Government Gazette

REPUBLIC OF SOUTH AFRICA

Vol. 481 Pretoria 18 July 2005 No. 27814

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GENERAL NOTICE

NOTICE 1200 OF *2005*

INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

NOTICE IN TERMS OF SECTION 27 OF THE TELECOMMUNICATIONS ACT, NO. 103 OF 1996 ("THE ACT") INVITING REPRESENTATIONS WITH REGARD TO A REVIEW OF MOBILE PRICES

The Independent Communications Authority of South Africa ("the Authority") hereby provides notice and invites comments on a review of Mobile Prices under section 27 of the Telecommunications Act No. 103 of 1996, as amended.

Interested persons are invited to submit written representations, on the above by hand, facsimile, mail or email by Thursday, 25 August 2005 no later than 16H30.

In the event that the Authority decides to hold an oral hearing on the above, persons making representations are further invited to indicate whether they request an opportunity to make oral representations, including the estimated duration thereof, which shall not exceed one hour).

Please forward your written comments to:

Mr. Khulile Boqwana
Manager: Financial and Economic Analysis
ICASA, Private Bag X10002, Sandton, 2146 or
ICASA, Block B, Pill Mill Farm, 164 Katherine Street, Sandton.

Where possible, written representations should also be emailed to kbogwana@icasa.org.za and copied to mnkopane@icasa.org.za

All written representations submitted to the Authority pursuant to this notice shall be made available for inspection by interested persons from Friday, 26 August 2005 on the ICASA website and at the ICASA library during office hours and copies of such representations and documents will be obtainable on payment of a fee.

At the request of any person who submits a written representation or document pursuant to this notice, the Authority may determine whether such representation or document, or portion thereof, relates to the financial capacity or business plan of any person, or to any other matter reasonably justifying confidentiality, in which event such representation or document shall not be made available for inspection by members of public. If the request for non-disclosure to public is refused, the person making the request will be allowed to withdraw the representation or document in question.

With respect to the documentation determined not to be open to public inspection, the Authority may direct that the public, shall not be present during the oral submission relating to such documentation; provided that those present shall have been notified of this intention, allowed to object thereto and after such objections had been considered by the Authority.

In order to provide a wide basis for representations to be made during the enquiry, the Authority has compiled a discussion document, containing questions pertinent to this issue. These questions have been incorporated into the annexure titled **"Discussion Document – Mobile Prices".** Representations may address any relevant issue, whether or not such issues have been raised in the Discussion Document.

The findings, recommendations and conclusions by the Authority following public comment, will be published in the Government Gazette in accordance with section 27 of the Act.

ICASA has taken all reasonable steps to ensure that the information contained herein has been obtained from reliable sources and that this consultation document is accurate in all respects.

CHAIRPERSON
PARIS MASHILE

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Introduction

On 3 May 2005, ICASA received a complaint regarding various aspects of mobile call charges in South Africa, submitted by the Communications User Association of South Africa ("CUASA"). CUASA requested the Authority to investigate the following':

- The cause of the high cost of mobile calls in general;
- Why the introduction of competition (Cell C) in the mobile market has not reduced call costs;
- Whether there is sufficient competition in the mobile market;
- Why an international landline call to a foreign destination is less expensive than a national call to a mobile phone as compared to other jurisdictions;
- The high cost of sending **SMSs** compared to a one minute international call from a national landline;
- The different interconnection charges between mobile-to-mobile and mobile-to-fixed line;
- The cost of South African roaming mobile charges; and
- The high costs of mobile prepaid rates.

CUASA believes that mobile phone industry costs are excessive for calls and other services. As a result of the complaint the Authority decided to conduct an enquiry into mobile prices. The purpose of this enquiry is to establish whether the high costs of mobile services are justifiable and also to establish if there is a need exists for more rigorous regulatory intervention of mobile tariffs.

Furthermore, this enquiry being conducted within the context of the President's State of the Nation address in February 2005, in which he raised the high costs of communications and promised that telecommunication prices will become more affordable. The general public and small businesses are becoming aware of the micro-economic effects that the high costs of telecommunication services has on the economy of the country.

[1] **Letter from CUASA to the Independent Communications Authority of South Africa, dated 3 May 2005.**

The introduction of competition and innovation that is associated with having more operators is supposed to reduce prices in a market. Unfortunately, since the introduction of the third cellular operator, prices have not decreased in real terms as is often the case with an increase in competition. Even the changes in technology and bundling of services have not reduced prices to acceptable levels. The Authority is of the view that consumers have grasped the dynamics of the telecommunications market and are demanding results as they increasingly begin to voice their concerns. The Authority has received various complaints relating to telecommunication services in general, regarding price and quality of services in particular.

Telecommunication services are an input to every business. High costs of communications have a knock-on effect on all other business products and services. At present, it is the high cost of communications in South Africa that is also seen as the largest barrier to a boom market for foreign and domestic call centres and business process outsourcing, generally.

The Authority believes that a regulator should not intervene in a market where competitive forces are producing shareholder wealth and consumer welfare. However, a regulator has a clear role to play as a proxy for competition, where the presence of competitors alone is not sufficient to bring down the costs of communication services and protect consumer interests. This Discussion Document seeks to obtain input from all interested parties as to the nature of the problem and the potential solutions.

Competition in the Mobile sector

The communications sector' structure and technology are facing rapid changes. Much has occurred since Telkom was issued its licence in 1997 and Vodacom and MTN were issued their operating licences from 1994. The mobile market has grown substantially with approximately 17 million mobile subscribers recorded in 2004 and a penetration rate of 48%. Currently mobile subscribers constitute approximately 49% of the South African population*.

Dramatic transformation of the communications sector has occurred over the last decade from the overwhelming dominance of a state owned monopoly operator to a semi-competitive and more dynamic marketplace. The introduction of Cell C and imminent arrival of the Second National Operator (SNO) have placed increasing pressure on Telkom and the seven-year duopoly of Vodacom and MTN to develop new tools and products in order to retain the existing customer base and expand their market share and revenue streams. It was expected that within two years of introducing Cell C into the market, that prices would be driven towards a global average as competition has done in other jurisdictions. It is however, almost four years since Cell C was licensed and the perceived benefits of lower and competitive prices normally associated with increased competition, have not been substantially experienced by the majority of consumers.

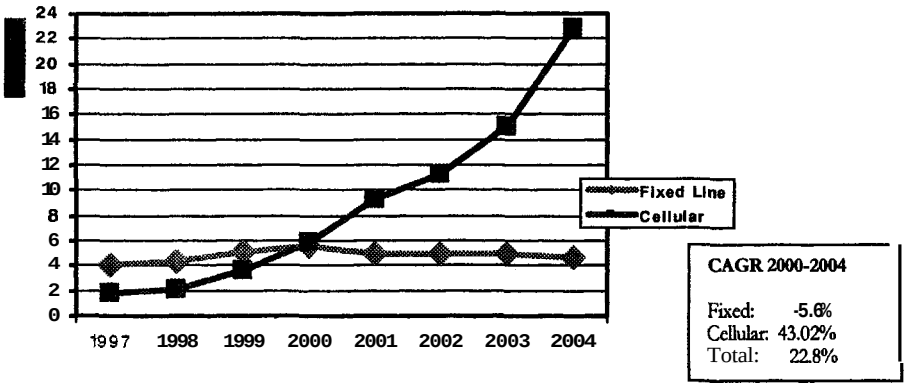
When Cell C entered the market in November 2001, there were approximately 10.5 million subscribers with Cell C predicting a total market of 13 million. In June 2003, MTN predicted a

[2] **Marina Bidoli, "Twins on Quest", Financial *Mail*, 11 June 2004.**

total addressable active market of 15 -17million subscribers and Vodacom of 19 million. As the market matures, the established operators are increasingly moving to mobile data markets to sustain revenue growth from high-value customers and to pre-paid subscribers to sustain growth in lower income segments. Amongst the three mobile operators, there are approximately 22.761 million subscribers,[3] substantially surpassing predicted growth rates by the operators.

Graph 1: Cellular and Fixed Line Growth in South Africa, 1997-2004

Source: BMI-TechKnowledge, South Africa. Updated, ICASA, July 2005, based on Telkom Annual Reports 2000-2004.



The above graph reflects the growth of mobile to fixed lines between 1997 and 2004. Cell C, the smallest of the three mobile operators in terms of customer base, holds 9% or 2.3 million of the total subscriber base, compared to some 4.8 million customers on Telkom's network. Allan Knott– Craig, CE of Vodacom has predicted "at least another 12 million subscribers before we talk of saturation of the mobile market."[4]

1. *Does the presence of three operators in the mobile sector suggest sufficient competition or is there a need to introduce a fourth mobile cellular operator?*
2. *What indicates sufficient competition within the mobile sector? Or, if a lack of meaningful competition is perceived, what are the indicators thereof?*
3. *What are the possible solutions to the perceived problem?*

[3] *See* httd/w.wmc.com

[4] *Financial Mail,* 11 June 2004, page 24.

Introduction of USALs

Due to the high levels of wage and wealth disparities in South Africa, telecommunications operators are reluctant to adequately roll out infrastructure in the low income and underserved areas. [5]

Facilitated by financial aid from the Universal Service Agency, several Under Serviced Area licences (USALs) have been awarded to companies to provide telecommunications services in areas which are currently considered to be non-commercially viable by the incumbent and well-established telecommunication companies. Typically, these areas have less than 5% teledensity.

In 2004, six USALs were licensed with the seventh being granted its licence at the beginning of 2005. The Authority is in the process of licensing a further tenty USALs to bring the number of USALs to 27. It is expected that the introduction of USALs will assist in bridging the digital divide and contributing to economic and social development. However, it must be noted that USALs will still have to build their own network infrastructure or piggyback on the networks of the existing telecommunications operators. Regardless, massive financial investment will be required, notwithstanding Universal Service Agency subsidies of R5 million already received by some of the USALs. Moreover, USALs will be required to interconnect with the existing telecommunications operators. Inevitably, even with asymmetrical regulation, along with other operational logistics, the interconnection process will create financial burden for USALs.

4. ***What impact does the introduction of USALs have within the telecommunications sector both for competition generally and on price for consumers?***

5. ***How much time is required for USALs to have an expected impact on the above?***

Ministerial Determinations

In September 2004, the Minister of Communications announced seminal policy directives designed to stimulate and foster more competition in the telecommunications industry. The main objective of the determinations was the further liberalization of the telecommunications

[5] **SA records one of the highest Gini Coefficient indexes in the world, measured in 2003 at 59.3. The Gini coefficient is used to compare inequality among nations. It measures the distribution of income (or consumption) among individuals or households within a country between 0 (perfect equality) and 100 (perfect inequality).**

market. These Policy Directives emanated from various restrictions in the telecommunications Act which were now lifted by the Minister.

Some of the pronouncements suggested the following lessening of restrictions:

- Value-added Network Service operators (VANS) whose core operations were the provision of data and Internet services can now provide voice services on their IP networks. Stated differently, both voice and data could now be carried over the same network.
- Facilities previously supplied on an exclusive basis from Telkom can now be obtained from anyone other than Telkom.
- Mobile operators can provide their own fixed links.
- VANS may resell spare capacity and services.

A media statement issued by the Minister of Communications, Dr. Ivy Matsepe-Casaburri on 31 January 2005 stipulated that this did not however, allow VANS and Internet Service Providers (ISPs) to build their own networks or self provide their own physical infrastructure.

The Ministerial Determinations came into operation on 1 February 2005, however, the framework for the licensing of VANS was only finalised in July 2005.

6, Does the ability for VANS to carry voice have any perceived impact on competition in the mobile industry?

7. Can the introduction of VoIP be seen as direct competition to mobile and fixed operators?

Mobile Voice

Mobile voice services have evolved to be the most widely used form of voice communication in South Africa.[6] Yet, further liberalization as outlined above, competition, regulation and technological change allow the commodification of voice which can create a situation where voice on its own is not the sole driver of service differentiation. The provision of voice services by a larger number of industry players will make voice services more widely available from a greater number of providers, creating downward pressure on price and offering options for customers. This will have a positive effect as the expectation will be a reduction in rates while service providers continue to develop strategies of leveraging voice to create unique value for end-users. At present, evidence of this is only manifested in the price of fixed line international calls, which is also however, a product of the tariff rebalancing exercise in which Telkom is currently engaged.

[6] See http://www.pyr.com

Internationally, the cost of voice is increasingly giving way under competitive pressure[7]. In South Africa, this has facilitated mobile operators creatively bundling voice with data and traffic load management pricing plans, as well as developing a wide array of tariff plans and tariff structures which provide flexibility and create a perception of value for money.

Huge capital outlays do not end with the deployment of the physical network infrastructure. To ensure high quality services, mobile operators need to maintain their infrastructure on a continuous basis. Inevitably, maintenance costs account for a large percentage of operating costs, which are recovered from the consumers. The incidence of high maintenance costs, however, despite its inevitability does not in any way provide the operators with the leeway to levy astronomically high service tariffs against users or to depart significantly from their cost base when pricing their services. It is against this background that more drastic and commercially viable measures are needed in the South African voice market in an effort to bring voice rates to an acceptable and affordable level. Among other alternatives which could counter high telecommunication costs is mobile voice over IP and fixed-mobile convergence, which means VANS carrying voice should not be a threat to the mobile or fixed operators but a challenge for innovation. These innovations could grow mobile voice usage and revenues whether delivered by mobile or fixed service providers. It is widely speculated that Telkom has moved its international voice services to voice over Internet Protocol (VoIP) which is one of the reasons, as highlighted above, for decreasing international call prices.

In a converged environment it is assumed that mobile voice will no longer be an exclusive right of mobile operators as fixed line operators and Internet Service Providers (ISPs) will be equipped with technologies to compete. Convergence promotes innovation amongst mobile operators to start transforming and migrating mobile voice over Wireless Local Area Network (WLAN) and other technologies. Mobile voice over IP is part of the future. New IP technologies could provide mobile operators with an opportunity to take over fixed line customers by creating unique services that are tailored for the needs of the individual, business or private user, which will combine voice with multimedia services. Innovation like mobile VoIP will provide mobile operators with an opportunity for customer retention as bundling of services reduces churn and improves average revenues per service (ARPS).

8. Is the price of mobile voice services justifiable and are consumers getting value for money?

9. What should be done to enhance the usage of mobile voice and ensure that it is priced in an acceptable manner, if it is indeed over-priced?

10. If the price of mobile voice is considered too high, or too low, what is the basis for justifying the price and what would be an acceptable level?

11. What is the impact of wholesale prices (interconnection and retention charges) on

[7] See http://www.analysis.com

retail prices?

12. If they are having an adverse impact on consumers, what is the remedy?

13. Please comment generally on mobile telecommunication service charges including, but not limited to interconnection pricing; retention rates; discount and special offers by operators.

Comparison of Mobile Postpaid and Prepaid'

It is evident that voice services remain the most important aspect of the operators business and contributes significantly to the operators' total revenue. However, the emergence of data and multimedia services may change this proposition. The bundling of services makes mobile products and services more lucrative and brings a perceived sense of increased value for money to the consumer. The importance of moving all mobile services towards cost remains an important objective for ICASA, so as to ensure that consumers are truly receiving value for money and that the objects of the Telecommunications Act are met.

Due to the indispensability of voice services to consumers, demand for these services is highly inelastic. That is, demand for voice services is not adversely affected by fluctuations in prices. The demand for voice services remains to a large degree, unaffected in the event of either a downward or upward price fluctuations. In rare cases of adverse change, it is so insignificant to an extent that its overall impact becomes negligible, due to the fact that through retention and termination charges the operators will always make revenue from every subscriber for as long as the consumer remains active.

Thus, it may be argued that the high voice services take-up, with little perceived downward trend in pricing, warrants regulatory intervention of tariffs by the Authority. This does not however prevent the relevance of regulating prices pertaining to other services such as data, notwithstanding the latter's minute contribution to the overall operators' revenue.

Below is a table representing per second charges levied by the three mobile operators as at 8 June 2005.

[8] **Based on mobile operators tariff filings (March 2005).**

TABLE: 1 (Prepaid packages) [9]

Details	Unit	Peak	Off-peak
Cell C to Cell C	R/min	R3.25	R1.00
Cell C to other Mobile Operators	R/min	R3.60	R1.25
Cell C to Telkom	R/min	R3.25	R1.00
MTN to MTN	R/min	R3.30	R1.02
MTN to other Mobile Operators	R/min	R3.60	R1.26
MTN to Telkom	R/min	R3.30	R1.02
Vodacom to Vodacom	R/min	R3.25	R1.00
Vodacom to other Mobile OPerators	R/min	R3.60	R1.30
Vodacom to Telkom	R/min	R3.25	R1.00

Based on the above, it is clear that calls originating from mobile networks and terminating on the fixed line network are slightly lower in cost than calls originating from and terminating on different mobile networks. The pricing differential is attributable to interconnection costs payable to operators by other operators in respect of traffic terminating on their networks. Currently, mobile operators derive more revenue in respect of traffic terminating on their networks which originates from the fixed line network both during peak and off-peak periods.

By contrast, the incumbent fixed line operator generates materially less revenue from the traffic terminating on its network which was initiated from the mobile networks during both peak and off-peak periods. Furthermore, interconnection charges on calls originating from and terminating on different mobile networks are high in all periods (peak and off-peak) hence the prevalence of high prices pertaining to traffic between mobile networks at all periods.

Due to the almost identical nature of the physical architecture of wireless networks, it is conceivable that the price of voice traffic amongst those networks should be cheaper than the traffic terminating on the fixed line network. However, since interconnection agreements are commercial arrangements between and amongst operators with the Authority only ensuring compliance with regulatory guidelines and dispute resolution, interconnection pricing mechanisms are essentially left to the discretion of the players. It is the Authority's view that interconnection charges agreed through negotiations between operators remains unclear as the operators cannot explain the rationale behind the setting of the current rates.

TABI 2 ·paid l

	Cell C[10]		MTN[11]		Vodacom[12]	
	2000	2005	2000	2005	2000	2005
CPI	5.4%	3.4%	5.4%	3.4%	5.4%	3.4%

[9] *See* http://www.mtnice.co.za; http://www.vodacom4me.co.za

Access Charges						
Connection charges	N/A	R99	R95.19	R99	R95	R97
Monthly charges	N/A	R640	R678.30	R949	R600	R785
Call Rates						
On -Net -peak calls	N/A	R1.55	R1.16	R1.60	R1.30	R1.43
Off –Net Peak calls	N/A	R.180	R1.35	R1.85	R1.30	R1.80
Local and National calls to **Telkom by three Mobile Operators -Peak**	N/A	R1.30	R1.19	R1.15	R1.19	R1.15

It requires emphasis that post-paid or contract based subscribers account for a very small percentage of the overall pool of subscribers and is drawn mainly from middle and high income earners.

Based on the above-table it is apparent, that access charges have fluctuated significantly in an upward direction over the last five years, with particular reference to subscription fees as evidenced by the average increase of 35% during the period under review. Notwithstanding the marginal increase in connection rates, the rates in question have remained almost unchanged on closer examination, specifically relative to other access charges.

On the other hand, call charges have fluctuated widely over the last five years in a positive direction. The observed evidence indicates that domestic calls particularly, have increased dramatically. Even calls originating from and terminating on similar networks have been greatly affected by spiraling increases. The increases in call rates related to calls originating and terminating on either the same or different mobile networks can be attributed to the following:

- Exponential increase in subscribers which is offset by the decrease in the Average Revenue Per User (ARPU)
- High interconnection costs payable by mobile operators to each in respect of calls terminating on each others' networks

However, as in the case of prepaid customers, further analysis revealed that contract subscribers are charged considerably lower rates in respect of calls originating from the mobile networks and terminating on the fixed-line network. This is the case despite lower termination charges payable by mobile operators to the incumbent operator. The only explanation that could be given for the difference in termination charges from mobile to mobile and from mobile to fixed is that of the use of more network intelligence which does not justify the high difference between the two. The fact that interconnection charges from fixed to mobile are different from mobile to fixed raises even more concern.

[10] **Annual Tariff filing, 2005.**

[11] **Annual Tariff filing 2000 and http:// www.mtnice.co.za (June 2005).**

[12] **Annual Tariff filing 2000 and http://www.vodocom.c.za (June 2005).**

At a general level, the Authority is of the view that the overall picture pertaining to call rates in the country is not encouraging. The reality of the situation is that low income consumers are subjected to much higher prices. Contract or post-paid users on the high tariff plans are charged lower rates in contrast to those who are on the lower tariff plans. The fact that handsets for contract customers are subsidized and the usage rates are lower raises concerns of pre-paid users potentially subsidizing post-paid users.

Moreover, many other jurisdictions have managed to levy pre-paid and post paid rates at parity. In China for example, the only discernable difference between pre-paid, accounting for ***70%*** of the subscriber base, and post paid users, is a monthly subscription fee.[13] While initial arguments for premium rating pre-paid services may have some purchase, there are strong arguments suggesting that these costs have declined, and a corresponding decline in pre-paid rates should follow.

Instead of promoting seamless alignment to a cost-based model, the pricing models adopted by the operators, unfortunately widen a wedge which exists between pre-paid and post paid users, aggravating the digital divide. The potential consequences flowing from this approach are of national concern. Affordable access to communication services is universally accepted as a fundamental prerequisite to the acceleration and realisation of both economic and social development, specifically in developing countries.

14. *Should there be a difference between post-paid and pre-paid tariffs? Please provide the rationale for your answer.*

15. ***Is*** *there a justification for regulatory intervention* ***by*** *the Authority in retail rates for pre-paid services?*

Comparison of South African Mobile Prices with International Prices[14]

The table below compares pre-paid packages, postpaid packages and **SMS** of different countries. The selection criteria used includes countries with at least three competing mobile operators and a strong incumbent operator. It proved difficult to select countries that are similar to South Africa in terms of economy and population density as the competing factors within the telecommunication industries were very different. It must be noted that even though those countries were not considered in this table, overall their mobile prices are still relatively lower than the South African market. Table 3 clearly reflects the trend that mobile prices in South Africa are relatively higher than other international countries with similar sectors.

[13] **ICASA notes that not all countries are immediately comparable, but can be used to suggest trends.**

[14] **The information used in the table was extracted from the websites of the mobile operators mentioned. The average conversion rates used were: 1Euro=R 8.10; 1HUF= R0.03; 1Czeck Koruna= RO, 27 and 1CHF=R5, 22.**

T 3: International Price Comparison

							Czech Republic			Switzerland		Spain
Operators Packages	Peak Rates	MTN	Vodacom	3IC	Cellnet GSM	Vodafone	T-Mobile	Oskar	Eurotel	Orange	Swiss Com	Amena
Prepaid	Unit											
Mobile to Mobile (on net)	R/min	R3.30	R3.25	R3.25	2.23	2.13	0.10	0.08	0.17	4.66	5.13	1.00
Mobile to Mobile (Off-net)	R/min	R3.60	R3.60	R3.60	2.23	2.13	0.10	0.08	0.23	4.66	6.68	1.01
Mobile to Fixed	R/min	R3.30	R3.25	R3.25	0	2.13	0.10	0.08	0.23	4.66	6.88	1.01
Post Paid												
Connection fees	Once off	R99	R97	R99	0	0	0	0	0	0	0	0
Subscription fees	Monthly	R949	R785	R640	582.26	173.87	58.90	61.59	119.33	68.90	61.59	119.33
Mobile to Mobile (on net)	Wmin	R1.60	R1.55	R1.43	0.58	0.81	3.12	0.13	0.04	1.55	0.985	1.72
Mobile to Mobile (Off-net)	R/min	R1.80	R1.80	R1.85	0	1.62	1.12	0.13	0.13	0	4.093	1.72
Mobile to Fixed	R/min	R1.15	R1.15	R1.30	0	2.13	1.12	0.13	0.13	0	0.98	1.72
SMS's												
SMS Peak on net	Rat/Mes	R0.86	R0.80	R0.80	0.62	0.82	0.07	0.03	0.04			
SMS peak calls off-net	Rat/Mes	R0.86	R0.80	R0.80	0.62	R116.4	2.02	0.13	0.034			

The only country that had higher pre-paid package offerings than South Africa was Switzerland. However, the Swiss market also has various customized pre-paid packages for particular consumer groups, for example, the youth market, that are cheaper than South African packages.

Overall, rates in South Africa are over a Rand more expensive than in most jurisdictions. These costs are aggravated by the initial payment for SIM cards which, while evidencing

decreases in certain outlets, the operators are still filling higher SIM card charges with the Authority. While many jurisdictions evidence parity or trivial differences between prepaid and post-paid or contract rates, South African pre-paid rates reflect an average of twice the cost of post-paid packages, despite the lack of credit risk and upfront cash payments associated with pre-paid services. Moreover, pre-paid subscribers form the bulk of all operators' subscriber bases in South Africa. Unsubstantiated speculation on subsidization between pre and post paid subscribers is also fuelled by the lack of transparency on handset subsidies and lower rates charged to contract users and additional benefits associated with contracts.

While this review is anecdotal, it reveals a number of salient trends. South African contract or post paid packages are more expensive than those in the selected countries reviewed, and in most instances South African operators charge connection or SIM card fees where other countries do not. The subscription or monthly charge is approximately ten times more expensive than the lowest charging countries and the rates are also approximately ten times higher than the selected countries reviewed. Finally, in South Africa there are also different rates for making "on net" and "off net" calls while in most countries reviewed, there appears to be no difference.

16. *Should there be any difference between On-net calls and Off-net call rates? If* ***so*** *what is the reasoning behind the differential?*

17. *Should calling a fixed network be any different from calling mobile operators?* ***If so*** *why?*

Mobile SMS

Despite the assumed low cost associated with carrying data traffic such as Short Message Services (SMSs), data service prices remain high when compared internationally. The three operators however, apply similar costing models to arrive at the tariffs levied to clients as the services are charged per message relayed. The number of characters contained in each message is not considered. On average, by comparison to other countries, it is more expensive to send an **SMS** in South Africa considering that the marginal cost to operators is minimal. This claim is arguably justified by the widespread use of limited free "please call me" SMSs.

In South Africa, mobile operators' data only accounts for less than **5%** of total revenues which begs the question of revenue from voice being used to cross-subsidise data revenue. The Authority believes that cross-subsidies per se are acceptable within limits and if subject to transparency.

Operator	Off-peak Periods	Peak Periods
Cell C	0.36	0.80
MTN	0.86	0.86
Vodacom	**0.35**	**0.80**

The above table shows that the prices charged by both Vodacom and Cell C are similar during peak periods. On the other hand, Cell C charges a slightly higher rate compared to Vodacom during off-peak periods which translates to 2.9%. In real terms, the 2.9% difference is negligible. On the other hand, MTN appears more expensive both during peak and off-peak periods. MTN's SMS tariffs are 147% and 143% higher compared to the tariffs levied by Vodacom and Cell C respectively in off-peak periods. However, the tariffs differential gap narrows during peak periods as MTN charges 7.5% higher than both Vodacom and Cell C.

In view of the above, it is clear that real competition does exist in the data category. The arrival of third generation technology **(3G)** together with its perceived benefits will undoubtedly continue this trend. Operators however, will face additional costs to upgrade and maintain their physical infrastructure to conform to this 'technology and acquire third generation technology network licences.

Most industry analysts held the view that the mobile telephony market would reach saturation ten years after cellular telephony began in SA, overlooking one important factor: the evolution of new technologies in subsequent periods *after* awarding of the two mobile cellular telecommunication services licenses then to Vodacom and MTN and later to the third operator, Cell C.

Although reported statistics differ, it is estimated that there are between 20-23 million mobile telephony subscribers in the country representing approximately 48% cellular phone penetration (contrasted to Internet penetration of 7.3%). However, taking the upper limit, of the 23 million subscribers, 77.8% account for prepaid users with the remainder, 22.2% falling in the post-paid category. Despite the presence of three mobile operators, Vodacom commands the overall market share of 55.2%, followed by MTN with 35% and with Cell C accounting for 9.8%.

It must be noted that in line with the country's universal access policy, pursuant to the terms and conditions of the Mobile Cellular Telecommunication Service (MCTS) licences, the three mobile operators were also tasked or undertook to deploy Community Service Telephones

[15] **Mobile operator tariff filings, (June 2005).**

(CSTs) in specified areas. The CSTs were intended to serve a dual purpose to afford business opportunities to aspiring entrepreneurs and to generate sustainable employment for people with no or low skills.

To ensure the diffusion of CSTs in all nine provinces, both Vodacom and MTN were given CST targets of 22 000 and 7 500 respectively over a period of 3 years. The targets in question have been met. Cell C which was awarded its mobile service licence in 2001 undertook a much higher target of 52 000 CSTs to be rolled out over a period of 7 years. The difference from the original two operators' targets may be ascribed to the exponential growth in demand for mobile telecommunication services, a factor which was not perceived at the time the Vodacom and MTN licences were granted. To date, a total of approximately 16 000 CSTs have been deployed in various parts of the country by Cell C.

On the basis of the above, coupled with new innovations in cellular technology and the propensity for wireless substitution, there is enormous potential for growth. In addition to voice traffic being the main source of revenue for mobile telephony operators, there has been a major shift with regard to consumer preferences on the utilisation of data services. The primary cause attributable to users being more data-centric is the array of data-oriented services offered by both private and public sector companies through a cellular phone device. For example, most commercial banks offer clients cellular phone banking services. These services, which have in effect converted at a very affordable cost, traditional cellular phone devices into Personal Data Assistants, provide consumers with real-time information on all aspects of their financial transactions. Usage of cellular telephones for information is not limited to financial transactions, but also offers information services pertaining to other activities such as lottery and sport results, competition entry, and various other information services.

18. Are data services priced fairly? If not, what is the consumer expectation?

19. Is voice and data bundling offering customer's value for money?

20. What is the consumer expectation around the pricing of bundled services?

21. Is further regulatory oversight required with respect to mobile data services?

Financial Performance

Due to a lack of financial information over a lengthy period, the Authority used the information available to compare mobile operators' financial performance over the same period. Financial performance of operators is crucial to shareholder value and the delivery of increased services and quality. However, the Authority also needs to ensure that profits are not to the

detriment of the consumers. There are various ways of assessing a company's financial performance and the Authority will only concentrate on growth in revenue and profits over the period 2003 to 2004, because of the fact that the overall performance of the operators is diluted by their international operations. Table 5 below depicts the growth in revenues of the mobile operators over a one year period.

TABLE 5: Mobile Operators Financial Performance Review: South African Operations

Figures in millions (R millions)

	Cell C			**MTN**			**Vodacom**		
	2003	**2004**	**% A**	**2003**	**2004**	**% A**	**2003**	**2004**	**% A**
Operating Revenue	2 463.07	4 029.58	63.60%	12 298	15098	**22.77%**	18 544	21 981	**18.53%**
Operating profit(loss)	-1 599.12	-621.38	**61.14%**	2 336	2 339	**0.123%**	4 476	**5** 466	**22.12%**
Operating profit/loss margin	-64.92%	-15.42%	**76.25%**	18.99	15.49	**-18.44%**	24.87	24.14	**3.02%**

The growth in revenue for Vodacom and MTN in 2003 and 2004 was between **18.5%** and 22.7%. Cell C also performed better in 2004 compared to the previous year, where Cell C's loss declined from 64.9 million to 15.4 million. The growth in revenue was mainly driven amongst other things, by increases in the number of subscribers; tariffs; SMS usage; interconnection charges and equipment sales increases. This suggests that demand grew alongside general price increases in 2004.

TABLE 6: Mobile Operators Financial Performance Review: Domestic and International Operations
Figures in millions (R millions)

Details	Cell C			MTN			Vodacom		
	2003	2004	% A	2003	2004	% A	2003		
Operating Revenue	2461	4099.63	67	19405	23871	23	19779	23478	19
Gross Profit	540	2042	344	11084	14212	28	8918	10425	17
Gross Profit margins	21.96%	49.80%	127	57.12%	59.54%	4	45.09%	44.40%	2
Operating expenses net of other income	2137	2718	27	7,347	8,204	12	4,588	5,191	13
Operating profit/loss	(1596)	(676)	2	3737	6,008	61	4,330	5,234	21
Operating profit/loss margins	(64.87 %)	-16.50	75	19.26	25.17	31	21.89	22.29	2
EBITDA	-2,0689	-1,306,	37	8,983	6,217	-30	6,704	7,767	16
EBITDA margin (%)	-84.06	-31.86	62	46.29	26.04	-44	33.90	33.08	2
Net Profit/Loss	-911	-681	25	1,934	3,700	91	2,215	3,032	37
ROCE	-45.93	-16.51	64	16.99	23.43	38	44.15	50.99	15

With reference to Table **6,** it is dear that the three operators have experienced an overall improvement in most financial indicators. For instance in the financial period ending **31** December **2004,** Cell **C s** operating revenue increased by the equivalent of **66.6%** from **R2.46** billion in **2003** to **R4.099** billion. One of the main contributing factors to this phenomenal growth in revenue was the increase in the group's subscriber base. Cell C has also experienced growth in market share, with **2.310** million subscribers of whom **510** 000 are postpaid and **1.8** million are prepaid customers. Furthermore, aggressive marketing strategies and innovative products which accommodate both prepaid and postpaid markets have contributed significantly to the increase in subscribers.

Although Cell C has incurred losses in the **two** years under consideration, it is worth noting that its gross profit margins have improved substantially: the company's gross profit margin more than doubled from **21.96%** in **2003** to a record high of **49.8%** in **2004.** In addition to that, indications are that the Group is steadily approaching profitability levels as evidenced by a decline in losses of **25.3%** from **R911.26** millions in **2003** to **R680.72** millions in the financial period ending **31** December **2004.**

MTN and Vodacom have also experienced sterling operational performance in all areas. MTN achieved an increase of 41.8% in subscriber base from 6.7 million subscribers in 2003 to 9.5 million subscribers in 2004. The group also operates in six African countries namely Cameroon, Nigeria, Rwanda, Swaziland, Uganda and South Africa. However, of the 9.5 million subscribers, 66% were based in South Africa with the remainder 34% spread in the other five countries. Thus, of the approximately R24 billion generated in sales in the period ended 31 March 2004, R15.098 billion was generated from South Africa, amounting to 62.5% of internally generated revenue.

Looking closely at the earnings generated from operations after accounting for expenses, huge improvements are observed. A case in point is the increase of 60.8% in operating income from R3.737 billion to R6.008 billion in the financial period ending 31 March 2004. Due to continuous improvement in profitability levels, MTN group's return on capital employed increased from 16.99% in 2003 to 23.43% in 2004.

Vodacom also performed extremely well in its trading activities. Similar to the MTN group, its operations transcend the borders of South Africa to include Tanzania, the Democratic Republic of Congo (DRC), Lesotho and Mozambique. Vodacom's operating revenue increased by 18.7% to R23 478 million from R19 778.7 million in 2003. Factors such as the increase in subscribers and improved markup percentages contributed significantly to the upward trend in sales. The return on capital employed improved from 44.15% in 2003 to 50.99% in 2004.

22. How have the mobile operators been performing over the last few years and are the results justified (are operators enjoying super profits)?

23. To what effect does the performance of the Group influence the regulated telecommunications company?

Mobile Networks Bridging the Digital divide

Encouraging the spread of mobile phones is an effective response to the challenges of the digital divide[16]. However, because the definition of digital divide is narrow, it is often perceived to mean access to the Internet. However, a holistic interpretation is required at all times to refer to access to communications. The causes of the digital divide are socio-economic in nature. However, in the information economy, communications technologies cannot be viewed as consumer devices alone, but must be seen as tools of production. Lack of access to information and communication technologies (ICTs) aggravates wealth and income disparities, contributing to a further lack of access.

[16] "The real digital divide" *Economist* (Leaders section), 12 March 2005.

Clearly, the digital divide is a symptom of a deeper socio-economic divide. Poor countries have competing pressures such as addressing housing needs, literacy levels, access to health care and medicines as well as addressing the AIDS pandemic and food security. Having a personal computer and access to the Internet is often not viewed then, as a priority. However, this requires an approach that treats the underlying cause, rather than the symptoms. Access to mobile technology for voice and data is central to that developmental agenda.

There is abundant evidence of the contribution of mobile technology to development. It has been found that mobile phones raise long term growth rates as twice as much in developing countries than in developed countries. It has been argued that an extra ten phones per 100 people in developing countries increases GDP growth by 0.6 percent.[17]

24. Is the belief that the growth in mobile phones promotes growth in the economy of the country true? If so, how has this contributed to growth in South Africa?

25. Is the belief that mobile phones could assist to bridge the digital divide true? If so, what needs to be done in South Africa?

26. Does any of the above require regulatory intervention and oversight?

Changing technology

The information superhighway and rapid advances in technology have spurred growth over the past five years with even greater technological advances predicted for the upcoming decade.

The Ministerial Determinations of September 2004 and the Convergence Bill are envisaged to facilitate further innovation. Mobile operators will be forced to consider new technological changes to enhance their business case for voice migration.

27. There is a general belief that changes in technology benefit consumers, by a way of a decrease in prices. How has this manifested in the South African communications environment?

Mobile Price Regulation

Tariffs for mobile operators are currently regulated by the Act and the provisions in the respective licences. There are no stand alone tariff regulations for mobiles as can be implemented in terms of section 45 of the Telecommunications Act. The Authority can only disapprove a tariff when there is a mathematical error in the application or the application is

[17] See http//www.economist.com, "Calling across the divide".

in contravention of the Telecommunication Act. This approval framework is seen as being very limited.

New services are not regulated and operators are free to introduce new services and packages. This approach is desirable in order to promote innovation. However, the entry prices for new services are often viewed by consumers as high, yet the Authority cannot assist operators in setting acceptable prices as no system is yet in place to determine the real costs of providing a particular service. This is a legacy problem which will be addressed over the next two years as the Authority is in the process of implementing the regulations on costing methodology or the Chart of Accounts and Cost Allocation Manual". Operators will have to comply with the requirements of regulatory accounting by September 2006.

At present, the Authority has 7 days to approve a tariff lodged by an operator. If there is no response from the Authority, the tariff is deemed approved. The 7 day rule serves to protect operators from interception of information by other operators in terms of products by competing operators, but can be onerous on the Authority.

28. Is the Authority efficiently and effectively regulating mobile prices? If not, what should be done to improve the current state of affairs?

29. Should there be greater regulatory oversight of mobile prices in cases where market forces are producing consumer welfare and lower prices?

Legislative and Policy Considerations[19]

The Telecommunications Act is used as a point of departure for regulation, augmented by national policies and priorities. Of paramount importance to the outcomes of regulation, are national social and economic policies of government pertaining to communications, which include, amongst others: lower costs of and increased access to communications; increased employment in ICTs; attracting foreign investment in the communications sector; increased broad-based black economic empowerment in communications and bridging the digital divide.

In this regard, there should be a healthy balance between the operators' pricing strategies in respect of products and services with the underlying objectives of national policies. It is against this background that the Authority has endeavoured to build into operators' licences, certain obligations that would ensure the roll-out of communication services and quality of service. However it is still very difficult for the Authority to establish the extent to which the costs of those obligations are incorporated into communication prices.

[18] ICASA, Chart Of Accounts/Cost Allocation Manual Regulations.

[19] Telecommunications Act, No. 103 of 1996, as amended.

The Authority is of the view that with the implementation of Mobile COA/CAM (Vol 2), the costs incurred by the operators will be accounted for and the Authority will be able to balance the cost of offering a service with the price charged to end users. The procedure for amending the current Rate Regime for mobile services is laid down in each of the mobile operators' licences.[20]

Moreover, section 96 of the Act affords the Authority powers to develop regulations through a transparent and consultative process. Section 45 (2) of the Act provides that the manner of determining fees and charges shall be prescribed only in respect of fields where no or insufficient competition exists. In essence, where market forces are not achieving a desirable result, the Authority can intervene and direct the industry towards the attainment of competitive outcomes.

There are various options that the Authority may consider:

- A once-off reduction of prices to an acceptable level that reflects the cost of providing a particular service;
- Ongoing regulation of prices through an agreed regulatory methodology;
- Introduction of more competition in the sector and implementation of stringent and fair controls over wholesale prices.

30. Are current regulatory policies protecting consumers? If not, what should be done to protect the interest of the consumer?

31. Should there be greater wholesale regulation by the Authority?

32. Should the Authority regulate retail tariffs in light of the presence of three operators in the market?

33. What initiatives should the regulator consider to increase universal access without imposing a cost on operators that is transferred to consumers?

Conclusion

A crucial goal of regulation is to ensure that consumers are protected, that prices are affordable and that the quality of service is high. At the same time, effective regulation must create a fair, secure and stable trading environment for operators, and one that allows them to recoup their investment and produce a reasonable return for shareholders and investors.

[20] Paragraph 12, (Vodacom and MTN) and 13 (Cell C).

Striking the balance is a mammoth task but remains one to which the Authority is highly committed.

This Discussion Document is the start of a much needed dialogue on the costs of mobile communication services. The Authority seeks input from all interested patties on the issues canvassed, as well as any other issue that has not been directly addressed, but which has relevance to the cost of mobile services in South Africa.

Annexure 1: Conversion of Foreign Currencies into South African Currency

		Hungary				Czech Republic						Switzerland				Spain	
Operators		Pannon GSM	Vodafone Hungary	Pannon GSM	Vodafone	T-Mobile	Oskar	Eurotel	T-Mobile	Oskar	Eurotel	Orange	Swiss Com	Orange	Swiss Com	Amena	Amena
Packages		HUF	HUF	Rand	Rand	CZK	CZK	CZK	Rand	Rand	Rand	CHF	CHF	Rand	Rand	ESP	Rand
Sim Card/Monthly Charge		0	0	0	0	0	0	47.6	0	0	1.54	49		253.9	0	0	0
Included SMS's		0	0	0	0	0			0	0	0			0	0	0	0
Prepaid	U			0	0				0	0	0			0	0		0
Mobile to Mobile (on net)	R/mi	69	66	2.23	2.13	3	2.38	5.36	0.10	0.08	0.17	0.9	0.99	4.66	5.13	21	1.00
Mobile to Mobile (Off-net)	R/mi	69	66	2.23	2.13	3	2.38	7.14	0.10	0.08	0.23	0.9	1.29	4.66	6.68	21	1.01
Mobile to Fixed	R/		66	0	2.13	3	2.38	7.14	0.10	0.08	0.23	0.9	1.29	4.66	6.88	21	1.01
Post Paid																	
Sim Card				0	0				0	0	0			0	0	0	0
Connection fees	O		0	0	0	0	0	0	0	0	0			0	0	0	0
Subscription fees	Monthl	18000	5375	582.26	173.87	2130.1	1904	3689	68.90	61.59	119.33	330	75	68.90	61.59	60	2.88
Inclusive Minutes		1000		1000		500	3.96	1000	500	3.96	1000	1200		6218.04	0	120	5.772
Mobile to Mobile (on net)	R/mi	18	25	0.58	0.81	3.57	3.96	1.19	0.12	0.13	0.04	0.3	0.19	1.55	0.985	15	0.72

Mobile to Mobile (Off-net)	R/min		50	0	1.62	3.57	3.96	4.05	0.12	0.13	0.13		0.79	0	4.093	15	0.72
Mobile to Fixed	R/min		66	0	2.13	3.57	3.96	4.05	0.12	0.13	0.13		0.19	0	0.98	15	0.72
SMS's																	
SMS(peak calls to any operator)	R/Msg	19		0.62	0	2.02	1.19	1.19	0.07	0.03	0.034	0.15	0.2	0.78	1.04		0
After 30 SMS				0	0				0	0	0	0.25		1.3	0		0
Contract On net			25	0	0.81				0	0	0			0	0		0
Off-Net			50	0	1.62				0	0	0			0	0		0