The impact of lowering mobile termination rates in SOUTH AFRICA

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ABSTRACT

In 2010 South Africa reduced the interconnect termination rates from R1.25 per minute peak to R0.89 peak rate per minute. After South Africa announced and implemented the reduction of termination rates in March 2010 there was a lot of speculation regarding the impact to the end-user. The comments came from all corners of the telecommunication industry. Most comments argued that the reduction of interconnection rates will not be filtered down to the end user and the government convinced that the reduction will eventually result in cheaper telecommunication costs in South Africa.

Both impact analysis and content analysis methods of research were used in analysing the impact of the lowering of rates in South Africa. The study examined the impact of this reduction by investigating how the packages offered by the mobile operators have changed a year before the reduction and a year after the reduction. The investigation showed that not much has changed in rates and confirming the speculation that nothing will change instead end-users should expect an increase in rates due to what is normally referred to Waterbed Effect.

The study showed that the interconnect rates reduction did not benefit the end- user for the period investigated in this mini-thesis, although some operators showed some decrease; these were still less than the expected percentages. The study recommended that the regulator, regulates the end-user rates rather instead of the interconnect rates as this will ensure the benefits of end-user.

ABBREVIATIONS AND TERMINOLOGY

ECN: Electronic Communications Act

ECNS: Electronic Communications Network Services

ECS: Electronic Communication Services

On-net: Telecommunication transmission within the same network

Off-net: Telecommunication transmission across networks.

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CHAPTER 1

NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

The prices that mobile telephone operators charge other network operators to terminate calls on their network, also known as 'termination rates', have become a highly contentious issue among regulators and academics worldwide. There is not a standard method of mobile termination charges among countries, with some only regulating those for fixed-to-mobile calls, and others requiring mobile networks to apply a single regulated termination charge regardless of where the call originates. South Africa recently reduced the mobile interconnect rates, justified by the then Minister of the Department of Communications, Nyanda (2009) as "a step in the right direction" and "… putting money back in the pockets of ordinary South Africans, who need it more now than ever" (Southafrica.info).

1.2 BACKGROUND TO THE STUDY

In his State of the Nation Address, former South African president Thabo Mbeki (2005) said "Bold steps have been taken to further liberalise the telecommunications industry". however South Africans are still subjected to high telecommunications tariffs, despite the deregulation of the market which preceded his public attack on high prices, and despite telecommunications pricing regulations aimed at the lowering of telephone call prices and the costs of doing business in the country.

Mbeki (2005) also said that "We believe that the unacceptable situation in which some of our fixed line rates are ten times those of developed countries as reported by the Organisation for Economic Co-operation and Development (OECD) will soon become a thing of the past". It is evident that South Africa Telecommunication costs remain very high, despite the former president's

concern, and it is against this background that the study is undertaken, in order to measure the impact of the lowering of the termination rates to the end-user.

1.3 PROBLEM STATEMENT

Holdsworth (2009) of Electronic Communication Network (ECN) echoed the words of Thabo Mbeki: when he said “South African Telecommunications prices, fixed and mobile, remain among the highest in the world”, and the Independent Communications Authority of South Africa (ICASA, 2009) reported that South Africa would lower the mobile interconnect rates as from the 1 March 2010, from R1.25 per minute peak to R0.89 per minute, leaving the off-peak rates at R0.77 per minute. The motive behind the lowering of rates was to lower the costs of communications in South Africa and make it more affordable for the end-user, as indicated earlier by the former Minister of communications, Nyanda.

Some industry analysts argue that the lowering of interconnect rates will result in what is referred to as ‘the waterbed effect’ and will not benefit the end-user. The government on the other side is adamant that the lowering of rates will result in cheaper telecommunications in South Africa. The purpose of this study is to establish whether the lowering of termination rates has benefited the end-user.

1.4 OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

1.4.1 Primary objective

The primary objective of this study is to investigate whether the lowering of interconnect rates has contributed to lower telecommunications cost in South Africa, to the benefit the end-user.

1.4.2 Secondary objective

The secondary objective is to compare the packages offered by the mobile operators a year before March 2009 to February 2010, when the mobile interconnect rates were reduced, and the year March 2010 to February 2011 after they were reduced.

1.5 SCOPE OF THE STUDY

The study will focus on service providers *Vodacom*, *MTN* and *Cell C*, and will investigate both pre-paid and post-paid packages offered by them over the timeframes specified above.

1.6 RESEARCH METHODOLOGY

The study will look into both theoretical review and empirical study as follows:

1.6.1 The theoretical review will be based on internet articles on the subject, newspaper articles, ICASA regulations and the Department of Communication's website.

1.6.2 The empirical study will focus on the packages offered by the three mobile operators a year before the introduction of reduced mobile termination rates and those a year after.

1.7 LIMITATIONS OF THE STUDY

Because it is difficult for the end-users to recall the actual cost to make a call per minute a year ago, the end-users may notice the difference based on the duration of the calls per minute, due to lower call tariffs, but they may not be able to quantify it. It would have been more useful to gather the information from the end-users over the timeframe. Although the end-users may have problems in remembering call rates, the mobile operators' call rates are

recorded and stored for reporting purposes, therefore the study will focus on end-user call packages in the stated timeframe.

1.8 LAYOUT OF THE STUDY

Chapter 1: Nature and scope of the study

This introduces the topic of the dissertation and explains the format and sequence of information. It has presented the problem and the research objectives, and has highlighted the importance and relevance of this research as well as its limitations.

Chapter 2: Literature study

Chapter 2 forms the literature review and will examine the theories around mobile termination rates and deregulation of them.

Chapter 3: Empirical study

In this chapter a detailed examination of the packages offered by the three South African Mobile Operators to the South African market will be performed. The study will focus more on what the end user paid on-net and off-net, both on prepaid and post-paid packages for all the three mobile operators for the year before and the year after the reduction of mobile termination rates.

Chapter 4: Conclusion and recommendations

This chapter will conclude the study and make recommendations for the reduction of termination rates.

CHAPTER 2

LITERATURE STUDY

2.1 INTRODUCTION

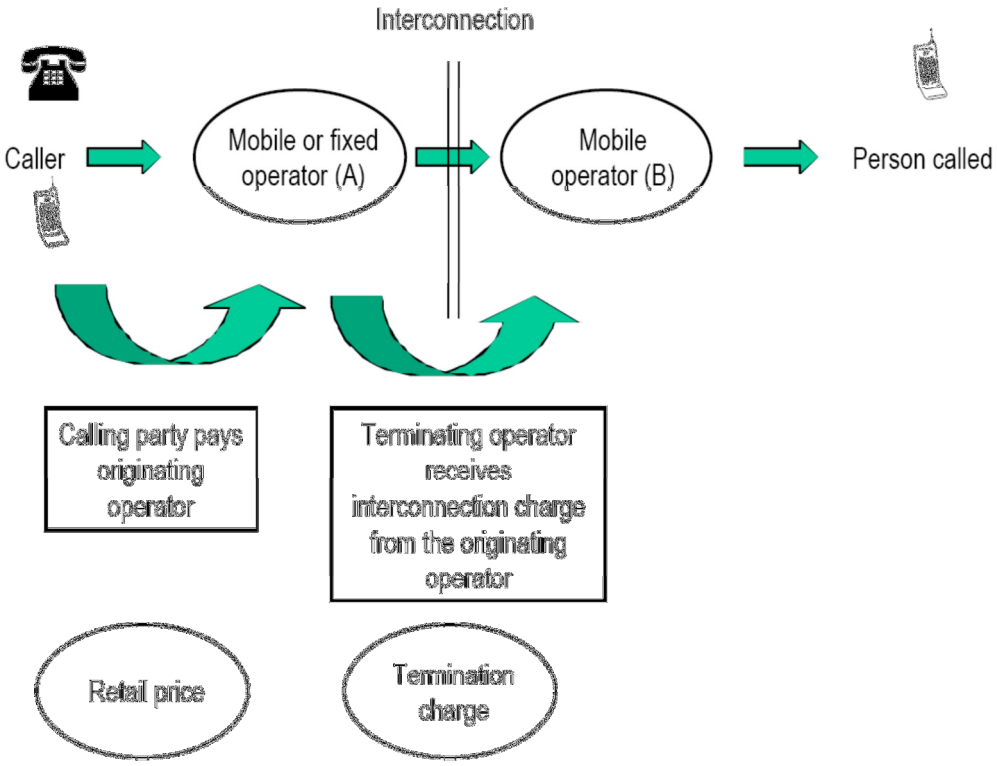
Interconnect fees are a result of two network companies exchanging traffic, and can be explained by using the SASWITCH in banks as an example. A Standard bank client can withdraw money from a *First National Bank* ATM but that bank will charge *Standard Bank* interconnect charges for servicing a *Standard Bank* client. For a *Vodacom* client to call an *MTN* client the former service provider must have an interconnect agreement with the latter so that it can receive calls from *MTN*. The interconnect fees form part of the interconnect agreement.

The term “interconnection” is defined by the International Telecommunication Union (ITU) as:

> The commercial and technical arrangements under which service providers connect their equipment, networks and services to enable customers to have access to the customers, services and networks of other service providers. (ITU, 1995). This arrangement is depicted by figure 2.1 below.

Figure 2.1 (below) demonstrates that interconnection is crucial for communicating across networks, and makes it possible for the subscribers of two different operators to communicate with each other. For the caller to be able to talk to the called, operator A must have an interconnect agreement with operator B. Operator A will then pay operator B for receiving its call and operator A will recoup the cost from the caller.

Figure 2.1: Interconnection between two operators



Source: www.cerna.ensmp.fr/Documents/OB-GLB-F2M-FinalReport.pdf

The Electronic Communications Act (ECA ,36/2005) of South Africa defines 'interconnection' as the physical or logical linking of two or more electronic communications services, broadcasting services, or services provided pursuant to licence exemption or any combination thereof. Various definitions refer to a linking up of one telecom operator's infrastructure facilities to those of another. The ITU's definition is simple and straightforward and in a way gives power to the operators to make interconnect arrangements, implying that there may be charges incurred. Interconnection is essential for extending the scope and efficiency of the telecom network, and is especially important for new operators entering the market who normally use the existing facilities of another operator for providing services (ITU, 1995). It is therefore fundamental to a competitive market structure.

Interconnection charges include charges for collecting and delivering calls, for installing, maintaining and operating the points of interconnect, payment for supplementary services (such as directory assistance, fault reporting, network

maintenance, or inter-carrier billing), and for ancillary and other facilities (such as space in the equipment room) (Interconnection charges, n.d.).

The latter definition is more detailed than the previous ones in that it talks to the purpose of this dissertation. The charge for collecting and delivering calls mentioned above refers to termination rate or an interconnection rate, which is the main reason for this dissertation, focussing as it does on regulation of mobile termination rates. The definition does not clearly specify which of the operators pays.

According to ITU (2010) there are three main ways in which operators pay interconnection charges for carrying each other's traffic:

1. Calling party network pays (CPNP) — the originating operator pays a per-minute charge to the operator that terminates the traffic being exchanged. It is the most common interconnection regime.

2. Bill and keep (BAK) — under this system (sometimes called "sender keeps all"), each operator agrees to terminate calls from another network at no charge (usually on condition that traffic is roughly balanced in each direction).

3. Receiving party network pays (RPNP) — an operator receiving a call pays a per-minute charge to the originating operator. Less common than CPNP, this system is used in North America and Japan.

Most countries in Africa, including South Africa, use the first method to settle interconnects charges, which explains the reason for the extensive regulatory intervention and inherent disputes in the system.

The first method is the most common and has somehow become an acceptable norm that the party who makes the call should pay. The third method, which is not common in South Africa, was introduced by mobile operators as a reverse call whereby the recipient of the call pays to receive

the call, and provided an option to receive or reject it. Regulation is mainly introduced to address those differences that usually result in disputes.

2. 2 REGULATION OF MOBILE CALL TERMINATION RATES

For a long time and in many countries around the world, mobile operators were settling mobile interconnection rates through negotiation and commercial agreements, with the regulator often only a mediator or arbiter, sometimes settling the interconnection charges in cases where the parties failed to agree (Lazauskaite, 2009).

It is evident from the above that interconnection is a key to a competitive market, otherwise the operators requiring interconnection would not be able to operate efficiently. The current charge is a constraint to effective competition as well as a driver of high retail prices in South Africa (Makhakhe, 2007). It is against this background that ICASA and regulators in other countries intervened to regulate the market. Since the arrival of mobile communication in Africa more than 15 years ago, mobile service providers have been left to decide their own interconnection rates, but many African governments were already taking steps to regulate the fees (Malakata, 2010).

Regulation implies that the interconnection rates will be influenced or decided by the regulator. According to Malakata (2010), South Africa was the first to reduce interconnection charges after the ICASA issued regulations regarding interconnection fees, followed by Uganda, which introduced fixed interconnection charges in December 2009.

2.3 RATIONALE TO REGULATE INTERCONNECTION

ITU (ITU news, 2010) states that countries have different reasons for regulating rates, but the common ones are:

- to lower telecommunications costs

- to permitting more firms to enter the market, including virtual mobile network operators
- to encouraging measures that help consumers to change service providers
- to ensure transparency in tariffs so that consumers can compare different companies' and countries' charges.

It is evident that all the above reasons for regulating interconnect rates will benefit the consumer, who will then have a choice of which operator to use, and the ability to compare prices and change operators. The regulations also assist the partners in resolving billing disputes as regulation takes precedence over individual party agreements.

2.4 PROCEDURES USED FOR SETTING INTERCONNECTION CHARGES

In most countries, regulators encourage the operators to settle interconnection rates through negotiations. To assist this process, the regulators normally establish guidelines or a framework which they consider desirable for determining interconnection charges. ITU (ITU regulation toolkit, 2010) suggest a number of regulatory options for price regulations, which include rate of return regulation; incentive regulation; international benchmarking of prices; and asymmetric termination rates based on significant market power.

The choice of the method of regulation differed from country to country as indicated below, with a comparison between South Africa and Namibia.

2.5 REDUCTION OF RATES IN NAMIBIA

According to the *Africa Telecom Magazine* (2009), regulators across Africa and Europe agree that termination rates should be based on the cost of providing the termination service, but in Namibia, following a dispute about

interconnection charges between local telecommunication operators, a consultative workshop on interconnection models was held in October 2008 in Windhoek, with a consensus being reached among the participants. They agreed to use international benchmarking as the preferred approach to determining interconnection rates prescribed by the regulator when carriers fail to agree on terms of interconnection within a reasonable period.

The ITU (ICT Regulation Toolkit, n.d.) defines 'interconnection benchmarking' as the process of establishing interconnection rates based on rates in other jurisdictions. Benchmarking can be used as a common-sense check on the results of cost models and directly to set interconnection termination rates. Undertaking full forward-looking cost modelling is very challenging, expensive and time-consuming, and often the detailed information required is not available in developing countries.

Pfeffer (2006) agrees that with benchmarking, besides the value of understanding the market, it makes sense to learn from the experiences of others rather than having to make every discovery (and every mistake) for oneself. Pfeffer further argues that there are three inherent problems with benchmarking, perhaps not as it was intended, but as it is often practiced. Firstly, if the business strategy is simply to copy what others do, then by definition the best one can hope for is to be a perfect imitation. In addition, there is a problem with what companies choose to copy, which is "often only the most visible and superficial aspects of another company's management approach."

Irrespective of the choice of implementing the regulation of Mobile interconnect rates, according to the Mobile Telecommunications Limited (MTC media statement, 2011) in Namibia, MTC is now has one of the lowest termination rates in Africa, with two falls during the year, from N$0.60 to N$0.50 in January, and from N$0.50 to N$0.40 in July. The last fall to N$0.30 was scheduled for January 2011.

According to du Toit of Vox Orion (quoted by Staff Writer, 2009), despite the significant recent cut in interconnect rates in Namibia, consumers have yet to

see any price reduction in call rates. McLeod (TechCentral, 2010) noted that MTC, Namibia's largest mobile network operator, had left its retail rate, i.e., the basic cost of a call, unchanged. It has been argued that the operators will, instead of lowering retails rates, offer other benefits such as more free minutes or text messages.

The study will investigate if there has been a benefit for consumers in South Africa, the results of which will be discussed in detail in chapter 3.

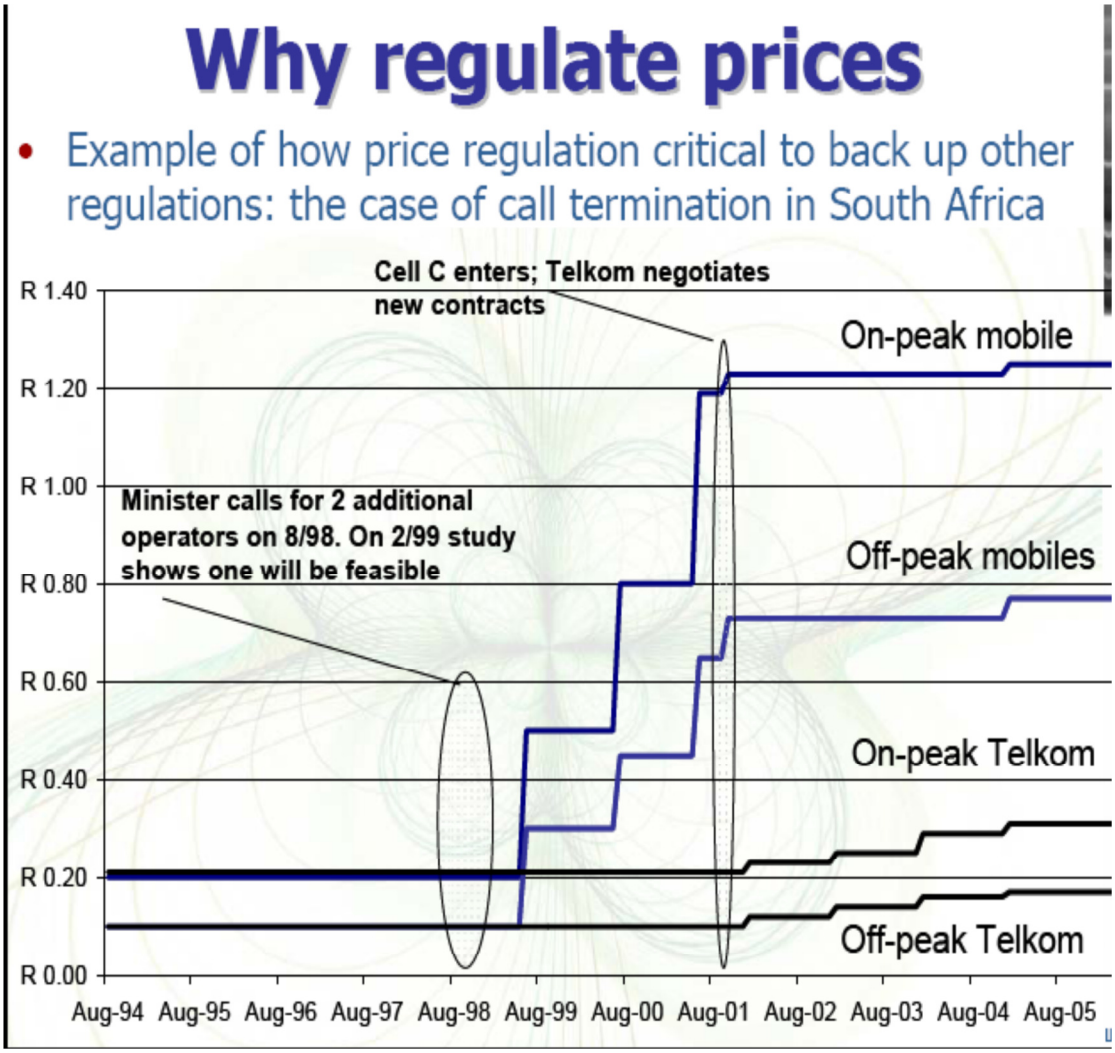
2.6 REDUCTION OF RATES SOUTH AFRICA

The telecommunications sector in South Africa is regulated by both the Electronic Communications Act (ECA, 2005) and the Competition Act. Operators in South Africa have both Electronic Communications Services (ECS) and Electronic Communications Network Services (ECNS) licenses.

According to telecommunication's report (BMI-T, n.d.), there was a mounting and increasingly incontrovertible body of evidence and experience from around the world that the high mobile termination rates (MTRs) prevailing in South Africa (R1.25 per minute) could not be justified on the basis of costs. Contrary to benchmarking used by Namibia in reduction of the termination rates used asymmetric rates based on significant market power. Figure 2.2 (below) shows the abuse of the significant market power by operators prior to *Cell C* licensing.

It is evident from the figure below that as a way of creating a barrier to entry for *Cell C* call termination, rates increased by 500% over the 12 years to 2005, and that they had surged by 512% in the period from 1998 to 2001. As indicated above, *MTN* and *Vodacom* were involved in uncompetitive behaviour, which is one of the reason interconnect fees are regulated.

Figure 2.2: Changes in interconnection rates in South Africa



Source: Lewis (2011) Pricing and tariffs: principles

Historically, the cellular telephone market has enjoyed the profits from exceptionally high, unregulated pricing in South Africa. Dominant cell phone operators increased termination rates by 512% over three years from 1998 to 2001, for example, and remained there for nearly a decade, while in competitive markets in Africa they plummeted with rapid and effective regulatory intervention. South Africa's regulator adjusted the mobile termination price in 2010 to the figures below, as quoted by Theron and van Eeden (2011:1).

Table 2.1: Interconnect rate reduction gliding path in South Africa

	Peak	Annual adjustment %	Off Peak	Annual adjustment %
01-Mar-09	R 1.25		R 0.77	
01-Mar-10	R 0.89	29%	R 0.77	0%
01-Mar-11	R 0.73	18%	R 0.65	16%
01-Mar-12	R 0.56	23%	R 0.52	20%
01-Mar-13	R 0.40	29%	R 0.40	23%

Source: Adapted from Theron & van Eeden (2011:1)

ICASA regulations required the cellular industry players to reduce peak cell phone call-termination rates from R1.25 per minute to 89c per minute by the 01 March 2010, and further to 73c per minute by March 2011, forecasted to further drop to 56c per minute by March 2012 and to 40c by 2013. Off-peak cell phone termination rates dropped to 65c a minute by March 2011 and forecasted to further drop to 52c a minute by March 2012, and to 40c per minute by March 2013.

In spite of all these changes, Gillwald (2011) argues that South African interconnection charges, and therefore retail prices, will still be magnitudes of scale higher than the best performers in Africa. The next chapter will investigate this issue.

CHAPTER 3

EMPIRICAL STUDY

3.1 INTRODUCTION

This chapter presents a detailed examination of the packages offered by the three South African mobile telephone operators to the domestic market. It will focus on what the end user paid on-net and off-net, both on prepaid and post-paid packages for all the three mobile operators for the year before March 2009 to February 2010 and the year after March 2010 to February 2011 the reduction of mobile termination rates.

The research will combine both impact analysis and content analysis methods of research in analysing the impact of the lowering of rates in South Africa. According to Roche (1999:21), Impact Assessment focus on whether a policy or intervention has succeeded in terms of its original objectives, or it may be a wider assessment of overall changes caused by the policy or intervention, i.e., positive or negative, intended or unintended. Roche further defines 'impact' as

> … the systematic analysis of the lasting or significant changes - positive or negative, intended or not in people's lives brought about by a given action or series of actions.

The study will analyse in particular whether the intended changes that were meant to be brought about by the lowering of rates did materialise or not.

The study will also make use of content analysis to analyse the changes, as only information from the mobile operators will be used to determine the impact and draw conclusions. The Newsimproved.org (n.d) website defines 'content analysis' as a simple, effective means of measuring change. In this study it is used to measure the change or impact after the reduction of mobile termination rates. Content analysis was chosen to focus on analysing the content from mobile operators and to draw conclusions regarding the impact

of the regulations based on the studied content. The study concentrates on the year before and the year after the rates reduction as indicated above.

With the above-mentioned pronouncement of of Nyanda (2009) in mind, this chapter will investigate if this reduction did indeed result in money being put back into the pockets of South Africans.

The population for the study includes all the top operators in South Africa, namely *Vodacom, MTN, Cell C, 8ta, Virgin Mobile, Red Bull* and *Telkom*. For the purpose of this study the sample will consist of *Vodacom, MTN* and *Cell C*. The analysis will focus on the packages listed in Table 3.1 (below) for each mobile operator in the sample.

3.2 ANALYSIS OF THE SAMPLE

As mentioned above, the sample will consist of *Vodacom, MTN* and *Cell C*. In order to make fair conclusion it is necessary to start by analysing the market share of each operator.

Table 3.1: Retail mobile market shares, by total customer connections, originated voice minutes, and revenues, as at June 2009

Operator	Market share by customers	Market share by originated voice traffic	Market share by market revenues
Vodacom	54%	55%	55%
MTN	32%	36%	36%
Cell C	14%	9%	9%

Source: ICASA explanatory note on draft call termination regulations (2010)

The table above shows that *Cell C* possesses only between a 9 and 14 per cent share of the downstream retail market, while *Vodacom* accounts for

between 54 per cent and 55 per cent of the market, and *MTN* for between 32 per cent and 36 per cent. The strong position of the two largest licensees in the retail side of the South African retail market and were afforded a much stronger position in historic termination agreements.

3.3 PACKAGES

For each mobile operator the study will analyse the following types of package:

- Flat rate and Peak/Off-Peak
- In Bundle and Out of Bundle
- Prepaid/ Hybrid/ Post Paid

It is worth mentioning the reduction targeted peak hour since more calls are made during the day than off peak. For the purpose of this discussion it will be assumed that the proportion of peak to off peak is 70%:30%. Table 3.2 (below) shows the rates before and after 1 March 2010. These were from Saicom Telecommunication submission to ICASA and *theairtimebible*, a document sourced from www.buyersbible.co.za website, comparing prices.

Table 3.2: Mobile rates before and after 1 March 2010

	Mobile Peak	Mobile Off-Peak
Before 1 March 2010	R 1.25	R 0.77
After 01 March 10	R 0.89	R 0.77
Change	29%	0%

Source: own

The above table shows that only a reduction of 29% for the peak off-net calls was implemented for the period in question. The minister's statement created an expectation that this reduction of 29%, or a fraction of it, will be filtered down to benefit the end-user. In order to analyse the expected fraction that

would be expected to be passed on by each operator an examination of the market segmentation is necessary.

The next step is to determine the expected reduction percentage for each operator based on its market share.

3.4 EXPECTED RESULTS

The table below is calculated based on market share of each mobile operator and the assumption made above that 70% of the calls are peak calls.

Table 3.3: Expected reduction to retail for each mobile operator

	Vodacom	*MTN*	*Cell C*
Market share	**54%**	**32%**	**14%**
% On net	**54%**	**32%**	**14%**
% Off net	**46%**	**68%**	**86%**
% Peak	**70%**	**70%**	**70%**
% Peak 0ff net	**32%**	**48%**	**60%**
% ICASA reduction	**29%**	**29%**	**29%**
% Expected reduction to retail	**9%**	**14%**	**17%**

Source: own

The table above show that *Vodacom* has 54% of the market and hence 54% of *Vodacom* calls will be on-net calls (Vodacom subscribers calling each other), that is *Vodacom* to *Vodacom,* and 46% will be to other networks. Based on the assumption that 70% of the calls are peak calls, 32% (70% of 46%) of the *Vodacom* calls will be off-net peak calls. The mobile termination rates are reduced by 29%. For Vodacom 29% of 32% is 9%, thus 9% is the expected reduction percentage *Vodacom* is expected to give to consumers.

The same process is repeated for the rest of the operators. In summary, *Vodacom* is expected to give a discount of 9%, 14% for *MTN* and 17% for *Cell C*.

3.5 ANALYSIS AND RESULTS

The tables below show the analysis the packages as defined by each mobile operator. The study is not comparing the package against the others but measures the change in each package from year 1 (March 2009 to February 2010) to year 2 (March 2010 to February 2011). Each package will be analysed separately and its result determined, with the study continuing to the next package until all the packages of the sample have been analysed.

3.5.1 Analysis of Vodacom Packages, Expected discount 9%

3.5.1.1 Talk 500 package

Vodacom Talk 500	March 2009 to Feb 2010	March 2010 to Feb 2011	% Reduction
MTR Peak	R 1.25	R 0.89	**-28.80%**
MTR Off-Peak	R 0.77	R 0.77	**0.00%**
Subscription	R 730	R 730	**0.00%**
Free (in bundle) Peak On-Network minutes	500	500	**0.00%**
Peak (in bundle) On-Network Rate	R 1.43	R 1.43	**0.00%**
Peak (in bundle) Off-Network Rate	R 2.35	R 1.99	**-15.32%**
Off-Peak (in bundle) on-Network Rate	R 0.84	R 1.43	**70.24%**
Off- Peak (in bundle) Off-Network Rate	R 1.25	R 1.99	**59.20%**
Happy Hour Rate	R 1.43	R 1.43	**0.00%**
Overall Package Reduction / Increase			**14.05%**
Connection Incentive Bonus	R3 500	R3 500	

Source: Adapted from Saicom submission to ICASA

Results: Overall change is an increase of 14.05%.

For the above package Vodacom increased by 14.05% instead of decreasing by 9% as expected as discussed in 3.5 above under excepted results. It is evident that the end-user ended up paying 23% more than the expected amount.

3.5.1.2 Family Top Up 315 package

Vodacom Family Top Up 315	March 2009 to Feb 2010	March 2010 to Feb 2011	% Reduction
MTR Peak	R 1.25	R 0.89	**-28.80%**
MTR Off-Peak	R 0.77	R 0.77	**0.00%**
Subscription	R 315	R 315	**0.00%**
Peak (in bundle) On-Network Rate	R 1.72	R 1.55	**-9.88%**
Peak (in bundle) Off-Network Rate	R 2.30	R 2.20	**-4.35%**
Off-Peak (in bundle) on-Network Rate	R 0.90	R 0.90	**0.00%**
Off- Peak (in bundle) Off-Network Rate	R 1.05	R 1.05	**0.00%**
Happy Hour Rate	R 1.49	R 1.55	**4.03%**
Overall Package Reduction / Increase			**-3.94%**
Connection Incentive Bonus	R3200	R2700	

Source: Adapted from Saicom submission to ICASA

Results: Happy Hour dropped from R3200 to R2700. Connection incentive Bonus (CIB) dropped by R500 adds an additional 6.6% resulting in a total increase of 2.66%. Again *Vodacom* was expected to reduce rates by 9%

instead consumer was hit by 2.66%. The combined effect is that the consumer is paying 11.66% more for this package than the expected decrease of 9%.

3.5.1.3 Vodacom Prepaid package

Vodacom Prepaid	March 2009 to Feb 2010	March 2010 to Feb 2011	% Reduction
MTR Peak	R 1.25	R 0.89	**-28.80%**
MTR Off-Peak	R 0.77	R 0.77	**0.00%**
Peak (in bundle) On-Network Rate	R 2.25	R 1.70	**-24.44%**
Peak (in bundle) Off-Network Rate	R 2.65	R 1.80	**-32.08%**
Off-Peak (in bundle) on-Network Rate	R 1.18	R 1.70	**44.07%**
Off- Peak (in bundle) Off-Network Rate	R 1.30	R 1.80	**38.46%**
Happy Hour Rate	R 1.49	R 1.70	**14.09%**
Overall Package Reduction / Increase			**-4.51%**

Source: Adapted from Saicom submission to ICASA

Results: Reduction of -4.51%

The 4.51% looks good as if the *Vodacom* is being whereas this decrease is less than the expected decrease of 9%. Although *Vodacom* reduced the rates for this package, the resulted change is an increase of 4.5%.

3.5.2 Analysis of MTN Packages, Expected discount 14%

3.5.2.1 MTN My Choice 750 package

MTN My Choice 750	March 2009 to Feb 2010	March 2010 to Feb 2011	% Reduction
MTR Peak	R 1.25	R 0.89	**-28.80%**
MTR Off-Peak	R 0.77	R 0.77	**0.00%**
Expected Reduction from *MTN* based on MTR			**-12.10%**
Subscription	R 705	R 705	**0.00%**
Peak (in bundle) On-Network Rate	R 1.46	R 1.46	**0.00%**
Peak (in bundle) Off-Network Rate	R 2.45	R 2.45	**0.00%**
Off-Peak (in bundle) on-Network Rate	R 0.95	R 0.95	**0.00%**
Off- Peak (in bundle) Off-Network Rate	R 1.15	R 1.15	**0.00%**
Overall Package Reduction			**0.00%**
Connection Incentive Bonus	R2000	R1200	**4.72%**

Source: Adapted from Saicom submission to ICASA

Results: Connection Incentive Bonus dropped by R800 and equates to an increase of 4.72%. *MTN* may look good as if there was no change whereas there was an increase of 4.7% due to connection incentive bonus. *MTN* was also expected to reduce the rates by 14% and with the increase calculated above the end-user ended with 18.72% increase than the expected amount.

3.5.2.1 MTN Anytime 500 package

MTN Anytime 500	March 2009 to Feb 2010	March 2010 to Feb 2011	% Reduction
MTR Peak	R 1.25	R 0.89	**-28.80%**
MTR Off-Peak	R 0.77	R 0.77	**0.00%**
Expected Reduction from *MTN* based on MTR			**-12.10%**
Subscription	R 500	R 500	**0.00%**
Peak (in bundle) On-Network Rate	R 1.95	R 1.95	**0.00%**
Peak (in bundle) Off-Network Rate	R 1.95	R 1.95	**0.00%**
Off-Peak (in bundle) on-Network Rate	R 1.95	R 1.95	**0.00%**
Off- Peak (in bundle) Off-Network Rate	R 1.95	R 1.95	**0.00%**
Happy Hour Rate	R 1.95	R 1.95	**0.00%**
Overall Package Reduction / Increase			**0.00%**
Connection Incentive Bonus	R3700	R3700	**0.00%**

Source: Adapted from Saicom submission to ICASA

Results: No change

It seems like *MTN* as sympathetic to the end-user by not changing the rate and benefits for this package whereas according to the end-user ended paying 14% more than the expected amount.

3.5.2.1 MTN Prepaid package

MTN Prepaid One Rate	March 2009 to Feb 2010	March 2010 to Feb 2011	% Reduction
MTR Peak	R 1.25	R 0.89	**-28.80%**
MTR Off-Peak	R 0.77	R 0.77	**0.00%**
Expected Reduction from *MTN* based on MTR			**-12.10%**
Peak (in bundle) On-Network Rate	R 1.86	R 1.75	**-5.91%**
Peak (in bundle) Off-Network Rate	R 1.86	R 1.75	**-5.91%**
Off-Peak (in bundle) on-Network Rate	R 1.86	R 1.75	**-5.91%**
Off- Peak (in bundle) Off-Network Rate	R 1.86	R 1.75	**-5.91%**
Overall Package Reduction / Increase			**-5.91%**

Source: Adapted from Saicom submission to ICASA

Results: Reduction of 5.91%

The reduction of 5.91% is still less than the expected 14%. The end-user is still paying 3.1% more than the expected amount.

3.5.3 Analysis of Cell C Packages, Expected discount 17%

3.5.3.1 Control Chat per Second Packages

Cell C Control Chat Per Second Packages	March 2009 to Feb 2010	March 2010 to Feb 2011	% Reduction
MTR Peak	R 1.25	R 0.89	**-28.80%**
MTR Off-Peak	R 0.77	R 0.77	**0.00%**
Expected Reduction from *Cell C* based on MTR			**-18.14%**
Peak (in bundle) On-Network Rate	R 3.20	R 3.20	**0.00%**
Peak (in bundle) Off-Network Rate	R 3.50	R 3.50	**0.00%**
Off-Peak (in bundle) on-Network Rate	R 1.05	R 1.05	**0.00%**
Off- Peak (in bundle) Off-Network Rate	R 1.30	R 1.30	**0.00%**
Overall Package Reduction			**0.00%**

Source: Adapted from Saicom submission to ICASA

Results: No change. The no change result may look good but it is less than the expected 17% reduction expected from *Cell C* network.

3.5.3.2 Casual Chat 100 package

Cell C Casual Chat 100	March 2009 to Feb 2010	March 2010 to Feb 2011	% Reduction
MTR Peak	R 1.25	R 0.89	**-28.80%**
MTR Off-Peak	R 0.77	R 0.77	**0.00%**
Expected Reduction from *Cell C* based on MTR			**-18.14%**
Subscription	R 100	R 100	**0.00%**
Peak (in bundle) On-Network Rate	R 1.80	R 1.80	**0.00%**
Peak (in bundle) Off-Network Rate	R 2.70	R 2.70	**0.00%**
Off-Peak (in bundle) on-Network Rate	R 0.90	R 0.90	**0.00%**
Off- Peak (in bundle) Off-Network Rate	R 1.00	R 1.00	**0.00%**
Overall Package Reduction			**0.00%**

Source: Adapted from Saicom submission to ICASA

Results: No change. Again the no change result may look good but it is still less than the expected 17% reduction expected from *Cell C* network.

3.5.3.3 Prepaid (no per second) package

Cell C Prepaid (no per second)	March 2009 to Feb 2010	March 2010 to Feb 2011	% Reduction
MTR Peak	R 1.25	R 0.89	**-28.80%**
MTR Off-Peak	R 0.77	R 0.77	**0.00%**
Expected Reduction from *Cell C* based on MTR			**-18.14%**
Peak (in bundle) On-Network Rate	R 1.50	R 1.50	**0.00%**
Peak (in bundle) Off-Network Rate	R 1.50	R 1.50	**0.00%**
Off-Peak (in bundle) on-Network Rate	R 1.50	R 1.50	**0.00%**
Off- Peak (in bundle) Off-Network Rate	R 1.50	R 1.50	**0.00%**
Happy Hour Rate	R 1.50	R 1.50	**0.00%**
Overall Package Reduction / Increase			**0.00%**

Source: Adapted from Saicom submission to ICASA

Results: No change. The no change result may look good from the end-user but it is less than the expected 17% reduction expected from *Cell C* network.

3.6 SUMMARY OF ALL THE PACKAGES ANALYSED

The results of the analysis are summarised in the table below for each mobile operator.

Table 3.4: Comparative results for the three sampled mobile operators

Operator	Package	Increase/Decrease	Percentage	Expected reduction
Vodacom	Talk 500	Increase	14.05%	9%
	Family Top Up 315	Increase	2.66%	
	Vodacom Prepaid	Decrease	-4.51%	
MTN	MTN My Choice 750	Increased	4.72%	14%
	MTN Anytime 500	No Change	0	
	MTN Prepaid	Decrease	5.91%	
Cell C	Control Chat	No Change	0	17%
	Casual Chat 100	No change	0	
	Prepaid	No change	0	

Source: Own

The above table shows the summary of the changes in rates between the operators.

It is evident from the table that the rates reduction did not benefit the consumer.

Vodacom was expected to pass a reduction of 9% to the consumers but the consumers ended up with a highest increase of 14.05%.

For *MTN,* consumers had a decrease of 5.91%, which is less than the expected 14%.

For *Cell C* consumers there was neither an increase nor a decrease.

The above analysis shows that the mobile operators did not filter the reduction to the consumers as intended by the government.

CHAPTER 4

CONCLUSION

4.1 INTRODUCTION

In this chapter the analysis and results found in Chapter 3 are going to be discussed. The objective of this study was mainly to investigate if the lowering of the termination rates benefited the end user. The study was based on a statement issued by the then Minister of Communications of South Africa as quoted by Southafrica.info, saying “The reduced fees were a step in the right direction” and he said “This is putting money back in the pockets of ordinary South Africans, who need it more now than ever”. The study has aimed at looking at how this will impact the consumer as well as the mobile operators. Although there are more than three mobile operators in South Africa the study concentrated only on the top three, namely *Vodacom, MTN* and *Cell C*.

4.2 FINDINGS OF THE STUDY

A theory behind the formulation and implementation of termination rates was discussed in Chapter 2. Various methods of implementing the terminations rate and approaches in other countries were also looked into in comparison with the South Africa’s method. It was discovered that South Africa is in line with other African countries and is following counties such as Namibia, who have already reduced their interconnect rates. It was evident that South Africa had the most expensive termination rates amongst the African countries.

Chapter 3 analysed interpreted the changes in the actual rates from the mobile operators, comparing the year before the reduction of the interconnect rates to the year after the reduction of interconnect rates. The comparison was presented in tabular format, with the current rates of the previous year in one column aligned with the ones for the current year. The results showed that the lowering of interconnect rates has had no bearing on the retails rates, confirming the waterbed theory implication, as predicted by some analyst and

specialists in the industry. Instead of the operators reducing the rates some had increased them to mask the losses incurred by lowering of interconnect rates.

The results in Chapter 3 showed that although *Vodacom* was expected to pass on a reduction of 9% to the consumers, the consumers ended up with a highest increase of 14.05%, whilst *MTN* consumers had a decrease of 5.91%, which is still less than the expected 14%, and for *Cell C*, which was expected to reduce rates by 17%, consumers ended up with the same rates as before.

It is significant that consumer did benefit in terms of getting more for the same since the mobile operators introduced free minutes bundles and free data bundles in order to retain or attract customers. The rate of competition also increased, which meant benefits for the consumer. The operators had to address the sudden loss of revenue and the possible loss of subscribers. This is the main reason that increased competition. The barrier to entry was also lowered and it was easy for the newcomers such as *8ta* to enter the market, thus also stimulating the market.

4.3 RECOMMENDATIONS

Although the reduction was not immediately realised by the end-user, there were signs of reduction in retail rates. The completion introduced by the new players forced the main players to lower their rates in order to protect their subscriber base. In order for the government to realise their goal of lowering call rates, regulation of the retail rates would have proven more successful. Currently the retails rates are not regulated, the operator can charge whatever price, and the consumer does not have a choice but to pay as the mobile operators are the main means of communication. The other piece of legislation allowed users to migrate to another network with their numbers should the customer not be satisfied with the serviced of the currently network. The operators felt compelled to offer reduced or more for the same price.

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