommunications regulations or request competition authorities to consult them when issuing general competition guidelines that may affect the sector.

According to Kumar (2006:9), another informal mechanism of ensuring cooperation between sector-specific regulators and competition authorities, in order to resolve or avoid conflicts, is to ensure an adequate level of technical expertise that may include: a) exchange of officials and developing technical know-how with the competition authority, in order to ensure that competition principles can be effectively transferred to the telecommunications sector; b) exchange of high quality information; c) educational cooperation and vocational training; and d) appointing contact persons (desirably at council level).

Delimitation of Jurisdiction

Delimitation of jurisdiction entails mechanisms such as abstention, whereby an industry regulator may be required to refrain from exercising regulatory authority where sufficient competition exists or choosing not to apply competition law where there is a legal basis of an industry regulation nature for a specific behaviour (such as abusive practices concerning telecommunications). Delimitation of jurisdiction may also be in the form of a statute, in order to ensure that either the sector-specific regulator or the competition-wide regulator do not interfere in the other's territory (*Info*Dev 2008; Öz 2006:19).

Organised Cooperation

The formal approaches for the conflict resolution mechanism commonly used by different countries include the following (*Info*Dev 2008; Öz 2006:18-21):

- > The development of formal memoranda on cooperation between sector-specific regulators and competition authorities
- Developing a code of conduct that seeks to improve the relationship among industry participants
- Establishing conditions regarding the protection and exchange of confidential information
- The right of either the sector-specific regulator or the competition-wide regulator to participate in proceedings before the other may be formalised
- Joint proceedings in order to make use of complementary expertise
- Mandatory agreements, consultations and referrals such as mandatory advisory reports on competitive factors, provided by competition authorities; mandatory notification of investigation within the jurisdiction of the other body; and mandatory consultation or referrals
- Set time consultation frames where the one body may have limited time allowed for providing a report or an opinion to the other body

Appeal to a common authority (such as the courts)

InfoDev (2008) emphasises the point that the relationship between sector-specific regulators and competition-wide regulators can be managed by simply having a "forward looking" approach which entails the development of strategies to anticipate and address potential competition problems and deal with them before they negatively impact the market.

4.5. NATIONAL FRAMEWORKS FOR REGULATING COMPETITION IN TELECOMMUNICATIONS

Whatever the current division between agencies and regulators, there are few, if any, countries where that division can be regarded as finally settled, especially since the transition to greater competition is far from complete (United Nations Conference on Trade and Development (UNCTD) 2006:4). In recognition of the fact that telecommunications unfold at an international level, the discussions below provide brief overviews of the interface of competition policy as well as telecommunications sector-specific regulations in regulating competition in five countries, so as to identify best practice, if it exists, that is.

4.5.1. Canada

The Minister of Industry (Industry Canada) is responsible for telecommunications policy and legislative initiatives involving the Telecommunications Act. On the other hand, policy and legislative initiatives involving the Broadcast Act are the responsibility of the Minister of Canadian Heritage. The Canadian Radio-Television and Telecommunications Commission (CRTC) is the regulator responsible for the regulation of both the telecommunications and broadcasting sectors (Teal 2007:5). The CRTC

reports to parliament through the Minister of Canadian Heritage (IIAC-WGPI [sa]:4). Enforcement of competition law lies with the Competition Bureau, an independent agency within Industry Canada, reporting to Parliament through the Minister of Industry (Teal 2007:6).

Canadian law provides for changes in the extent of sector-specific telecommunications regulation, depending on the level of competition in specific telecommunications markets (Intven 2000:5). Section 34 of the Telecom Act in Canada provides that the CRTC: a) may refrain from regulation when it is consistent with objectives of the Telecom Act; b) or shall forbear from regulation of specific provisions of the Act where competition is sufficient to protect the interests of users; c) forbearance may be either conditional or unconditional; and d) forbearance power addresses the requirements to file tariffs, conditions of service and approval of agreements. As a result of this, anticompetitive conduct can be dealt with under the Competition Act to the extent that the CRTC has forborne from regulating conduct relating to a telecommunications service or class of services.

4.5.2. United States of America

Competition rules in the US are conferred by both the sector-specific regulator, the Federal Communications Commission (FCC), and the two competition authorities, the Anti-Trust Division of the Department of Justice (USDOJ) and the Federal Trade Commission (FTC) (Dunbar 2007:36; ITU 2008; Öz 2006:10). Overlap of jurisdiction between the two competition authorities is protected through a clearance procedure under which matters are allocated to one agency or the other prior to initiation of investigation (Dunbar 2007:37).

In addition, a memorandum of understanding signed in 2002 between the USDOJ and FTC allocated primary responsibility of competition enforcement in the media and entertainment industries, of which telecommunications is part, to the USDOJ, due to its superior experience in these sectors. The agreement also requires the two competition

regulators to maintain a common database to track allocation of cases. This means that the likelihood of overlapping jurisdiction is only between the USDOJ and the FCC (Dunbar 2007:36:39).

The processes for interaction between the FCC and USDOJ are largely informal, according to Dunbar (2007:36). In the case of mergers, for example, both the USDOJ and the FCC have an overlapping jurisdiction. Despite differences in standards and timeframes, the two regulators can cooperate on and coordinate their respective merger investigations. The rules of this coordination and cooperation are, however, not spelled out (OECD 2005:5).

4.5.3. United Kingdom

In the United Kingdom, the telecommunications sector-specific regulator, the Office of Communications (Ofcom), has a concurrent jurisdiction over the telecommunications sector (Kumar 2006:14). According to Dunbar (2007:29), the UK's competition regulatory framework is designed to foster consistency in regulation, by providing regulated entities with a single regulator in the form of a "one-stop shop", in order to avoid double jeopardy.

Intven (2000:5) maintains that Ofcom must, according to law, coordinate its efforts with the competition-wide regulator, the Office of Fair Trade (OFT). The division of responsibilities between the sector-specific regulator and competition-wide regulator is governed by the Competition Act of 1998 and the Concurrency Regulations of 2004. The Concurrency Regulations are basically designed to ensure that only one competent authority launches an investigation under the Competition Act into a particular sector, by spelling out the procedure by which it is decided which authority is better placed to deal with a case and settlement procedure of the dispute (Dunbar 2007:31; United Nations 2004:6). However, where there is concurrent jurisdiction, the assumption is generally that the sector regulator is better suited than the OFT to investigate anti-competitive agreements or conduct in the telecommunications sector (Dunbar 2007:31).

Once it has been decided which authority is going to assert jurisdiction over a complaint, that authority has exclusivity in the investigation and adjudication of the case. The UK competition regulatory framework of the telecommunications industry also contains mechanisms for information sharing between the sector-specific regulator and the competition-wide regulator. These mechanisms include the sharing of information relating to a complaint, in the contest of their consultation, to determine which authority is going to act in cases of a concurrent jurisdiction (Dunbar 2007:31).

4.5.4. Hong Kong

The telecommunications sector is regulated by an independent authority, the Telecommunications Authority (TA), which is a public officer appointed by the Chief Executive under section 5 of the Telecommunications Ordinance. The Office of the Telecommunications Authority (OFTA) is the executive arm of the TA. The TA has authority to regulate the telecommunications industry, including the enforcement of license conditions, determination of interconnection matters, giving directions, imposing financial penalties, and so forth (IIAC-WGPI [sa]:3).

Hong Kong does not have a general competition law and there is also no competition-wide authority in the country. As a result, conditions prohibiting anti-competitive behaviour and abuse form part of licenses issued under the Telecommunications Ordinance (IIAC-WGPI [sa]:4).

Hong Kong is, however, seriously looking at the possibilities of establishing a competition-wide regulator (Wu & Leung 2008:20).

4.5.5. Australia

In Australia, the competition authority incorporates industry-specific technical regulations (Kumar 2006:14). In 1997, the general competition law was amended and a new Telecommunications Act was introduced. According to Dunbar (2007:23), the restructuring of the Australian telecommunications regulatory institutions was motivated by various reasons, including the following: a) the need for consistency in regulating different sectors of the economy; b) saving of costs by pooling skills across sectors; c) minimising the risks of regulatory capture of sector-specific regulators; and d) to promote a more "pro-competitive culture" in the regulatory process.

As a result of the restructuring, the competition authority, the Australian Competition and Consumer Commission (ACCC), had an expanded role in telecommunications regulation. The ACCC is responsible for: a) implementation of rules and policies in the telecommunications sector; and b) economic regulation of the telecommunications sector, including the incumbent operator, Telstra (Intven 2000:5).

Sector-specific or technical regulatory functions are carried out by the Australian Communications and Media Authority (ACMA). The ACMA regulates technical matters such as: the licensing of the radio spectrum; the creation of standards; the creation of numbering plans; as well as consumer protection matters (ACMA 2008). It should, however, be noted, according to Dunbar (2007:24), that despite the transformed regulatory framework which split functions between the two regulators in telecommunications, there are still some areas of overlapping jurisdiction between the ACCC and ACMA.

The overlapping jurisdiction occurs in the areas of: terms and conditions of interconnection and inter-operability, numbering plans, number portability, standards and consumer protection issues. A particular example would be in respect of consumer protection where the ACCC focuses on misleading advertising and fraudulent conduct, while the ACMA looks at more detailed telecommunications-specific issues like notice of

rate changes, billing issues and disclosure of contractual terms. Australia has instituted a number of mechanisms to address overlaps in the regulation of the telecommunications sector. These mechanisms include: mandatory consultations; powers of direction; overlapping commissioners (the appointment of the ACCC chairperson as an associate member of the ACMA and vice versa); and provisions for sharing information. In practice, the cooperation and interaction between the ACCC and ACMA go beyond the provided mechanisms due, in part, to the overlap in jurisdiction (Dunbar 2007:25).

4.6. THE ROLE OF INSTITUTIONAL REGULATORY FRAMEWORKS IN TELECOMMUNICATIONS REGULATION

The expertise available to both sector-specific regulators and competition authorities are unique and cannot be acquired easily by either. As Kumar (2006:14) puts it, competition law enforcement can overcome insufficiencies in regulations, while a sectoral regulator can do what a competition authority cannot, seeing that some situations might warrant price fixation in the interest of consumers. In recognition of these unique features, coupled with the unique circumstances of individual countries, countries have created institutional regulatory frameworks that seek to maximise the benefit of competition in the telecommunications sector. The question then becomes: does the institutional framework for regulating competition in the telecommunications sector have any impact in determining the competitiveness of the sector?

Finger and Voets (2003:32) maintain that in order to guarantee maximum coherence and stability of the institutional regulatory framework, the objectives of telecommunications regulation should be clear and the competencies of the different actors involved should be precisely defined. However, the reality is that there are usually serious institutional flaws in the regulatory frameworks of most countries, as demonstrated in the preceding sections, and this has the resultant effect of preventing the overall system from yielding optimal results.

Finger and Voets (2003:34) concluded in their *Comparative Study on the Effectiveness of Telecommunications Regulators* that "the way the institutional regulatory framework is set up significantly affects the outcomes of regulation". The flaws of competition regulatory frameworks are usually around the struggle for power, overlapping or poorly defined tasks, as well as lack of cooperation between the different actors involved in telecommunications regulation. This has the resultant effect of creating delays in the sector, where clarity is usually sought through lengthy and costly battles in courts. According to Kerf, Neto and Geradin (2005:1), the balance between competition policy and telecommunications regulation is important for the competitiveness of the telecommunications sector. Drawing on the experiences of Australia, Chile, New Zealand, the United Kingdom and the United States, Kerf, Neto and Geradin's (2005:1) study on competition and regulations found that countries that get the balance right tend to have more competitive telecommunications markets.

Apart from the sector-specific regulators and competition authorities, other players pertinent to the performance of regulatory frameworks are, as Kerf and Geradin (2003:8) and Öz (2006:7) pointed out, judicial powers, sponsoring ministries, incumbents and competitors. If there are inter-organisational tensions within a regulatory system, it only reflects weaknesses in the regulation of a sector itself.

Considering that an optimal institutional regulatory framework does not exist as well as the fact that regulatory institutional frameworks still strongly reflect the political and institutional histories of most countries, a certain degree of conflictual relations, which negatively impact on the performance of the sector, should always be expected between the actors involved, namely, the regulator, judicial authorities and/or sponsoring ministry, and competition authorities. It is also for this reason that "the performance of the sector regulator will always be sub-optimal, no matter how good the institutional regulatory design", according to Finger and Voets (2003:35).

It is important to note that although the tension between sector-specific regulators and competition regulators are usually caused by the inherent political and legal systems of a country, tensions between the telecommunications-sponsoring ministry and other players in the regulation of the sector are generally due to the fact that one of the operators in the market, usually the incumbent, remains publicly owned. These tensions would ultimately disappear with total privatisation, which is not an option for most countries. The sponsoring ministry thus plays a significant role in the outcomes of a regulatory framework.

4.7. SUMMARY

The chapter provided an outline of competition regulation in the telecommunications sector with particular emphasis on the interface of sector-specific regulators and competition authorities. The relationship between telecommunications legislation and competition policy differs from country to country depending on: a) the level of economic development in a country; b) the country's institutional framework determined through political and practical considerations such as management of existing human and financial resources; as well as c) the maturity of the telecommunications market.

There is a correlation between the way the institutional regulatory framework is set up and the outcomes of regulation. If not managed well, the relationship between a sector-specific regulator and competition authority can create delays in the sector. In this regard, the balance between competition policy and telecommunications regulation is important for the competitiveness of the telecommunications sector. Both sector-specific regulators and competition-wide regulators have unique characteristics that are necessary to the growth of the telecommunications sector. The need for clear lines of jurisdiction and increased cooperation where there is a combination of sector-specific regulation and competition-wide regulation can thus not be stressed enough.

CHAPTER FIVE: COMPETITION REGULATION IN SOUTH AFRICAN TELECOMMUNICATIONS

5.1. INTRODUCTION

The essence of this Chapter is to determine the three research questions outlined below:

- What is the interplay between the Competition Commission and ICASA?
- Do the competition regulators have adequate competency and authority to foster competition in the South African telecommunications sector?
- ➤ Is the South African regulatory framework effectively fostering a competitive telecommunications environment that works in the interest of the public?

The chapter therefore unpacks the interplay of the Competition Commission and the Independent Communications Authority of South Africa (ICASA) in regulating competition in the South African telecommunications sector, whereby, the inherent roles of the Competition Commission, ICASA, and that of the Department of Communications, are discussed. The Competition Commission and ICASA are discussed with regard to their constitutional and legislative mandates, competence and independence. The Department of Communications is discussed with regard to its role as both policy-maker and telecommunications industry player.

Having discussed the competencies and authorities of the Competition Commission, the chapter unfolds the interface of the competition authority (Competition Commission) and the sector-specific regulator (ICASA) in regulating competition in telecommunications. By way of conclusion, the chapter discusses the role of the institutional regulatory framework in determining the competitiveness of the telecommunications sector so as to

determine whether the South African regulatory framework is effectively fostering a competitive telecommunications environment that works in the interest of the public.

5.2. POLICY, LEGISLATIVE AND INSTITUTIONAL FRAMEWORK FOR FOSTERING COMPETITION IN THE TELECOMMUNICATIONS SECTOR

As alluded to in Chapter One, the institutional arrangement for the regulation of competition in the South African telecommunications sector entails a sharing of jurisdiction between the Competition Commission and ICASA. Another important role-player in the telecommunications industry is the Department of Communications, whose role, arguably, has the biggest impact in the competitiveness of the industry. The sections below provide an account of the legislative and policy arrangements for the institutional role-players in the regulation of competition in South African telecommunications, and examination of their competencies is also provided.

5.2.1. The Competition Commission

The Competition Commission is the body responsible for industry-wide competition regulation in South Africa, which means that the telecommunications sector also falls within its ambit.

5.2.1.1. Policy and Legislative Framework

With the advent of democracy, the Department of Trade and Industry (DTI) undertook a consultative process in 1995 with the aim of developing a new competition policy that would replace the Maintenance and Promotion of Competition Act (No. 96 of 1979). The consultative process gave birth to the 1997 Guidelines for Competition Policy, which in

turn informed the Competition Act (No. 89 of 1998), which took effect in September 1999 (Hartzenbergh 2008:41).

The Competition Act takes cognisance of unique challenges facing South Africa, by seeking to redress historical realities where "the former apartheid regime imposed rigid barriers that severely limited the economic participation of racial groups categorised as blacks, coloureds, and Asians", resulting in a situation where "power was concentrated in the hands of a few large, white-owned firms". South Africa's competition law thus combines considerations of purely economic efficiency with those of equitable wealth distribution and considers the particular needs of firms that are owned or controlled by previously disadvantaged racial groups (Hanival 2008:1-2). This undoubtedly poses a challenge for competition authorities who have to strike a balance between purely economic objectives and social ones. Although committed to public interest concerns, the Commission strives to put economic efficiency at centre stage (Hartzenbergh 2008:41).

The Competition Act has seen a number of amendments, including the Competition Amendment Act (No. 35 of 1999); the Competition Amendment Act (No. 115 of 2000); and the Competition Second Amendment Act (No. 39 of 2000). The Competition Amendment Act of 1999 provided for the establishment of three independent institutions responsible for the enforcement of competition law in South Africa: the Competition Commission (in charge of investigations); the Competition Tribunal (the adjudicatory body); and the Competition Appeal Court (hears appeals of decisions made by the Tribunal) (Competition Commission 2008a).

According to the Competition Commission (2008a), its role is to monitor competition and market transparency by investigating anticompetitive conduct. The Commission is also empowered to investigate, control and evaluate restrictive practices, abuse of dominant position, as well as mergers and acquisitions. The decisions of the Commission may be appealed to the Competition Tribunal and the Competition Appeal Court.

The Competition Commission (2008b:1) views its mandate as to promote and maintain competition in South Africa, in order to achieve the following:

- Promote the efficiency, adaptability and development of the economy
- Provide consumers with competitive prices and product choices
- Promote employment and advance the social and economic welfare of South Africans
- Expand opportunities for South African participation in world markets and recognise the role of foreign competition in South Africa
- > Ensure that small and medium-sized enterprises have an equitable opportunity to participate in the country's economy
- Provide a greater spread of ownership particularly to historically disadvantaged persons

To fulfil these objectives, the main function of the Competition Commission includes the following: to prohibit anti-competitive agreements, practices or arrangements between firms; to prevent abuse of dominance or monopoly positions; and to regulate merger activity (this entails approval or denial of mergers) (Cohen 2007:21).

5.2.1.2. Accountability Mechanisms

The Competition Act provides for the appointment of a Commissioner, and one or more deputies, by the Minister of the Department of Trade and Industry (DTI), for a five-year term. The Commissioner is the Chief Executive Officer of the Competition Commission and responsible for the general administration of the Commission. The remuneration as well as terms and conditions of employment of the Commissioner, and one or more of his/her deputies, are determined by the Minister in consultation with the Minister of Finance. The Minister has powers to remove the Commissioner, on the basis of serious misconduct, permanent incapacity or engaging in any activity that may undermine the integrity of the Competition Commission (Competition Act 2000:28-39).

The Commissioner is responsible for preparing the annual report of the Commission and submits it to the Minister of the DTI to table in the National Assembly within 10 business days of receiving that report (Competition Act, as amended 2000:53).

The Competition Commission consists of a Commissioner and a Deputy Commissioner. The Commissioner, as the Chief Executive Officer (CEO), is directly accountable to the Minister of Trade and Industry (Competition Commission 2008b:45).

5.2.1.3. Funding

The Competition Commission is financed from monies appropriated by Parliament; fees payable to the Commission in terms of the Competition Act; income derived by the Commission from its investment; as well as money received from any other source. The Commissioner must submit a statement that approximates the Commission's estimated income and expenditure to the Minister, and request appropriation from Parliament in respect of the ensuing financial year. For the purposes of the Public Finance Management Act (No. 1 of 1999), the Commissioner is the accounting authority of the Competition Commission. The financial statements of the Commission are audited by the Auditor General (Competition Act 2000:40-41).

The Commission operated on a budget of R81 million in 2008, which had increased by 18% from R68 million in 2007. Expenditure increased from R75 million in 2007 to R92 million in 2008, totalling an overall increase of 22%. For the 2008/9 financial year, government approved a grant of R40 million for the Commission (Competition Commission 2008b:56).

5.2.1.4. Capacity

As at 31 March 2008, the Commission had 116 employees under the following departments: Mergers and Acquisitions (23); Enforcement and Exemptions (24); Legal

Services (10); Compliance (12); Policy and Research (18); Corporate Services (24); and Commissioner's Office (4) (Competition Commission 2008b:41). The Commission faces a problem of high staff turnover because its staff members are constantly being poached by the private sector. For example, in the 2007/8 financial year, there were 36 appointments and 28 resignations. The inability to retain qualified staff, which is in short supply in South Africa, negatively impacts on the Commission's competency (Competition Commission 2008b:42).

The Commission has resorted to recruiting recent graduates and providing on-the-job training. Furthermore, emphasis is being put on skills development of the entire staff so that training in competition law and economics is prioritised. In addition to developing its internal capacity, the Commission also has a role to develop capacity within sector regulators, in order to develop a workable interface. The promotion of a competitive environment through enforcement of both sector-specific and competition-wide rules is important for effective regulation of the telecommunications sector (Hartzenbergh 2008:35).

For the enforcement of regulation to be effective, specific capacities are not required within regulatory authorities only, but also within the private sector, the legal and economics professions, and among consumers (Hartzenbergh 2008:26). This is so that the regulated companies, for example, should be in a position to detect and report anti-competitive behaviour among the counterparts to competition authorities. According to Hanival (2008:2), the reality is that businesses were particularly reluctant and unsure of what they had to do to comply with the competition law when the Commission was still at its infancy stages, but now businesses are aware of what penalties are involved and they also put a lot of money, time and effort into making sure that they comply at all levels.

5.2.1.5. Independence and Credibility

The Competition Act (2000:35) stipulates that the Competition Commission is subject only to the Constitution of the Republic of South Africa (Act No. 108 of 1996) and the law, and must be impartial as well as perform its functions without fear, favour or prejudice. Furthermore, the Competition Act directs the Commissioner, the Deputy Commissioners, as well as members of staff, to refrain from engaging in any activity that may undermine the integrity of the Commission. Lastly, the Act provides that each organ of state must assist the Commission to maintain its independence and impartiality, as well as to effectively carry out its powers and duties.

According to Hartzenbergh (2008:9), the independence of the Competition Commission is also protected by the Competition Act, which provides that there is no ministerial override of the decisions of the Competition Commission. Independence is also protected by the separation of powers between the investigative and adjudicatory functions of the Commission. It can be said that the institutional architecture provides for effective governance of economic activity in South Africa.

With regard to credibility, the Competition Commission is well respected and has a good reputation in the business community of South Africa as well as internationally (Hartzenbergh 2008:40). It is widely believed that the Competition Commission has had a real impact on South Africa's economic life. Vani Chetty, a lawyer who has represented many businesses before the competition authorities, views the competition authorities as having "grown from a fledgling institution with very little credibility to one with much greater stature and knowledge" (Hanival 2008:2).

5.2.2. ICASA

The Independent Communications Authority of South Africa is the ICT sector-specific regulator responsible for telecommunications, broadcasting and postal issues.

5.2.2.1. Policy and Legislative Framework

ICASA was established through a merger between the then Independent Broadcasting Authority (IBA), which was governed by the IBA Act (No. 153 1993), and the South African Telecommunications Regulatory Authority (SATRA), which was governed by the Telecommunications Act (No. 12 1997). The merger was enacted in 2000, in terms of the Independent Communications Authority of South Africa Act (No. 13 2000) (Lewis 2003; Smith 2007:35).

The merger was influenced by the increasing convergence of the broadcasting, telecommunications and information industries, as well as for efficiency and cost benefits. ICASA has a complex history, and seeing that the broadcasting and telecommunications sectors were regulated by separate entities for quite some time, it later emerged that both the new enabling legislation and internal structure of the maintained the separation regulator. which further of broadcasting telecommunications, was not conducive to the convergence of technologies (Parliament of the Republic of South Africa 2007:189). Adding to this, ICASA's powers were amended by the Electronic Communications Act (2005), a convergence friendly legislation which also repealed the IBA Act (1993), the Telecommunications Act (1997), and substantially amended the Broadcasting Act (No. 4 of 1999) (Smith 2007:23).

ICASA is mandated to regulate the country's information and communication technology (ICT) industry in the public's interest. The mandate requires a balancing act, promoting economic growth and development on the one hand and protecting the public and consumers on the other (ICASA 2008). ICASA's public service mandate is also explicitly connected to the country's political history and socio-economic developments, as reflected in provisions of its founding and underlying statutes (Smith 2007:23).

ICASA (2008) maintains that its functions are to regulate the telecommunications and broadcasting industries, in the public interest, by fulfilling the following key functions:

Make regulations and policies that govern broadcasting and telecommunications

- Issue licenses to providers of telecommunications services and broadcasters
- Monitor the environment and enforce compliance with rules, regulations and policies
- ➤ Hear and decide on disputes and complaints brought by industry or members of the public against licensees
- Plan, control and manage the frequency spectrum
- Protect consumers from unfair business practices, poor quality services and harmful or inferior products

In terms of competition, ICASA (2008) views its responsibility as ensuring a level playing field, where rules apply equally to all industry players. The regulator maintains that it is for this reason that it has a strong belief in open and transparent processes which it achieves through mechanisms such as developing regulations and policies; engaging in consultative processes when developing rules, regulations and policies; and through its adjudication functions. Furthermore, ICASA (2008) recognises the fact that "the administration of regulatory justice and fairness is important for the creation of regulatory certainty. It is crucial for competition, for building confidence in the market and to attracting investment into the communications market."

5.2.2.2. Accountability Mechanisms

According to section seven of the ICASA Amendment Act (No. 3 of 2006), the Authority consists of a Council of eight councillors and a chairperson appointed by the Minister of Communications upon the approval of the National Assembly. The National Assembly must submit to the Minister a list of suitable councillors at least one and a half times the number of councillors to be appointed; the National Assembly may solicit advice from a team of experts in compiling the shortlist of councillors. From the short-listed candidates, the Minister must recommend persons he or she proposes to serve on the Council. The National Assembly may request the Minister to review his/her list should they not be satisfied. It is only upon the approval of the Minster's recommendation by the National Assembly that the Minister can appoint the Council. Parliament's report

(2007:196) notes that the ICASA Act is silent with regard to what should be done should the Minister and National Assembly disagree on the Minister's list of appointees.

The performance management of Council is overseen by the Minister, in consultation with the National Assembly. The chairperson holds office for a period of five years, while the councillors hold office for a period of four years (ICASA Act 2006:16). In general, the following instruments and bodies perform an oversight function over ICASA:

- Constitution of the Republic of South Africa (1996)
- > Parliament of South Africa
- Independent Communications Authority of South Africa Act (2000)
- ➤ Public Audit Act (2004)
- Public Finance Management Act (PFMA) (1999)
- > Treasury Regulations issued in terms of PMFA
- Auditor General
- Internal Audit Committee

However, ICASA is primarily accountable to national Parliament, through its Portfolio Committee on Communications. ICASA is financed by money appropriated by Parliament, which means that ICASA is subject to the Public Finance Management Act of 1999. Section 14 of the ICASA Act provides that Council is ultimately responsible for ICASA's strategic direction and for appointing the CEO, and that the CEO is under the direction of Council in fulfilling his/her financial and administrative functions. On the other hand, section 15 of the Act provides that the CEO is the accounting officer and thereby, in terms of the PFMA, ultimately responsible for managing the finances of ICASA. The Act is confusing, as it makes it unclear who has the ultimate control of ICASA between Council and the CEO. Section 16 of the ICASA Act provides that the Minister of Communications must present ICASA's annual report to Parliament.

The current structure of ICASA causes tensions that largely stem from the lack of clarity regarding the role of the Council and CEO. An interview with ICASA staff revealed that Council is perceived to interfere in operational staff matters (Smith 2007:46). The *Mail* &

Guardian reported in 2006 that ICASA had been rocked by allegations that councillors regularly violate the ICASA Act by participating in activities of stakeholders in the ICT sector. These allegations occurred against the backdrop of an internal crisis and mass exodus at the regulator that saw 14 senior managers resigning, citing Council interference in management's affairs and the Chairperson's leadership failures.

5.2.2.3. Funding

Adequate funding is essential for an effective and independent regulator, according to Parliament (2007:199). As already mentioned, ICASA is financed by money appropriated by Parliament. Although ICASA's expenses almost always surpass its income in any given year, all license fees collected by ICASA are transferred to the National Revenue Fund (Parliament of the Republic of South Africa 2007:201). According to ICASA's annual report (2007:126), ICASA transferred a sum of R17 billion to the fiscus in 2006/7.

ICASA has on numerous occasions made it public that it is unhappy with the current funding model. In its submissions on the Convergence Bill, ICASA proposed that it should be funded through monies appropriated from: annual license fees; administration fees; numbering fees; and the National Revenue Fund (Smith 2007:51). In its review of Chapter 9 Institutions, Parliament (2007:199) concluded that ICASA's budget is inadequate for the efficient and effective performance of its operations, particularly in view of the added responsibilities brought about by the Electronic Communications Act. In this regard, Parliament (2007:202) recommended that ICASA be allowed to retain a portion of the revenue it collects.

In 2006, ICASA was criticised by the auditor-general's office for a host of financial irregularities in its 2005/6 financial year, with the audit report stating that "actual or potential fruitless, wasteful and irregular expenditure, totalling R6,75 million, was incurred" (Weidemann 2006).

5.2.2.4. Capacity

The ICASA Act (2006) stipulates that to be considered for appointment, councillors must possess suitable qualifications, expertise and experience in a wide range of fields such as broadcasting, electronic communications, postal policy, electronic engineering, law, marketing, economics and finance. According to Parliament (2007:196), each Councillor has a highly-paid technical advisor. In addition, ICASA often relies on consultants to compensate for the shortage of skills at its disposal. One contributing factor to the shortage of skills within the Authority is the inability to pay market-related salaries in an industry that offers lucrative and competitive packages.

As at March 2007, ICASA had a staff complement of 302 as well as 23 temporary/short-term contract employees. ICASA's employees fill up the following departments: Broadcasting (28); CEO's Office (2); Council (8); Council Aides and Support (16), Engineering and Technology (112); Office of Finance and Business Support (OFBS) (72); Internal Audit (8); Legal, Communications and Consumer Support (21); Telecommunications (21); and Postal (14). ICASA recognises the fact that the ability to retain key employees from being absorbed by industry remains a challenge to the Authority (ICASA 2007:53).

5.2.2.5. Independence and Credibility

Parliament views the independence of the regulator as paramount in markets such as South Africa where an oligopoly continues to exist. It is important that the regulator be vigilant in monitoring the behaviour of incumbents with regard to possible overcharging and denial of fair access to rivals (Parliament of the Republic of South Africa 2007:194-195). ICASA's establishment is provided for in the Constitution of South Africa, which calls for an independent regulator. ICASA's independence is also provided for by enabling legislation which provides that ICASA must function without political and commercial interference (Skinner 2007:24).

However, there are several factors that negatively impact on the independence of the Authority. The most notable hindrance to the independence of ICASA relates to the powers afforded by legislation to the Minister of Communications, particularly in view of the fact that the state, represented by the Minister, remains a significant shareholder in the telecommunications industry, in spite of some strides to liberalise the market. The involvement of the Minister in the appointment procedures of ICASA councillors also does not bode well for an independent and effective regulator.

ICASA is constantly criticised by industry, which perceives it to be a toothless and ineffectual organisation (Guest & Senne 2007). Guest and Senne (2007) maintain that "the Department of Communications has refused to publicly address industry issues around ICASA's ability to deliver on its mandate". The perception of ICASA's lack of independence and inability to regulate effectively in turn dissuade experts in the industry from associating themselves with an institution that lacks credibility (Parliament of the Republic of South Africa 2007:198).

5.2.3. The Role of Government: Department of Communications

The Department of Communications maintains that its mandate is derived from relevant legislation as well as the national strategic directives. In this regard, the role of the Department is "to create a favourable ICT environment that ensures South Africa has capacity to advance its socio-economic development goals, support the renewal of Africa and build a better world" (Department of Communications 2008a). In accordance with its role, the Department (2008a) views its core functions as follows:

- ➤ To develop ICT policies and legislation that stimulates and enhance the sustainable economic development of the South African 1st and 2nd economy and positively impact on the social wellbeing of all South Africans
- > To evaluate the economic, social and political implementation impact, outcomes and processes of the said policies
- ➤ To exercise oversight on State Owned Enterprises (SOE's)

> To fulfil South Africa's continental and international responsibilities in the ICT field

The statutory communications bodies over which the Department plays an oversight role are: ICASA; National Electronic Media Institute of South Africa (NEMISA); South African Broadcasting Corporation (SABC); Sentech; South African Post Office (SAPO); and Telkom (Department of Communications 2008a).

According to Munzhelele (2009), a senior staff member of the Department, the Department has a big role to play in the facilitation of competition in the telecommunications sector because its responsibility to society and South Africa is to ensure a favourable competition policy environment. The role of the Department is to ensure that the policy environment allows the regulator to be able to develop regulations which are going to give effect to competition, both at service and infrastructure level. In this regard, Munzhelele acknowledges that with the advent of the Electronic Communications Act (ECA) of 2005, the regulator has a huge role to play in implementing government policy. The essence of the matter is that the Department believes that from a policy perspective, the country has all that is sufficient for bringing about a competitive environment in the sector because the promotion of competition is at the heart of the ECA.

The reality is that the Department has been singled out by many as a hindrance to competition in the telecommunications sector, stemming from its role as both policy-maker and industry player. The Department of Communications is a major role player in key players in the ICT sector, to a point that it is "suggested that in respect to policies and approaches relating to Telkom, Vodacom, SABC, and Sentech, it is sometimes unclear if the priority is to focus on returns on investment or development" (Smith 2007:51).

Another issue of contention is the policy of managed liberalisation for the telecommunications sector, which was conceived as a mechanism to slowly privatise

the state utility companies over several years. A 30% equity share in Telkom was sold to the Thintana Consortium of Malaysian Telecom and American SBC in 1997. At the same time, the 1996 Telecommunications Act extended Telkom's monopoly through a five-year exclusivity period until May 2002, in order to give it the market advantage to complete certain roll-outs of infrastructure in rural areas, as well as to prepare for a competitive environment. Telkom, however, enjoyed a much longer exclusivity period, with the second national operator (SNO), Neotel, only licensed in 2005 and rolling out operations in 2007 (Bridges.org 2001; Theron & Boshoff 2006:577).

(2008b). According to the Department of Communications the Electronic Communications Act of 2005 (the successor to the Telecommunications Act) continues with the policy of managed liberalisation, in that it requires approval from the Minister, through a policy direction issued in terms of section 5(6) of the ECA, for any Individual Electronic Communications Network Service license to be issued by the regulator. It was on this basis that the Minister of Communications appealed a High Court Judgment, without success, which allowed Value Added Network Services (VANS) to build their own networks (Department of Communications 2008b). The ruling was made on 29 August 2008, following Altech's application to the High Court (Czemowalow & Jones 2008).

Perhaps this vindicates Skinner's (2007:23) view that the Department of Communications lacks leadership and vision with regards to managed liberalisation. Skinner (2007:23) wrote that "to date, there is still major confusion as to what exactly managed liberalisation in the telecommunications sector means". Skinner goes further to say that "leadership is also lacking with regards to key funding issues. A number of critical public institutions such as ICASA, the SABC, and Sentech are chronically underfunded. The Minister does not appear to have the clout in Cabinet (or else the will) to ensure that these institutions are given what they need to function effectively".

5.3. THE INTERPLAY OF THE COMPETITION COMMISSION AND ICASA

Prior to the Competition Second Amendment Act of 2000, the Competition Commission had jurisdiction over all economic activities except those activities subject to or authorised by sector-specific regulators. The Act abolished exclusive jurisdiction of sector-specific regulation and introduced concurrent regulation of competition in all sectors (Ngwepe 2003:243). Section 3 of the Competition Act, now states that "jurisdiction over competition matters is concurrent between the Competition Commission, on the one hand, and any industry regulator, on the other".

The Competition Act, as amended (2000:13), provides that the relationship between the Competition Commission and sector-specific regulators should be managed through a signed memorandum of agreement. The implication, according to Hartzenbergh (2008:18), is that the specific jurisdictional boundaries are not a matter of law but are to be agreed between ICASA and the Commission. ICASA and the Commission signed a Memorandum of Agreement in 2002, in order to establish the manner in which both parties will interact with each other in respect of regulation of the telecommunications and broadcasting sectors (Kalicharan & Finlayson 2009). The Memorandum of Agreement entered into between ICASA and the Commission in 2002 (3-10) provides for the following:

- Procedure in respect to application for approval of merger transaction
- Mechanisms for dealing with complaints: the Commission would deal with aspects relating to restrictive horizontal and vertical practices as well as abuse of dominance, while ICASA would address contraventions of broadcasting and telecommunications licensing conditions and legislation
- Establishment of a joint working committee: constituted by representatives of the Commission and the Authority to function on an ongoing basis. The functions of the Committee include managing and facilitating cooperation and consultation in respect of issues dealt with by each regulator, in terms of the agreement
- Sharing of resources: provided such an undertaking is reasonable and will not compromise the respective independence of the two regulators

- Exchange of information necessary to give effect to the Agreement
- Issues of confidentiality

The Memorandum of Agreement, although not perfect, generally worked well until the enactment of the Electronic Communications Act in 2005, which brought about uncertainties in the regulation of competition in the telecommunications sector. The ECA now gives ICASA powers to deal with competition matters as well as regulatory issues, which was not the case under the Telecommunications Act. The ECA even has a dedicated chapter (Chapter 10 or section 67) which deals solely with competition matters such as market definition; identifying significant market power; assessing the competitiveness of the sector; and developing pro-competitive remedies to address market failure. According to Cohen (2007:13), the ECA in a way bestows ICASA with both *ex ante* and *ex post* powers over the telecommunications sector.

ICASA has, however, still not promulgated the critical provisions set out in Chapter 10 of the ECA as well as most of the other regulations mandated in the ECA that are essential for a competitive telecommunications sector (Andric 2008:19). According to Thornton (2009), the problem is not with the regulator per se, but with the ECA itself. Thornton (2009) argues that if one reads Chapter 10 of the ECA carefully and analytically, one will realise that there are significant problems with regard to its implementation both because it is poorly written and because definitions of certain terms that are used are very loose and do not lend themselves to easy or effective regulation and implementation by the regulator. She goes further to say that if written carefully, the provisions of Chapter 10 of the ECA would foster a competitive environment. As a result, ICASA has not been able to enforce the provisions of Chapter 10 for more than two years since the Act came into force, because of the poorly written provisions.

Although ICASA also has powers to deal with competition issues as per Chapter 10 of the ECA, they are currently not dealing with those issues until such time as they finalise promulgating the provisions of the chapter. As a result, the Competition Commission is currently the only regulator dealing with competition matters in the telecommunications sector, while ICASA is limited to licensing and regulatory issues, for the simple reason that they have to promulgate the provisions of Chapter 10 before they can enforce them, according to Kalicharan and Finlay of the Competition Commission (2009).

Perhaps a more contentious provision of the ECA with regards to competition matters is Section 67(9), which provides that the Competition Act is subject to the Electronic Communications Act. In order to deal with this issue, amongst others, amendments to the Competition Act were promulgated in May 2008, with the following proposals (Competition Amendment Bill 2008:2):

- > Provide certainty with regard to the concurrent jurisdiction between the Competition Commission and other regulatory authorities
- ➤ Clarification in relation to market enquiries to identify and make recommendations on conditions preventing or restricting competition
- Introduction of provision to personally hold accountable individuals who are responsible for a company's involvement in a cartel
- ➤ A statutory basis for the Corporate Leniency Programme

With regard to concurrent jurisdiction, the Competition Amendment Bill proposes that the Competition Act be the central governing statement of competition in the country, while continuing to provide for a flexible mechanism for management of overlapping jurisdiction on issues of competition. Therefore, subsection 3 of the Competition Amendment Bill provides the following:

- Jurisdiction is concurrent over competition matters in the case where there is a sector regulator
- The concurrent jurisdiction is to be managed through a Memorandum of Agreement
- > Should there be conflicts between the sector-specific legislation and the Competition Act not catered for in the Memorandum of Agreement, then the

Competition Act prevails, but only to the extent of the unresolved conflict (Competition Amendment Bill 2008:10)

The Competition Amendment Bill was approved by the National Assembly on 21 October 2008, following its adoption by the National Council of Provinces on 25 September 2008 (Donovan 2008). On 29 January 2009, President Kgalema Motlanthe returned the Competition Amendment Bill unsigned to the National Assembly for reconsideration in terms of Section 79(1) of the Constitution. The President expressed reservation on the unconstitutionality of certain sections of the Bill. In particular, the President told Parliament that he had a legal opinion that deemed the "reverse onus" of proof, implied in the clause that imposes criminal liability on management of companies, violates the right to a fair-trial provision contained in the Bill of Rights of the South African Constitution (Hamlyn 2009).

It is unknown how long the issue around the Competition Amendment Bill will remain unresolved. As a result, the telecommunications sector will have to endure the consequence of the confusion caused by legislation a little longer, although the Competition Amendment Bill was returned to the National Assembly for issues unrelated to the clarification of the concurrent jurisdiction. According to Thornton (2009), it should be noted that once the Competition Amendment Bill is passed, a subsequent amendment of the ECA will be necessary, seeing that we now have a situation where both the ECA and the Competition Amendment Bill say that if there is anything that is conflicting in legislation that deals with competition in the sector, this Act is applicable. If the ECA is left unchanged, we will still have a situation where the courts would have to decide which Act prevails if there is a conflict.

The Deputy Minister of Communications, on 3 June 2008, during the Department of Communication's budget speech in Parliament, said that the Department of Communications will amend the Electronic Communications Act in line with the proposed Competition Amendment Bill, in order to effectively vest the Competition Commission with the final authority to adjudicate on competition matters within the telecommunications sector as well as to carry the responsibility to initiate a market

enquiry in the telecommunications sector. The Deputy Minister also added that the amendments of the Competition Act and the ECA are likely to have a significant bearing on costs issues within the telecommunications sector (Padayachie 2008).

The ECA also makes provision for cooperation between the two regulators whereby the one regulator may ask for and receive assistance or advice from the other regulator on relevant proceedings before it. In this regard, the Competition Commission, in its annual report (2008:20), maintains that it interacted regularly with ICASA in the period 2007 to 2008, as it has participated in ICASA's hearings and made submissions on the market definition for end-to-end leased lines. On the other hand, ICASA made a submission to the Commission in relation to a proposed merger of Neotel and Transtel.

According to the Competition Commission (2008:20), the advent of the ECA, amongst other things, has necessitated a revision of the 2002 Memorandum of Agreement signed between the Competition Commission and ICASA. The revision of the agreement is being spearheaded by the Joint Working Committee, established as per the 2002 agreement, in order to further clarify the respective roles of the Commission and ICASA. The revised Memorandum of Agreement is likely to be completed once the Competition Amendment Bill has been enacted into law, but for now the agreement signed in 2002 is still in force (Kalicharan & Finlayson 2009).

5.4. ANALYSIS OF COMPETITION IN THE TELECOMMUNICATIONS SECTOR

There is a clear link between the regulatory framework of the telecommunications sector as well as actual competition itself. This section thus analyses the state of competition in the telecommunications market in order to find out whether or not competition is effective. Effective competition is characterised by lack of significant market power.

5.4.1. Methodology and Application

In the following subsections, the state of competition is analysed with regard to number of operators, in terms of market share, market concentration as well as prices of telecommunications services. The assessment also takes cognisance of barrier to entry.

5.4.1.1. Market Definition

According to Intven (2000:10), market definition is an initial step to competition analysis as it provides the context in which the level of competition and the impact of anticompetitive conduct can be evaluated. In competition investigations, markets are defined by first assuming that there is a monopolist in a market, and then considering the extent to which the monopolist under investigation has the potential market power to raise profits, without substantial market reaction, through a concept called small but significant non-transitory increase in price (SSNIP) (Theron & Boshoff 2006:578). The SSNIP test demarcates competition markets along two dimensions: a) the product dimension: considering substitutability of products or services by the firm under investigation with those supplied by other firms; and b) the geographic dimension: considering substitutability of products or services supplied in a geographic region in which the firm under investigation is operating with products sold in other geographic regions. Once a market is defined, the market participants are identified, and market shares are assigned.

This study will confine the assessment of competition to the mobile telephony market, seeing that a competition assessment in the fixed-line market would not be realistic, particularly in view of the fact that it is characterised by one dominant operator, Telkom, and considering the fact that Neotel has just recently entered the market. As Theron (2006) advises, when applying the traditional SSNIP test to the market for mobile services, one has to ask whether fixed-line services are substitutable for mobile services. Two main reasons as to why fixed-line services should not be included in the market for mobile services can be identified: a) mobile and fixed-line services are

fundamentally different, particularly considering the fact that mobile phones have the distinct functional advantage of portability; and b) prices for mobile telephony services are significantly higher compared to those of fixed-line services. That said, it should be noted that the advent of convergence of ICTs will in the future blur the line between fixed-line and mobile services.

5.4.1.2. Number and Ownership of Market Operators

This section aims to identify the number of competitors in the mobile market as well as to establish the ownership thereof. Ownership is discussed with the particular aim of highlighting the level of government involvement in the telecommunications sector as a whole, as this may have a direct impact on the competitiveness of the sector. For this reason, the discussion goes beyond the mobile market to include fixed-line operators (Telkom and Neotel).

The South African mobile market is characterised by an oligopoly whereby three operators – Vodacom, MTN and Cell C – are the only players. It is, however, worth mentioning that Virgin Mobile is the only virtual network operator, which was launched in 2006. Vodacom and MTN were licensed in 1993 and started operating in 1994, while Cell C only joined the market in 2001.

The ownership of the main players in the South African telecommunications industry can be detailed as follows:

a) Telkom

According to Telkom (2008), as at 31 March 2008, the Government of the Republic of South Africa held the largest share capital of 38.9% in Telkom, while The Public Investment Corporation (PIC), an investment management company wholly owned by Government and which invests funds on behalf of the public sector entities, has 15.4% of issued share capital in Telkom. In addition, Newshelf 772 (Pty) Ltd has a 5.8% share in Telkom, while the remainder of the shares is held by Telkom Subsidiaries (4.1%) and

Public Freefloat (34.9%). Below is an illustration of Telkom's shareholding arrangements.

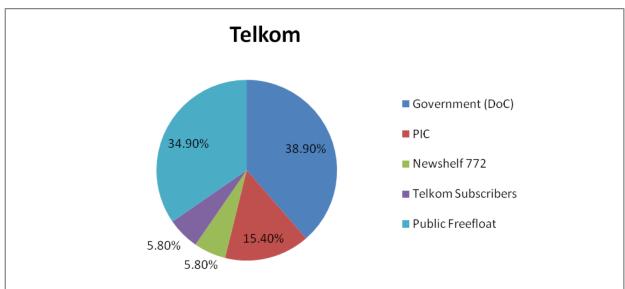


Figure 4: Telkom's shareholding as at March 2008

Source: Telkom 2009

b) Neotel

Tata Communications is the majority shareholder, with a 56% share within Neotel. Tata Communications' shares grew from 26% when it bought shares from Government's parastatals: Eskom Holdings (15%) and Transtel, a division of Transnet, (15%). Nexus Connexion, a BEE partner, has 19% of the Neotel shares, while Strategic Equity Partner Company (SEPCo) holding has a 25% share. Communitel, a consortium comprising Mkhonto We Sizwe Military Vetarans' Association (MKMVA) and Telecom Namibia, have a share of 12.5%. The remaining 12.5% is held by Two Consortium (Neotel 2009).

c) Vodacom

Vodacom is owned by Telkom SA (50% shares) and Vodafone (50% shares) (Vodacom 2008). Vodacom continues to be the largest mobile operator in South Africa. As of June 2008, Vodacom had about 24.9 million subscribers (Vodacom 2008). On 10 October 2008, the South African government approved Telkom's selling of 15% of equity to

British group, Vodafone. This would essentially increase Vodafone's stake to 65% and allow for the listing and unbundling of Telkom's remaining 35% shareholding in Vodacom to Telkom shareholders (Stones 2008).

d) MTN

MTN is a South African-based multinational mobile telecommunications company, operating in many African and Middle Eastern countries. MTN had about 15.6 million subscribers in 2008 (MTN 2008). MTN (2008) details it shareholding as follows: Public (77.09%); Non-public (22.91%); Directors of MTN (0.03%); Lombard Odier Darier Hentsch & Cie (9.82%); and Newshelf Proprietary Limited (13.06%).

e) Cell C

Cell C was launched in 2001. The company is 100% owned by 3C Telecommunications (which in turn is 60% owned by Oger Telecom South Africa, a division of Saudi Oger, 25% by CellSAf, unencumbered (CellSAf represents over 30 black empowerment companies and trusts) and 15% by Lanum Securities SA) (Saudi Oger Ltd 2009).

5.4.1.3. Market Share

According to Baker (2008:5), market shares may be measured in various units, most commonly sales revenues, sales units or production capacity. Section 7 of the Competition Act provides that a company is dominant in a market if: a) it has at least 45% of that market; b) it has at least 35%, but less than 45%, of that market, unless it can show that it does not have market power; c) it has less than 35% of that market, but has market power. This study will, however, concentrate on the use of volume-based indicators of one operator (Cell C), as others were not accessible to the researcher. With regards to the mobile players in the South African telecommunications market, Vodacom held 54% of the market share in 2008, MTN had 32%, while Cell C had the remaining 14%. The tables below outlines market share trends of the three mobile operators in the South African telecommunications market during 2006 to 2008.

70% 58% 57% 60% 54% 50% 40% 36% 36% Vodacom 32% ■ MTN 30% Cell C 20% 14% 7% 6% 10% 0% 2006 2007 2008

Figure 5: Market share (Subscriber-based)

Source: Operators annual reports, DoC, 2008

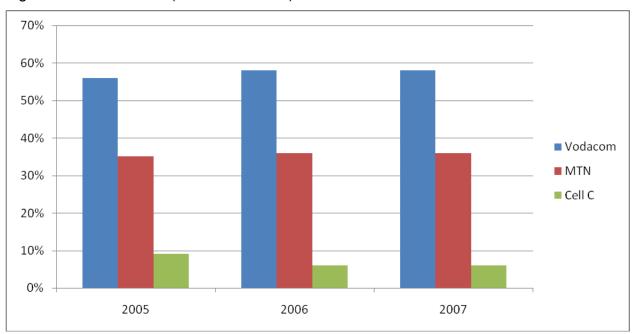


Figure 6: Market share (Revenue-based)

Source: DoC, 2008

From the tables above, it is evident that Vodacom has had continued dominance over the telecommunications market. Vodacom has also been exceeding the 45% mark (signifying market dominance) set by the Competition Commission. Cell C, on the other hand, has failed to make any significant dent in Vodacom's and MTN's combined control of over 80% of the mobile telecommunications market.

5.4.1.4. Market Concentration

Market concentration is a function of the number of firms in a market and their respective market shares (Baker 2008:3). Market concentration will be measured using the Herfindahl-Hirschman Index (HHI). The HHI of a market is calculated by summing the squares of the percentage market shares held by individual firms in a market. In this regard, if an industry has two companies with market shares of 70% and 30%, the HHI is then 70²+30², or 5800 (Chin 2006). Using the market share figures outlined above, the HHI of the three South African mobile operators can be illustrated as follows:

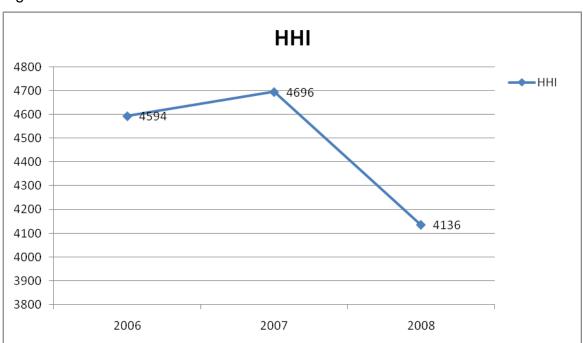


Figure 7: HHI based on subscriber-based market shares

Although still concentrated, the HHI is showing decreasing trends. It should be noted that concentration in a market does not necessarily translate to non-competition. It is possible that a small player can have a major impact in the lowering of prices.

5.4.1.5. End User Prices: International Benchmark

Prices in South Africa, although showing signs of improvements, are high by international standards. In a study for Genetics Analytics, Hodge, Truen, Cloete and Biacuana (2007:9) compare South African prices to prices in 16 countries, six of which – Brazil, India, Mexico, Morocco, Thailand and Turkey – can be regarded as a "peer group" of countries at a similar level of economic development, and eight of which – America, Australia, Denmark, Hong Kong, South Korea, Sweden, United Kingdom and Sweden – are global high performers in telecommunications. The study revealed the following:

- For the business mobile telephony basket, South Africa is the most expensive of the 15 countries surveyed, and is 106.9% higher than the average price
- ➤ Retail telephone costs were much lower, in that South Africa is only the eighth most expensive of the 15 countries surveyed, and is 6.1% lower than the average price

In a separate study conducted by KISDI in 2008, it was found that South Africa's mobile prices are the second highest out of 15 countries surveyed. The graph below illustrates South Africa's position in relation to other countries, as per KISDI's findings.

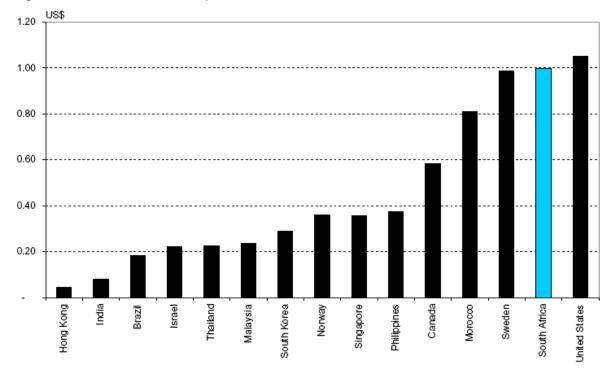


Figure 8: International Comparison of Price

Source: KISDI, 2008

The reasons for these high prices vary, but one of the most deep-seated causes is believed to be the high mobile interconnection rates (Anderson 2008b; Mochiko 2007). Interconnection rates refer to the rate that one operator pays another to terminate a call on its network (Esselaar et al. 2006:27). In South Africa, there is a significant difference between mobile and fixed-line termination rates. Fixed-line interconnect charge is 31c a minute, while mobile interconnection costs R1, 25c per minute (National Consumer Forum 2006).

Vodacom and MTN increased interconnection rates by 515% in 2001, when Cell C was preparing to enter the market, making it difficult for the new entrant to the market to make a profit (Mochiko 2007). Cell C is more disadvantaged because with Vodacom's and MTN's combined high market share, Cell C's subscribers are most likely to call Vodacom and MTN subscribers.

ICASA has attempted to reduce interconnection charges by forcing mobile operators to charge a fee that is more consistent with the cost of making the connection. ICASA's first attempt to reduce interconnection rates in 2005 was stopped by changing legislation. However, under the new Electronic Communications Act, ICASA has issued a discussion document in 2007 proposing that Telkom, Vodacom, MTN and Cell C have "significant market power" over call termination. That step would mark the operators as monopolies and enable ICASA to force a shift to cost-based interconnection fees (Regulateonline 2007).

5.4.1.6. Barriers to Entry

According to the *Info*Dev & ITU (2008), a barrier to entering a market may arise due to the following:

- ➤ Legal barriers prohibiting entry into telecommunications markets. Legal barriers take different forms after privatisation
- ➤ Economies of *scale* and *scope*: in the telecommunications sector, a new facilities-based entrant may have no choice but to start out at a relatively large scale of operations, in order to achieve unit costs close to the incumbent's
- ➤ High fixed or *sunk costs*
- Access to essential facilities

In South Africa, the licensing regime may be perceived as a barrier to entry, particularly the requirement that ICASA has to first get the go-ahead from the Minister of Communications in order for it to issue an invitation to apply for any individual licenses. The 2008 High Court judgement that Value Added Network Services (VANS) operators may build (self provide) their own networks is a major breakthrough for competition in the telecommunications sector. Although this may be the case, it should be noted that building a network, according to Esselaar (2008), may in itself pose another barrier to entry because of the substantial costs of building such a network, estimated at between R300 million to R1 billion, depending on the size of the network.

Furthermore, spectrum allocation constraints remain a difficult barrier to entry which results in oligopolistic structures characterising mobile markets internationally (Hoffman & Theron 2006:583). In South Africa, this oligopolistic structure manifests itself through Vodacom, MTN and Cell C, with equal spectrum allocations for each operator.

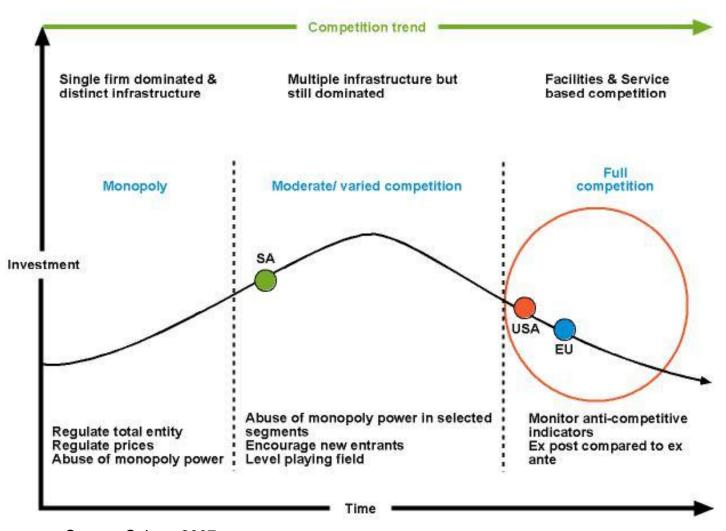
5.4.2. The state of competition in the South African telecommunications sector

The state of competition in the mobile telecommunications market is not desirable. There are three market players, along with one virtual operator, Virgin Mobile. With regard to ownership, the government and its agencies own about 54% of Telkom and hence 50% of Vodacom, and according to Regulateonline (2007), were founding shareholders in MTN and Neotel. The only operator the government has never had a share in is Cell C. With the selling of government's shares in Neotel as well as its intention to let go of Vodacom's shares, it appears that the South African government is slowly heeding the call to reduce its involvement in the sector. Although this is a positive move, it should be noted that most damage has already been done because the dominant operators have entrenched themselves into the market and are making it difficult for small players to survive.

Despite the presence of a third mobile operator, Cell C, the mobile market shows trends of a duopoly between Vodacom and MTN, thus making the market highly concentrated. As Regulateonline (2007) puts it, it has been years since Cell C entered the market but it still has less than a third of the customers of MTN and Vodacom. In addition, the entry of Neotel has not as yet made a sizable impact in the telecommunications sector, seeing that its entry to the market is almost four years behind schedule. Research shows that mobile telecommunications prices are high by international standards. Furthermore, there exist barriers to entry in the market which makes it difficult for new players likely to make an impact on the high prices to enter the market. The graph

below, adopted from Cohen (2007), illustrates South Africa's competitiveness in relation to the United States of America as well as the European Union.

Figure 9: Competitiveness of South African Telecommunications



Source: Cohen, 2007

From the graph above, it is clear that South Africa still has a long way to go in achieving a fully competitive telecommunications market.

5.5. THE ROLE OF THE INSTITUTIONAL REGULATORY FRAMEWORK IN DETERMINING THE COMPETITIVENESS OF TELECOMMUNICATIONS

There is no coherence in the regulation of competition in the telecommunications sector, this is due to legislation that fails to clearly define the objectives and roles of the different actors involved in the regulation of the sector. The ECA provides ICASA with significant powers to regulate competition matters in the telecommunications sector. However, there is a precondition in enforcing these powers, which is the promulgation of regulations that require various detailed steps as well as significant financial and human resources to be implemented. Promulgation of regulations has thus become a lengthy process with an unintended effect of sustaining the uncompetitive status quo of the telecommunications sector. While ICASA is not yet in a position to exercise the full ambit of its powers, the wording suggests that the Commission does not possess jurisdiction in the telecommunications sector (Cohen 2007:10).

The South African regulatory framework for competition opens opportunities for regulatory flaws that can hold back the telecommunications industry from growing:

- ➤ Delays where cases have to be heard in court; an example would be a complaint against Telkom by a group of internet service providers where after the Competition Commission ruled against Telkom, due to anti-competitive conduct, Telkom went to the High Court to challenge the jurisdiction of the competition authorities before the Commission could refer the case up to the Competition Tribunal (Joffe 2006)
- Forum shopping, where complainants can ignore the rulings of one regulator if they are of the opinion that their complaint was inadequately handled, and then approach the other in the hope of getting a decision that suits them
- Passing the buck by regulators, where regulators may simply avoid assuming responsibility by shifting the responsibility to the other regulator

The policy, institutional and regulatory framework for competition in the telecommunications sector does have an impact in determining the competitiveness of the sector. According to Stork (2009), there is a clear correlation between the regulatory framework and the competitiveness of the South African telecommunications sector, just like anywhere else in the world, because the regulatory framework sets the tone through which market players can compete. The competition analysis above makes it clear that some serious regulatory intervention is needed in order to ensure effective competition in the telecommunications sector. As Thornton (2009) puts it, "The reason we have regulation is because markets are not competitive and if they were we would not need regulation."

The problem is that ICASA's significant increase of jurisdiction over competition matters occurs in a space where ICASA is facing a serious shortage of resources. As a result, the sector regulator is unable to implement the laws required to increase competition in the sector. ICASA has essentially failed to promulgate regulations that are set out by Chapter 10 of the ECA. Although taking a long time, ICASA is making some strides in promulgating regulations that are likely to bring about effective competition in the telecommunications sector. ICT Weekly Update (2009:2-3) continuously lists about 27 regulations under pending proceedings by ICASA, some dating back from 2006. The pending regulations pertinent to the competitiveness of the telecommunications sector include the following: regulations for monitoring and investigating anti-competitive behavior; significant market power determinations; pro-competitive license terms and conditions; methodology to determine the effectiveness of competition; methodology to define and identify relevant markets; interconnection regulations; facilities leasing regulations; as well as essential facilities regulations.

The Competition Commission is, on the other hand, crippled by confusing legislation, amongst other things. The Commission views the telecommunications sector as characterised by lack of competition. The sector is found to be characterised by anti-competitive practices, even with the entry of Neotel, which has stated publicly that it will not be competing with Telkom on pricing (Competition Commission 2008b:19).

It is clearly evident that some serious policy intervention is needed if we are to have any meaningful competition in the telecommunications sector.

5.6. SUMMARY

This chapter unpacked the interplay of the Competition Commission and the Independent Communications Authority of South Africa (ICASA) in regulating competition in the South African telecommunications sector. The roles of the Competition Commission, ICASA, and that of the Department of Communications were discussed with regard to their constitutional and legislative mandates, competence and independence. It was found that the relationship between the Competition Commission and ICASA is managed through a Memorandum of Agreement signed in 2002. This system relatively worked well until the enactment of the Electronic Communications Act which caused confusion in the telecommunications sector, particularly, by stating that the Competition Act is subject to it. Owing to this conflicting in legislation, the regulatory framework in general, the dual role of the sponsoring ministry (Department of Communications), and the ineffectiveness of the sector-specific regulator (ICASA), the South African telecommunications sector is characterised by ineffective competition.

CHAPTER SIX: FURTHER FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1. INTRODUCTION

This chapter details the findings and conclusions of the study, which are based on both the reviewed literature and stakeholder interviews and are aligned with the research questions detailed in Chapter One as well as the aims and objectives of the study. The chapter also outlines limitations of the study. The chapter then concludes by providing recommendations, with the aim of strengthening the interface of the Competition Commission as well as ICASA in regulating competition in the telecommunications sector.

6.2. FINDINGS AND CONCLUSIONS

In determining the interplay of sector regulators and competition authorities in regulating competition in telecommunications, the chapters of the study are structured in a way that answers the research questions posed in Chapter One. In that regard, Chapter Two deals with the question that seeks to determine the rationale of economic regulation in the telecommunications sector, while Chapter Three deals with two questions: a) what are the general roles of sector regulators and competition authorities in telecommunications? And b) how is the relationship between sector regulators and competition authorities generally managed? Chapter Four deals with the rest of the research questions:

What is the interplay between the Competition Commission and ICASA?

- Do the competition regulators have adequate competency and authority to foster competition in the South African telecommunications sector?
- ➤ Is the South African regulatory framework effectively fostering a competitive telecommunications environment that works in the interest of the public?

Below is an outline of the research findings and conclusions of the study, as aligned to the research questions outlined in Chapter One.

6.2.1. The Rationale of Economic Regulation in the Telecommunications Sector

Economic regulation entails government intervention in a market in the quest for the welfare of the public. In telecommunications markets, as in any other markets, government intervention mainly takes the form of regulation. The essence of telecommunications regulation is to mitigate the adverse effects of telecommunications monopolies as well as to pursue public policy objectives (ITU 2002:10). As a result, telecommunications regulation includes a wide range of policy objectives, including: the promotion of universal access to basic telecommunications service; the protection of consumer rights; maintaining an effective competitive market; and fostering long-term development of the ICT sector.

Regulation is thus not an end but a means to an end. The desired end of regulation is thus to promote effective competition and to protect consumers. In a nutshell, the principal focus of regulating competition in the telecommunications industry is to develop and enforce a set of competitive rules that allows the forces of competition to work effectively in maximising socio-economic welfare.

6.2.2. The General Roles of Sector Regulators and Competition Authorities

Before discussing the general roles of sector regulators and competition authorities, it should be noted that the principles of regulation, according to which any form of regulation must ideally unfold, include: the rule of law; transparency; neutrality; a clear

mandate; predictability and consistency; independence and strong enforcement capabilities; and accountability. That said, sector-specific regulators and competition authorities possess unique expertise that cannot be acquired easily by either. It is thus advisable to devise a regulatory framework that ensures close cooperation and consultation between the two authorities.

Sector-specific regulators are largely concerned with *ex ante* (prospective) rules, while competition-wide regulators are solely concerned with *ex post* (retrospective) rules. This means that competition authorities are designed to guard against anti-competitive behaviour, while sector regulators not only redress anti-competitive harm but can alter a competitive situation in pursuit of the public interest objective. The essence is that telecommunications-specific regulators also address concerns about existing market power that may have accumulated prior to liberalisation, even if this means taking actions that can alter competition. An anomaly has been noted in the South African case where the Competition Commission is not only guided by principles of economic efficiency but also has to consider public interest objectives by considering provisions of BEE in its operations.

Telecommunications-specific regulators usually have better expertise important to tackling difficult and complicated telecommunications issues, as compared to competition-wide regulators. Sector-specific regulators and competition authorities basically complement each other. It is because of this complementarity, among other things, that most countries resort to designing regulatory frameworks that entail a combination of sector-specific rules and general competition rules. It should, however, be noted that the coexistence of both sets of rules brings to the fore conflicts that may hinder, instead of maximise, the growth of the sector, if not managed well.

6.2.3. The Interplay of Sector Regulators and Competition Authorities

The differences between competition-wide regulators and sector-specific regulators are what in turn make the two complementary, as the one regulator makes up for the

shortfall of the other. Complementarities between the two sets of rules suffer on account of conflict in laws (such as legislative ambiguity/overlap or omission) as well as interpretational bias. Granted that some level of conflict is inevitable in a market where there is a coexistence of competition-wide rules and sector-specific regulators: best practice shows that there are two possible ways to effectively regulate such a market: a) ensuring clear allocation of roles; and b) creating a framework for cooperation between the two authorities. With regard to the South African case, there exists a framework for cooperation between the Competition Commission and ICASA (the signed Memorandum of Agreement). However, the MoA does not help much because it is not a matter of law, while the unclear and confusing allocation of roles is legislated. It should be noted that other countries simply have one set of rules and therefore one regulator. In the case of Hong Kong, there is no competition-wide regulator, while there is no sector-specific regulator in the case of New Zealand. These are obviously unique cases which go against general trends.

It is important to note that although the tension between sector-specific regulators and competition regulators are usually caused by the inherent political and legal systems of a country, there are also tensions between the telecommunications sponsoring ministry and other players in the regulation of the sector which are generally due to the fact that one of the operators in the market, usually the incumbent, remains publicly owned. Although tensions will ultimately disappear with total privatisation, it is not an option for most countries. The sponsoring ministry thus plays a significant role in the outcomes of a regulatory framework.

6.2.4. Authority and Competence of the Competition Commission and ICASA in Fostering Competition in Telecommunications

Based on both the literature review and interview findings, the competence and authority of the Competition Commission and ICASA can be demarcated as follows:

Figure 10: Competence and authority of Competition Commission and ICASA

	Competition Commission	ICASA	
	Policy and legislative framework		
. oney and registante numerical			
>	Governed by the Competition Act	Governed by the ICASA Act and the ECA	
Accountability mechanisms			
	0		
>	Straightforward	> Complicated	
>	The Competition Act provides for the	Consists of a Council of eight councillors and a	
	appointment of a Commissioner and one or	Chairperson appointed by the Minister of the	
	more deputies by the Minister of the	Department of Communications upon the	
	Department of Trade and Industry. The	approval of the National Assembly. Council is	
	Commissioner is the Chief Executive Officer of	responsible for appointing a CEO	
	the Competition Commission responsible for		
	the general administration of the Commission	The ICASA Act makes it unclear who has the	
		ultimate control of ICASA between Council and	
		the CEO	
Funding			
>	Multiple sources: monies appropriated by	Single source: financed only by money	
	Parliament; fees payable to the Commission in	appropriated by Parliament and all collected	
	terms of the Competition Act; income derived	license fees are transferred to the National	
	by the Commission from its investments; and	Revenue Fund	
	money received from any other source	➤ ICASA is chronically underfunded	
		,	
Capacity			
>	With a staff complement of 116 (as at March	With a staff complement of 302 (as at March 2007),	
	2007), the Commission faces a problem of high	ICASA faces a problem of lack of capacity,	
	staff turnover, seeing that its staff is constantly	adequate experienced staff, resources and high	
	being poached by the private sector	staff turnover	
Independence and Credibility			
>	The Competition Commission is well respected	> Although the independence of ICASA is	
	and has a good reputation in the business	provided for in the Constitution, there are	
	community of South Africa as well as	several factors that negatively impact on the	
		independence of the Authority such as the	

internationally	powers afforded by legislation to the Minister of
	Communications, insufficient funding as well as
	the revolving door

From the above, the study draws the following conclusions: a) although not perfect, the Competition Commission is found to have some level of capacity and authority necessary to effectively regulate competition in the telecommunications sector to an extent that it is not limited by conflicting legislation; and b) the competency and authority of ICASA is, on the other hand, curtailed by a number of obstacles: the Minister's involvement in its operations, lack of funding as well as the cumbersome legislation governing the sector.

6.2.5. The Interplay of the Competition Commission and ICASA in Regulating Competition in the Telecommunications Sector

Concurrent jurisdiction is provided for in legislation whereby the Competition Second Amendment Act of 2000 introduced concurrent regulation of competition in all sectors. The Competition Act provides that the relationship between the Competition Commission and sector-specific regulators (ICASA in the case of telecommunications) should be managed through a signed memorandum of agreement.

The 2002 Memorandum of Agreement provides for the direct management of the relationship between the Competition Commission and ICASA. In this regard, the MoA seeks to achieve the following: dealing with merger approval applications and competition complaints from telecommunications industry players; establishment of a joint working committee tasked with managing and facilitating cooperation and consultation in respect of issues dealt with by each regulator, in terms of the agreement; sharing of resources; exchange of information necessary to give effect to the MoA; and issues of confidentiality.

Even with the signed MoA, conflicts still persist. These conflicts, as mentioned in the preceding section, emanate largely from conflicting legislation, caused by the Electronic Communications Act in particular and resulting in a vague delineation of roles. It is therefore the conclusion of this study that, although susceptible to remedial mechanisms, the interface of the Competition Commission and ICASA is far from perfect and thus results in serious repercussions for competition in the telecommunications sector, as it allows opportunities for forum shopping and regulators avoiding or passing on to each other responsibilities for maximising competition in the sector.

6.2.6. The Impact of the South African Regulatory Framework in Fostering a Competitive Telecommunications Sector

An assessment of competition revealed that the South African telecommunications sector is not competitive, a fact that corroborates the views of many commentators on the issue. It is noted that there are some improvements with regard to the level of competition; however, this is happening at an unacceptably slow pace.

This study concludes that the institutional and regulatory framework for fostering competition in the telecommunications sector does have an impact in determining the competitiveness of the sector. The regulators are failing to provide the much needed regulatory intervention in ensuring that there is effective competition in the telecommunications sector that will work to serve the interest of the South African public.

The regulatory framework affords ICASA a huge responsibility and powers to regulate competition matters in the telecommunications sector, without taking into consideration its capacity to implement these regulations. A further shortcoming is that in granting ICASA more powers, the Electronic Communications Act somewhat limits the powers of the fairly competent Competition Commission by subjecting the Competition Act to the Electronic Communications Act, because while ICASA is not yet in a position to fully

exercise its powers to regulate competition, the current wording of the Act suggests that the Commission does not possess much jurisdiction in the sector.

The flaws of the South African telecommunications regulatory framework for competition opens opportunities for both regulators and regulated operators to take advantage of the situation for their own personal gains, such as delaying tactics where cases have to be decided in court. The conclusion is that in its current form, the regulatory framework for competition plays a major role, even if it is not the root cause, in the lack of competition in the telecommunications sector.

6.3. LIMITATIONS OF THE STUDY

The limited scope of the study meant that concepts could not be fully explored. As a result, the study opens up other areas for academic inquiry such as the following, among others:

- ➤ An assessment of the actual extent of the regulatory framework's impact on the competitiveness of the telecommunications sector
- A holistic review of the South African ICT policy, legislative and regulatory framework and its impact on competition
- An inquiry into what would be the optimal design for the interface of the Competition Commission and ICASA in regulating competition

Another limitation encountered during the course of the study relates to the unavailability of information, particularly with regard to the competition analysis detailed as part of Chapter Four. Since telecommunications is a sector that greatly contributes to the general growth of a country, most organisations are making lucrative profits in charging very high prices in the provision of authoritative telecommunications indicators, which results in such information not being readily and freely available on the Internet. This problem is exacerbated by the fact that operators themselves are in the habit of withholding any information that may have an impact on their competitiveness.

As a result, it was difficult for the researcher to obtain reliable and up-to-date information while attempting to conduct the competition analysis. In particular, it was difficult to acquire information in relation to Cell C because the company is a private one and is thus not required to publish an annual report. As a result, where Cell C is concerned, the data used was made available by the Department of Communications. It is, however, believed that the information sourced from the Department of Communications more or less depicts the true state of Cell C's figures. It also goes without saying that had information been readily available, a much more comprehensive competition analysis could have been conducted.

Another limitation relating to information is the unavailability of interviewees in relation to ICASA. While the Competition Commission eventually availed itself for an in-depth interview, after numerous attempts to secure one by the researcher, similar calls to interview representatives of ICASA went unheeded. Had an interview taken place with ICASA, it is possible that the study could have arrived at somewhat different findings and conclusions.

6.4. RECOMMENDATIONS

In strengthening the interface of the Competition Commission and ICASA in regulating competition in the telecommunications sector, the study, based on the literature, best practice as well as findings of the study, recommends the following:

6.4.1. Clarification of Roles

The literature provides that where there are separate entities enforcing telecommunications and competition rules, balancing the interplay and jurisdiction between the entities involved is a key element in allowing the industry to grow. The South African case is far from this and the consequence is an uncompetitive

telecommunications sector, to the detriment of the public. The need for clarification of roles and demarcation of functions of the Competition Commission and ICASA cannot be stressed enough, for coherence in the regulation of competition in the telecommunications sector is necessary in order to remedy the current competition status of the sector.

The confusion in the telecommunications sector is largely due to legislation that fails to clearly define the objectives and roles of the different actors involved in the regulation of the sector. There is thus a need for both the Competition Act and the Electronic Communications Act to be amended as a point of departure towards the clarification of the roles of the Competition Commission and ICASA. However, the amendments should go beyond the clarification of roles to include other issues such as the review of oversight of ICASA and providing for the effective implementation of competition provisions in the case of the Electronic Communications Act.

6.4.2. Strengthening of ICASA

ICASA needs some serious intervention if it is to have any chance at successfully fulfilling its functions. ICASA's funding should be increased in order to boost capacity needed to effectively regulate the telecommunications sector. The government should consider diversifying ICASA's sources of funding to include license fees collected by the regulator. Furthermore, the independence of ICASA needs to be strengthened so as to improve its credibility within the industries it regulates. In this regard, the intimate involvement of the Minister of Communications in ICASA's operations should be reconsidered.

6.4.3. The Role of Government

If economic regulation means, as per the literature review, government intervention in a market in order to enhance the wellbeing of the customers served by market players, the South African government needs to seriously reconsider its role in the telecommunications sector. Government needs to take a leadership role in ensuring that there is effective competition in the telecommunications sector. This means that government should consider letting go of all its shares in any of the industry's players, in order to ensure the fair leadership that would result in the competitive market that is needed to enhance the socio-economic wellbeing of South African citizens, while the government itself is a player in the market.

Government should be in a position to intervene where regulation has failed or has not been effective; interconnection is a case in point, without considering the bickering of industry players who stand to gain most from the uncompetitive status of the telecommunications market.

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LIST OF ACRONYMS

ACCC: Australian Competition and Consumer Commission

ACMA: Australian Communications and Media Authority

BEE: Black Economic Empowerment

CEO: Chief Executive Officer

CRTC: Canadian Radio-television and Telecommunications Commission

DOC: Department of Communications

DTI: Department of Trade and Industry

FCC: Federal Communications Commission

FTC: Federal Trade Commission

HHI: Herfindahl-Hirschman Index

IBA: Independent Broadcasting Authority

ICASA: Independent Communications Authority of South Africa

ICN: International Competition Network

ICT: Information and communication technologies

IIAC-WGPI: Information Infrastructure Advisory Committee Working Group on Physical

Infrastructure

IMF: International Monetary Fund

KISDI: Korea Information Society Development Institute

MKMVA: Mkhonto We Sizwe Military Vetarans' Association

NEMISA: National Electronic Media Institute of South Africa

OECD: Organisation for Economic Cooperation and Development

OFBS: Office of Finance and Business Support

Ofcom: Office of Communications

OFT: Office of Fair Trade

OFTA: Office of the Telecommunications Authority

PFMA: Public Finance Management Act

PIC: Public Investment Corporation

RIA: Research ICT Africa

SABC: South African Broadcasting Corporation

SAPO: South African Post Office

SATRA: South African Telecommunications Regulatory Authority

SEPCo: Strategic Equity Partner Company

SNO: Second National Operator SOEs: State-owned enterprises

SSNIP: Small but significant non-transitory increase in price

TA: Telecommunications Authority

TIPS: Trade and Industry Policy Strategies

UNCTD: United Nations Conference on Trade and Development

USDOJ: Anti-Trust Division of the Department of Justice

VANS: Value-added network service

WTO: World Trade Organisation

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